

# Designing and Assessing the Model of Developing Employees' Moral Courage

Noorallah Paknejad<sup>1</sup>, Vahid Chenari<sup>1\*</sup>, Seyed Rasoul Agha Davood<sup>2</sup>, Seyed Ali Akbar Ahmadi<sup>3</sup>

<sup>1</sup> Department of Public Management, Shushtar Branch, Islamic Azad University, Shushtar, Iran

<sup>2</sup> Department of Public Management, Dehaghan Branch, Islamic Azad University, Dehaghan, Iran

<sup>3</sup> Department of Public Management, Tehran Branch, Payame Noor University of Tehran, Tehran, Iran

**Corresponding Author:** Vahid Chenari, Department of Public Management, Shushtar Branch, Islamic Azad University, Shushtar, Iran. E-mail: [vchenari@gmail.com](mailto:vchenari@gmail.com)

Received 09 Oct 2021

Accepted 27 Dec 2021

Online Published 29 May 2022

## Abstract

**Background:** Employees in organizations are considered the main driving force, so any action to identify their capabilities and develop those capabilities can help the organization achieve its goals. Due to some inconveniences in organizations, they need employees who, despite many threats and employees under various pressures, employees still maintain their moral courage when making decisions. This research has been conducted to design and evaluate the development model of employees' moral courage in the railways of the Islamic Republic of Iran.

**Material and Methods:** The present study is an applied type and has been done by the mixed method. In the qualitative part of the statistical population, including rail experts, a sample of 20 railway experts has been selected using the snowball sampling method, which is interpretive structural modeling of the courage development model. Employee ethics is explained. In a small part of the statistical population of railway employees, a sample of 220 people is made available by the available sampling method using a questionnaire. It is evaluated by the structural equation method using PLS3 and SPSS21 software.

**Results:** In this study, the findings show that personal, environmental, occupational, managerial, and organizational dimensions effectively develop the moral courage of employees. The ecological size plays an essential role as an independent variable, and the other dimensions play a crucial role as mediating variables.

**Conclusions:** In this study, a model is presented to develop the moral courage of employees. The model is evaluated, and all its relationships are approved.

**Keywords:** Ethical Courage, Model Assessment, Managerial Dimension, Organizational Dimension, Courage Development

**How to Cite:** Paknejad N, Chenari V, Agha Davood SR, Ahmadi SAA. Designing and Assessing the Model of Developing Employees' Moral Courage. 2022;4(1):75-83. doi: 10.52547/ijethics.4.4.75

## INTRODUCTION

Corruption and its dimensions are one of the problems that all societies face somehow. Today, due to the complexity, pervasiveness, and multifaceted nature of the issue of corruption and public health, reducing corruption has become an essential principle in public policy. One way to reduce and eliminate corruption is to develop the ethical virtues of employees. Achieving employee personality development can increase the value of an organization. The effort to build moral strength among employees can be more valuable in an organization than ethics training and skills training for the strict and centralized implementation of organizational rules [1]. Today, researchers and experts in corporate ethics encourage organizations to use and develop more ethical principles in the workplace. These recommendations go beyond even reviewing plans,

policies, and strategies [2]. On the other hand, employees in organizations are the essential source for the growth and excellence of organizations and consequently the development of today's society, as they are influential in formulating strategies and policies of an organization and also in how to implement these strategies and policies are powerful tools to help top managers. They are themselves. Therefore, in these circumstances, the need for moral courage in the employees of organizations, despite the adverse professional and organizational consequences that exist for them today, seems essential. Be inclusive and promote the guarantee of successful implementation of strategies and policies, leading to individual, corporate and social development [1]. In most organizations today, moral courage is a missing link that, if developed among employees and its

dimensions recognized, can lead to the individual and social development of employees and take comprehensive action to eradicate corruption and organizational problems. On the other hand, due to service delivery and efforts to achieve social justice, government organizations use employees and managers who do not have the desired conditions in terms of courage and ethics. They are challenged to achieve their goals, and public dissatisfaction with their performance increases. [3].

Immoral behaviors tarnish the image and credibility of organizations and undermine public trust, paving the way for widespread violations such as embezzlement, bribery, and breach of public rights [2]. Some scholars believe that the change that calls for a personality revolution and a review of the conscience and values of the members of the organization should be stimulated [4]. Achieving employee personality development can increase the value of an organization. The effort to build ethical power among employees can be more valuable in an organization than ethics training and skills training for the strict and focused implementation of organizational rules [5]. Also, one of the most critical factors to increasing social capital in the organization is to create and strengthen the field of professional moral courage in employees [6].

Considering the importance of moral courage in the organizational dimension and especially the development of employees as the driving force of organizations, while examining the research background to develop moral courage, a model was presented that considers different dimensions and is then evaluated in an organizational environment. Little research has been done on moral courage and how it is developed, and most of this research has addressed the issue in a one-dimensional way [1]. Research has shown that one of the most important ethical aspects in an organization is organizational virtue and professional moral courage. The results were obtained in this study, which aimed to focus on the relationship between the dimensions of organizational virtue and the components of professional ethics courage among faculty members in a university [7]. In another study, researchers believe that much research is needed to determine a more practical form of moral courage. How ethical challenges are effectively managed in organizational environments. They include five dimensions in their model: 1- The necessity of ethics (the manager considers the conditions for taking action with appropriate moral courage), 2- Multiple values (When taking action, consider organizational, individual, and environmental values), 3

- Tolerance of threats (the person is resilient in the face of threats and dangers) Ethics and its promotion) [5].

To measure the moral courage of research managers, research has been done that has considered individual, organizational, professional, environmental, and managerial dimensions [8]. Having moral courage in employees and managers who, despite the opposing professional and administrative consequences for them, persevere in their correct moral positions and principles can be examined in the successful formulation of a comprehensive strategy and guarantee the successful implementation of strategies and policies by strengthening the courage of employees. And managers should also be considered [1].

In the present study, an attempt is made to answer the following questions by using the existing knowledge of moral courage and valid research methods: 1- What are the most important dimensions and indicators affecting the development of moral courage of railway employees of the Islamic Republic of Iran? 2- What is the valid model of the factors affecting the growth of moral courage of the railway employees of the Islamic Republic of Iran? 3- How to measure the proposed model?

## MATERIAL AND METHODS

The present research is on applied and developmental types using a mixed-method (qualitative and quantitative).

### Qualitative Method

This research uses the method of oriented qualitative content analysis and fuzzy Delphi. Statistical Society of Railway Expert Staff of the Islamic Republic of Iran, a sample of 20 experts was selected as a statistical sample by snowball sampling. The selection of the number of experts appropriate to the method of interpretive structural research based on the study is 15 to 25 people [8-14].

Experts were selected due to the need for sufficient knowledge of the conditions of government organizations, especially the organization under study, as well as to help transfer their knowledge and views, provided they meet these conditions: 1: At least 15 years of work experience in the railway organization or having knowledge in the field of the present research 3: At least a bachelor's degree. The sample demographic information in terms of gender is 16 males and four females. In terms of degree, 9 (45%) of participants have a doctorate, 8 (40%) of participants have a master's degree, and 3 (15%) of participants have a bachelor's degree. Also, regarding the organizational position in

administrative and operational departments, 12 people (60%) were inactive, and eight people (40%) were in managerial jobs. Data collection tools include library studies and semi-structured interviews with experts whose validity and reliability was confirmed. The research model was explained using the structural-interpretive modeling method in this research.

In this study, first, from the existing knowledge and research on moral courage, dimensions and practical components in the development of employees' moral courage were extracted with a directional qualitative content analysis approach. Then, semi-structured interviews with experts were conducted based on directional qualitative content analysis. In the next step, the indicators were screened by experts using the fuzzy Delphi method. Then, the validity of the selected dimensions and the fit of the hands with the dimensions were again done using the undefined Delphi method. To confirm and screen the indicators, the value of the acquired value of each index was compared with the value of the acceptance threshold. The value of the acceptance threshold is  $1/70$ . It was done using Minkowski's formula. In the next step, the research model was presented using a qualitative method of interpretive structural modeling [9, 10].

#### Quantitative Method

To measure the proposed model, the research method of cross-sectional, descriptive-analytical, and correlational studies is used. The statistical population is the railway employees of the Islamic Republic of Iran, from which 220 people were selected by the available sampling method. Demographic characteristics of the research sample based on the type of gender of individuals show that 170 respondents (85%) are male and 30 (15%) are female. The frequency and percentage of sample distribution indicate that the group of men is more than women. The results of the distribution of sample people based on the level of education show that 100 people (50%) have a master's degree, 40 people (20%) have a doctorate, and 60 people (30%) have a bachelor's degree. The data collection tool was a researcher-made questionnaire based on 35 items designed with a range of 5 Likert options. Also, the validity and reliability of the questionnaire were confirmed by research experts and researchers, and the reliability test of the questionnaire with Cronbach's alpha coefficient of 82% was accepted. Out of 220 distributed questionnaires, 205 questionnaires were returned, and 200 were analyzable. The research model is evaluated using the structural equation method and Spearman correlation tests, the

valid Kolmogorov-Smirnov test, and PLS3 and SPSS21 software.

## RESULTS

### Qualitative Results

Components of moral courage were extracted by studying the research background and conducting semi-structured interviews with experts. Among the 198 derivative propositions related to developing employees' moral courage, some of them were repetitive, and others contained several other recommendations. In this regard, duplicate propositions were eliminated, and offers that were very close in terms of content were combined. Based on (Table 1) in the form of a questionnaire with the possibility of answering five options (strongly agree, agree, have no opinion, disagree, and strongly disagree) was provided to the experts. In the next step, among the selected components, the experts were once again asked in a fuzzy Delphi manner to comment on the classification of elements chosen into five dimensions: individual factors, organizational factors, managerial factors, environmental factors, and occupational factors, as well as appropriateness. Announce the components in each dimension with the corresponding size. These five dimensions are taken from research [7, 11-13].

After three rounds of fuzzy Delphi, the dimensions and components whose threshold value is more than  $1/7$  using the Minokowski formula. These dimensions and their components are: Individual dimension (1- Intrinsic personality 2- Individual values 3- Emotional self-regulation 4- Moral action 5- Motivation 6- Responsibility 7- Experience 8- Power of expression 9- Multidimensionality Being), job dimension (1- job security 2- career development path 3- nature of job), organizational dimension (1- organizational support 2- organizational culture 3- training of moral courage 4- meritocracy), environmental dimension (1- economic factors 2- Society culture 3- Political factors) and managerial dimension (1- Authentic leadership 2- Managerial justice 3- Criticism of managers 4- Visibility of employees) [10].

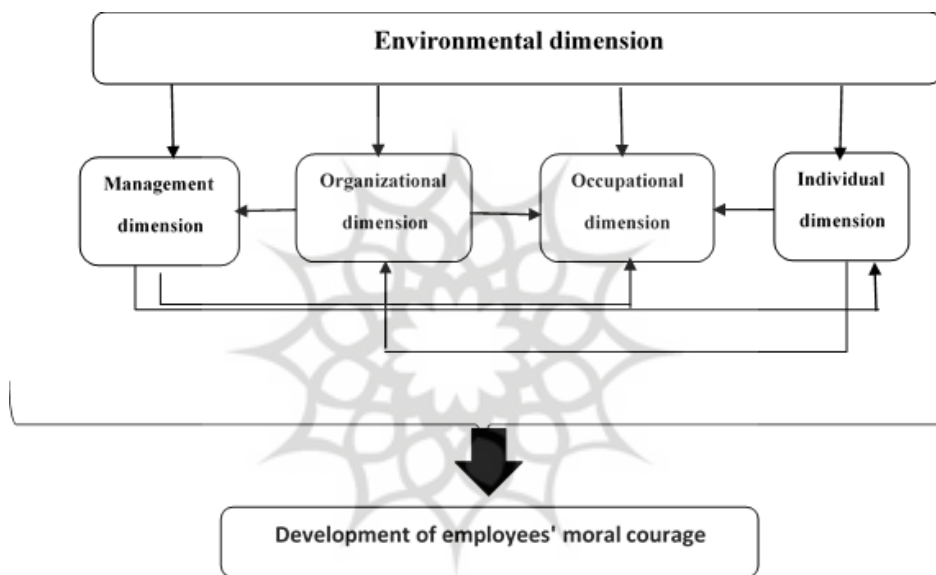
In the research, according to the leveling of the dimensions of the development of employees' moral courage by the qualitative method of structural-interpretive modeling, the final model is presented and the relationships between the dimensions are determined [10].



پروہشگاہ علوم انسانی و مطالعات فرہنگی  
پرتال جامع علوم انسانی

**Table 1.** Dimensions and Components of the Development of Moral Courage [10]

Dimension	Components
1 Occupational dimension	1- Job requirements and rules 2- Job description 3- Nature of job 4- Type of employment 5- Job stress 6- Job security 7- Job stability 8- Career path [1, 2, 8, 15]
2 Management dimension	1- Reliable leadership 2- Managerial perception 3- No threat from managers 4- Criticism of managers 5- Honesty of managers 6- Ethics of managers 7- Young management 8- Visibility of employees 9- Managerial justice [1, 8, 15]
3 Environmental dimension	1- Economic factors 2- Environmental values 3- Social pressure 4- Social identity 5- Environmental turmoil 6- Environmental hostility 7- Political factors 8- Social factors [1, 3, 8, 11, 12, 16, 17]
4 Organizational dimension	1-Organizational Transparency 2-Training 3-Organizational Values 4-Requirements and Rules 5-Organizational Communication 6-Competence 7-Compensation for Services 8- Humanitarian Behaviors 9-Habit 10-Storytelling for Employees 11-Heroism 12-Existence of Security and Protection 13-Organizational virtue 14-Organizational values 15-Organizational support 16-Real attention to the voice of members 17-Organizational culture 18-Performance evaluation 19-Organizational [1, 8, 18-24]
5 Individual dimension	1- Intrinsic personality 2- Moral action 3- Moral purpose 4- Individual values 5- Age 6- Work experience 7- Emotional self-regulation 8- Spiritual strength 9- Personality strength 10-Moral motivations 11-Psychological characteristics 12-Trust in God 13 -Patience 14-Family originality 15-Practical action 16-Demanding 17-Self-confidence 18-Sense of responsibility 19-Performing duties-20 Power of expression 21-No fear 22-Multifaceted employees [4, 8, 11, 14, 16, 25-28]



**Figure 1.** A Model for Developing Moral Courage

**Table 2.** Descriptive Statistics of the Dimensions of Moral Courage

Factor	Mean	SD	Min.	Max.	Skewness	Kurtosis
Organizational	3.328	1.443	1	5	-0.519	-1.521
Occupational	3.405	1.465	1	5	-0.498	-1.518
Individual	3.399	1.381	1.1	5	-0.555	-1.476
Environmental	3.423	1.427	1	5	-0.541	-1.325
Management	3.413	1.393	1	5	-0.469	-1.438
Moral courage	3.384	1.416	1	5	-0.499	-1.455

**Quantitative Results**

To evaluate the proposed model and hypotheses, as well as to understand the research community better and become more familiar with the research variables, before analyzing the statistical data, it is necessary to describe these data; Therefore, before testing the research hypotheses, the descriptive statistics of the variables used in the research were examined. The mean, as one of the main parameters, indicates the center of gravity of

society. In other words, it suggests that if the average is placed instead of all the community observations, there will be no change in the total data of the society. It also shows the maximum number of variables in the statistical population and the minimum number of variables in the statistical population. The results of descriptive statistics are presented in Table 2.

According to the table above, the average response of individuals to the organizational dimension index is 3.328, for the job dimension index is 3.405, the individual



dimension index is 3.399, for the environmental dimension index is 3.423, the index is equal. The managerial dimension is 3.413, and the index of moral courage is 3.384.

### Investigating the Normality of Research Variables

In order to implement statistical methods, calculate appropriate test statistics, and make logical inferences about research hypotheses, the most crucial action before any action is to choose the right statistical method for research. For this purpose, knowledge of data distribution is a top priority. For this purpose, in this research, the valid Kolmogorov-Smirnov test has been used to check the hypothesis of normality of the research data. In this test, according to the following hypotheses, a step has been taken to check the normality of the data: H0: The data have a normal distribution. H1: Data does not have a normal distribution.

According to the values of test statistics and significance level for research variables, organizational dimension (test statistic: 0.244 and significance level: zero), job dimension (test statistic: 0.238 and significance level: zero), individual dimension (test statistic: 0.237 and level Significance: zero), environmental dimension (test statistic: 0.223 and significance level: zero) and management dimension (test statistic: 0.218 and significance level: zero), Kolmogorov test states if the significance level for all independent and dependent variables is greater than the error level 5% of the data distribution is normal. Considering the above values that the significance level of the test for all variables is less than 0.05, it can be said that hypothesis H0 is rejected and therefore the distribution of variables does not follow the normal distribution. Therefore, non-parametric

methods are used to examine the relationships between research variables and hypotheses. For this reason, because PLS software has better performance for non-normal data than other software and is also not sensitive to the sample size, it has been used in the statistical analysis of this study.

Investigating the relationships between the dimensions of the research model

In this section, for the correlation test, due to the non-parametric nature of the data distribution, the relationship between the main variables is examined by Spearman correlation test.

H0: There is no significant relationship between the two variables.

H1: There is a significant relationship between the two variables.

The results of Spearman correlation between the main variables of the research are presented in Table 3. As can be seen from the table (all numbers are between zero and one), the level of significance of correlation coefficients is less than 5%. Therefore, the null hypothesis is rejected, and the opposite hypothesis is confirmed and shows a significant correlation between all research variables. As a result, it is possible to test the hypotheses using the structural equation method.

### Model Fit

Model fit means the extent to which a model is compatible with the relevant data. Therefore, in this section, the fit of the hypothesis of the research model is evaluated to ensure its compatibility with the research data and finally, the answers to the research questions are inferred.

Table 3. Correlation between Research Variables

Factor	Organizational	Occupational	Individual	Environmental	Management	Moral courage
Organizational	1	0.718	0.655	0.671	0.671	0.700
Occupational	0.718	1	0.675	0.691	0.692	0.729
Individual	0.655	0.675	1	0.680	0.670	0.682
Environmental	0.671	0.691	0.680	1	0.703	0.698
Management	0.671	0.692	0.670	0.703	1	0.698
Moral courage	0.700	0.729	0.682	0.684	0.698	1

Table 4. Results of Three Criteria of Cronbach's alpha, Convergent Reliability and Validity

Variables	Alpha>0.7	Cr>0.7	AVE>0.5
Organizational	0.938	0.951	0.764
Occupational	0.911	0.937	0.789
Individual	0.955	0.961	0.71
Environmental	0.874	0.923	0.799
Management	0.875	0.914	0.727
Moral courage	0.904	0.929	0.724

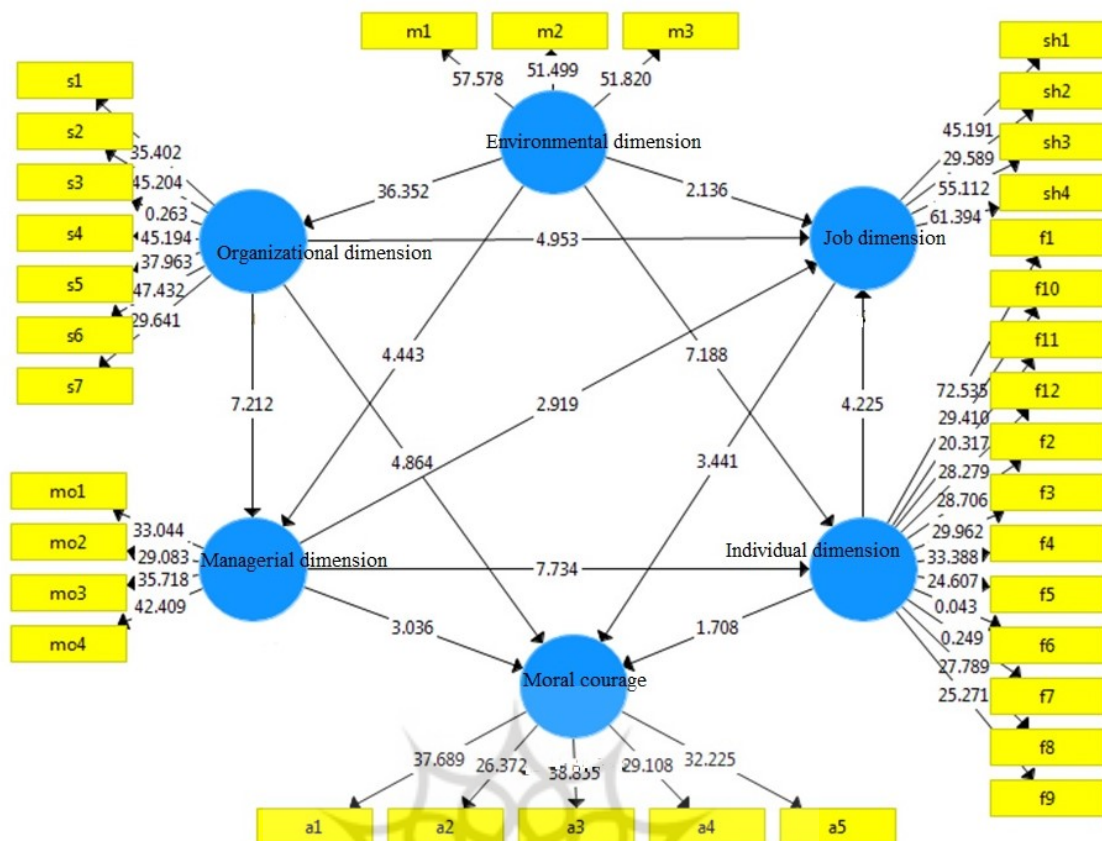


Figure 2. T-Value Data

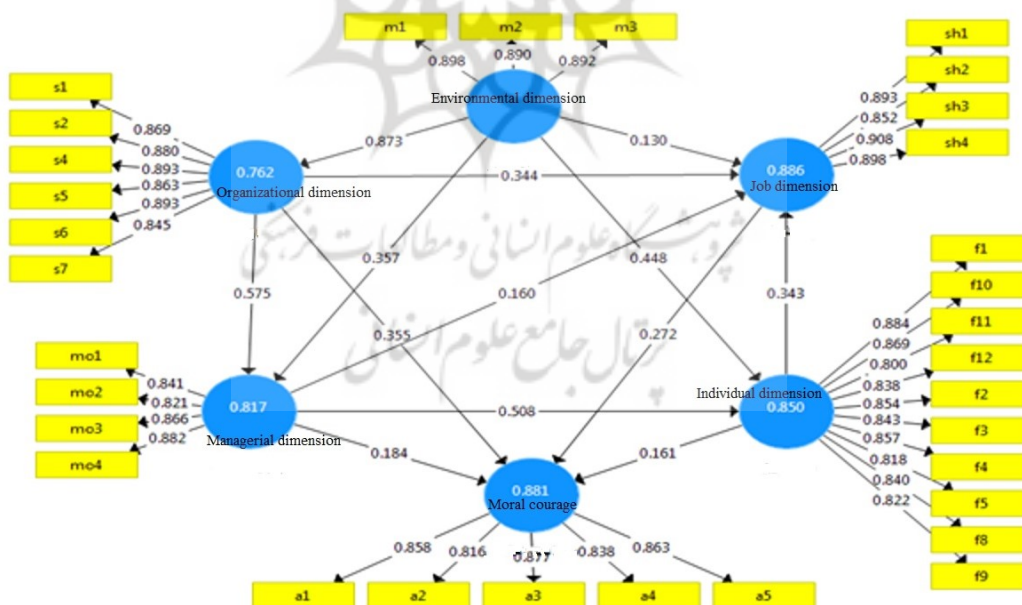


Figure 3. Regression Coefficients and Standard Factor Loads of the Research Model

Considering that the factor loads, as well as the value of T statistic of items six and seven individual dimensions and item three of organizational dimensions, are less than 0.4 and 1.96, these questions should be removed from the questionnaire, and the model should be fitted

based on the remaining questions and checked the correctness of the hypotheses.

According to the fitted model above, the standardized regression coefficient of the organizational dimension on the job dimension is equal to 0.344, the standardized regression coefficient of the organizational dimension on

the managerial dimension is equal to 0.575, the standardized regression coefficient of the organizational dimension on moral courage is equal to 0.335, the regression coefficient Standardized individual dimension on moral courage equal to 0.161, standardized regression coefficient on individual dimension on job dimension equal to 0.343, standardized regression coefficient on environmental dimension on organizational dimension equal to 0.873, standardized regression coefficient on environmental dimension on job dimension equal to 0.130, Standardized regression coefficient of environmental dimension on individual dimension equal to 0.448, standardized regression coefficient of environmental dimension on management dimension equal to 0.357, standardized regression coefficient of management dimension on job dimension equal to 0.160, standardized regression coefficient of managerial dimension on individual dimension of 0.508 And the standardized regression coefficient of the management dimension on moral courage is 0.184. The value of the adjustment coefficient ( $R^2$ ) for the variable of moral courage is equal to 0.881. This means that the variables express 88.1% of the variable of moral courage. Considering that in Smart PLS software, the value of the t-statistic is used to check the significance of the coefficients, and this value is 1.96 for a 5% error. Thus, if the value of the t-statistic is greater than 1.96, the relationship shown is significant. Given that Cronbach's alpha numbers, hybrid reliability (internal consistency), and AVE are all in the relevant range, it can be confirmed that the convergent reliability and validity of the research model are appropriate.

#### Goodness Criteria for Fitting the Research Model

The general model includes both the measurement and structural model parts, and by confirming its fit, the fit check in a complete model is completed. The criterion is related to the general interest in structural equation models. This means that by this criterion, the researcher can control the fit of the available part after examining the fit of the measurement part and the structural part of his general research model. GOF is obtained by calculating the geometric mean of the subscription mean and the standard of the adjustment coefficient ( $R^2$ ); it has a value between zero and one, and the closer it is to one, the better the model fits. Also, some researchers have stated that the model with good fit has a value higher than 0.36, and the model with medium fit has a value between 0.19 to 0.36 [1].

The value  $GOF = 0.794$  was obtained using the above formula and values. Given this value, the proper fit of the research model is confirmed.

#### DISCUSSION

Not much research has been done in the field of moral courage. Still, the researchers have each dealt with a specific dimension of courage, such as physical courage or mental courage, etc., and the lack of a comprehensive study on the development of moral courage in the staff field seems necessary. Considering the conditions, requirements, and goals of public and private organizations, the existence of a model to develop employees' moral courage seem essential. Ethical courage is a behavioral competency for employees. Given the prominent role of employees in the organization, little research has been done on developing employees' moral courage. One of the differences between this research and other research is that it has tried to comprehensively view the factors affecting the development of employees' moral courage and scientifically evaluate the conceptual model obtained in society and example.

While most researchers in the field of moral courage [8-13] have paid more attention to its individual and organizational dimension, to develop the moral courage of employees in the study organization, a comprehensive development model was proposed by administrative and academic experts and approved by research experts. Design the moral courage of employees in the organization. Moreover, the presented research is in completion of the research that has been done by the researchers of this research [1-10].

The proposed model is somewhat close to the concept and identity of the 4D model [11], which modeled only organizational courage, and close to model [8], which provided a model for measuring managers' courage. Still, there is no similar example in the development of employees' moral courage and employee classification. In this study, emphasizing the story of employees' moral courage to improve and develop their moral courage, it is necessary to pay special attention to the individual, organizational, environmental, managerial, and job dimensions [8, 10-12].

The results of this study are theoretically crucial for researchers of human resources and organizational behavior as well as managers and employees of government organizations. It is suggested that considering that the environmental dimension with the components of economic factors, society culture, and political factors as an independent variable has a great



impact on the development of employees' moral courage, it should be seriously considered to provide the reasons for growth and development of employees' moral courage. Also, measuring the level of moral courage of employees in the organization under study should be added to the employee performance appraisal program, and managers of the organization should give a special privilege to this feature in employees' career development.

Other researchers can conduct research in the pathology of underdevelopment of employees' moral courage and formulate the strategies needed by the organization to benefit employees with high moral courage. One of the limitations of this research is the reluctance of employees of organizations to talk about their moral courage.

## CONCLUSION

The present study is dedicated to presenting a comprehensive model for developing employees' moral courage and measuring it in the railway organization. SPSS version 21 has been evaluated. The results in the qualitative part indicate that five basic dimensions

## REFERENCES

- Paknejad N. Presenting a comprehensive model for the development of employees' moral courage (a study on the railways of the Islamic Republic of Iran) in Shushtar. [Ph.D thesis]. Islamic Azad University, Shushtar Branch, Shushtar/Iran. (In Persian)2021.
- Sekerka LE, Comer D. Keep calm and carry on (ethically): Durable moral courage in the workplace. *Human Resource Manag Rev.* 2017;28(2):116-30. doi: 10.1016/j.hrmr.2017.05.011
- Danaei Fard H. Challenges of public administration in Iran. Samat Publications, Tehran/Iran. (In Persian)2013.
- Sikora DM, Ferris GR. Strategic human resource practice implementation: The critical role of line management. *Human Resource Manage Rev.* 2014;24(3):271-81. doi: 10.1016/j.hrmr.2014.03.008
- Sekerka LE, Bagozzi RP, Charnigo R. Facing ethical challenges in the workplace: Conceptualizing and measuring professional moral courage. *J Business Ethic.* 2009;89(4):565-79. doi: 10.1007/s10551-008-0017-5
- Qalavandi H, Kooshaki M. Focal analysis of professional moral courage with social capital. (In Persian). *Ethic Sci Technol.* 2020;15(1):136-42.
- Asadzadeh N, Qalavandi H, Abbaszadeh MM. Focal analysis of the relationship between dimensions of organizational virtue and components of professional moral courage. (In Persian). *Ethic Sci Technol.* 2016;12(2):127-37.
- Mohammad Zaheri M, Sepahvand Nazarpour AH. Model for measuring the ethical courage of senior managers of Iranian government organizations. *J Law Enforcement Manag Res.* 2019;14(3):455-76.
- Azar A, Khosravani F. Soft operations research (problem structuring approaches). *Industrial Management Organization, Tehran/ Iran.* (In Persian)2016. 67-80 p.
- Paknejad N, Chenari V, Aghadavod SR, Ahmadi SA. Presenting a model for the development of employees' moral courage. *Ethics in Science and Technology.* (In Press). (In Persian)2021.
- Kilman F, Ralph Hara L, Gudy S. Developing and validating a quantitative measure of organizational courage. *J Bus Psychol.* 2010;12(2):123-36.
- Hutchinson M, Jackson D, Daly J, Usher K. Distilling the Antecedents and Enabling Dynamics of Leader Moral Courage: A Framework to Guide Action. *Issues Ment Health Nurs.* 2015;36(5):326-35. doi: 10.3109/01612840.2015.1017627 pmid: 26090942
- Sekerka LE, Bagozzi RP. Moral courage in the workplace: Moving to and from the desire and decision to act. *Business Ethic Europe Rev.* 2007;16(2):32-149. doi: 10.1111/j.1467-8608.2007.00484.x
- Warfield JW. Developing interconnected matrices in structural modelling, IEEE transcript on systems. *Men and Cybernetic.* 1974;4(1):51-81. doi: 10.1109/TSMC.1974.5408524
- Hannah ST, Avolio B, Walumbwa F. Relationships between Authentic Leadership, Moral Courage, and Ethical and Pro-Social Behaviors. *Business Ethic Quarter.* 2011;21(4):555-78. doi: 10.5840/beq201121436
- Simola S. Understanding moral courage through a feminist and developmental ethic of care. *J Business Ethic.* 2015;130(1):29-44. doi: 10.1007/s10551-014-2203-y
- Rate C, Clarke J, Lindsay D, Sternberg R. Implicit theories of courage. *J Positive Psychol.* 2007;2(10):80-98. doi: 10.1080/17439760701228755
- Miller W. *The mystery of courage.* Harvard University Press, Massachusetts/United States.2002.
- Gibson E. Longitudinal learning plan for developing moral courage. *Teach Learn Nurs.* 2019;14(2):122-4. doi: 10.1016/j.teln.2018.12.012
- Brock DS, de Pury JJ, Mercier HP, Schrobilgen GJ, Silvi B. A rare example of a krypton difluoride coordination compound: [BrOF<sub>2</sub>][AsF<sub>6</sub>] x 2 KrF<sub>2</sub>. *J Am Chem Soc.* 2010;132(10):3533-42. doi: 10.1021/ja9098559 pmid: 20170204
- Detert J, Bruno A. Workplace courage: review, synthesis, and future agenda for a complex construct. *Acade Manage*

- Annal. 2017;11(2):593-639. doi: [10.5465/annals.2015.0155](https://doi.org/10.5465/annals.2015.0155)
22. Kilmann RH, O'Hara LA, Strauss JP. Developing and validating a quantitative measure of organizational courage. *J Business Psychol.* 2010;25(1):15-23. doi: [10.1007/s10869-009-9125-1](https://doi.org/10.1007/s10869-009-9125-1)
  23. Sekerka LE, Bagozzi RP. Moral courage in the workplace: Moving to and from the desire and decision to act. *Business Ethic European Rev.* 2007;16(2):32-149. doi: [10.1111/j.1467-8608.2007.00484.x](https://doi.org/10.1111/j.1467-8608.2007.00484.x)
  24. Forouzandeh Dehkordi L, Vakiarzam A. Identification and leveling of factors affecting the institutionalization of ethics in government organizations using the ISM model. (In Persian). *Quarter J Organizat Resource Manage Res.* 2015;5(3):125-52.
  25. Sanchez -Morales R, Cabello-Medina C. The role of four universal moral competencies in ethical decision-making. *J Business Ethic.* 2013;116(4):717-34. doi: [10.1007/s10551-013-1817-9](https://doi.org/10.1007/s10551-013-1817-9)
  26. Worline MC, Pury S, Lopez J. Understanding the role of courage in social life. *American Psychol Associat.* 2010;14(9):209-26. doi: [10.1037/12168-011](https://doi.org/10.1037/12168-011)
  27. Fredin AJ. The effects of anticipated regret on the whistleblowing decision. *Ethic Behav.* 2011;21(5):404-27. doi: [10.1080/10508422.2011.604296](https://doi.org/10.1080/10508422.2011.604296)
  28. Mahdavi Seresht R, Atashzadeh Shorideh F, Borhani F, Baghestani AR. Correlation between moral courage and moral sensitivity of nurses working in selected hospitals of Tabriz University of Medical Sciences. (In Persian). *Iran J Med Ethic History.* 2016;8(3):27-39.

