

**Research Article**

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# The Impact of Transformational Leadership on the Development of Human Resources: Mediating Role of Entrepreneurship Orientation

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**KEYWORDS**

*Transformational Leadership, Entrepreneurial Orientation, Human Resource Development, Agricultural Jihad of Ardabil Province*

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**ABSTRACT**

A large part of leadership research has been conducted to have a greater impact on the development of human resources. This research aims to investigate the mediating role of entrepreneurial orientation on the relationship between transformational leadership and human resource development. For this purpose, 259 completed questionnaires from government employees in the Agricultural Jihad Organization (Ministry of Agriculture in Iran) were collected and analyzed using the maximum likelihood method and based on Baron and Kenny's four-step analysis; the adequacy of the model and its indicators were confirmed (RMSEA=0.073). Structural equation modeling with Baron and Kenny's four-step method showed that transformational leadership has a positive and significant impact on human resource development and entrepreneurial orientation, and entrepreneurial orientation significantly mediates the effect of transformational leadership on human resource development. The results of this research can help managers to consider the entrepreneurial orientation in organizational management even in government and public institutions; furthermore, they can benefit from it as a variable in facilitating the development of human resources. It can also be considered as one of the predictor variables of individual growth in the organization with regard to other organizational and individual variables.

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## Introduction

The body of research conducted on the relationship between leadership, transformational leadership in particular, and human capital is limited (Abu-Rumman, 2021). Transformational leadership has better stimulated the desire of human forces to grow and increased the human talents of organizations and used the capacities and the increasing energy of organizations to achieve organizational goals and vision (Moini Korbekandi & Tabarsa, 2023). Leaders with characteristics of ideal influence, by facilitating the participation of employees in organizational decisions, pave the way for promoting innovative behaviors among employees. In this regard, Fauzi et al. (2021) argue that these innovative behaviors increase the effectiveness of human capital in the form of rate of return on investment, like the development of new products or processes and registration of new patents. And in the meantime, the leadership of the organization is one of the most important and vital factors affecting the behavior of employees in the organization (Sattari Ardabili, 2020).

By having inspiring motivation, on the other hand, and by creating optimism and enthusiasm among employees, transformational leaders provide the basis for creating the spirit of individual and teamwork, and as a result, provide the basis for creating a high rate of return on investment. In this sense, these leaders take advantage of the career development of their employees to achieve the benefits of human capital (Jun & Lee, 2023). They also support employees' achievement of self-actualization by meeting employee expectations (Rowe & Guerrero, 2012). Therefore, these leaders develop high interpersonal relationships to prevent any conflict and ensure increased productivity among employees (Farrukh et al., 2022) and provide the opportunity to involve human resources in projects that lead to the achievement of competitive advantage (Lim & Moon, 2022), transformational leaders increase high-quality interactions among group members and support group members' communication and interactions with others in the external environment (Hill & Bartol, 2016).

Entrepreneurial orientation is a concept originated by Miller (1983) which consists of three dimensions of innovativeness, proactivity and risk-taking. It was then popularized by Quinn and Sloane (1989) in the concept of strategic positioning of entrepreneurship. Years later, Lumpkin and Dess (1996) further refined entrepreneurial orientation and proposed a five-dimensional model that includes autonomy, innovativeness, risk-taking, proactivity, and competitive aggressiveness.

Entrepreneurial orientation is a process that creates new ways of developing and commercializing products, moving into new markets and providing new services to customers. By exposing companies to new developments, having an entrepreneurial orientation always keeps them aware of market trends and helps them evaluate new possibilities (Mobini et al., 2016, p. 715). In recent years, researchers have suggested that entrepreneurial orientation can also be considered as an individual-level construct (Robinson & Stubberud, 2014, p. 4). The existing studies that examined the individual entrepreneurial orientation are unanimous that the individual entrepreneurial orientation is a multidimensional structure and consists of elements similar to the entrepreneurial orientation at the company level. For example, individual entrepreneurial orientation of Taiwanese franchisees is positively related to business performance (Chien, 2014,

p. 919). The relationship between individual entrepreneurial orientation and business success was also proven by Bolton (2012). The abovementioned studies have actually gained a new insight on individual entrepreneurial orientation as an individual factor of entrepreneurial orientation. Since the orientation of individual entrepreneurship exists at the individual level, its relationship with the individual's attitude or behavior and career development can also be important and help operationalize the elements related to it in organizational studies.

The importance of developing human resources based on entrepreneurial orientation in government agencies has also been noted (Rakhshani et al., 2020), but considering the nature of the activities of these organizations, perhaps it can be said that the most effective factor contributing to this development is transformational leadership in government agencies. In fact, instead of focusing on external rewards, transformational leadership emphasizes self-regulation as an important factor in improving employees' behaviors, and in situations where organizations have bureaucracy and a high level of concentration, the leadership style can adjust the conditions and help accelerate the growth of employees. The transformational leader can help to increase the self-confidence of the employees in the work environment by asking their opinion in setting goals. Such leaders provide useful feedback to employees, encourage them to work harder to achieve new solutions, and motivate them to think creatively in an internal manner (Kucharska & Rebelo, 2022). Hence, in this research, the importance of the influence of transformational leadership in the process of human resource development through the creation of an entrepreneurial approach in public and government organizations has been discussed.

### **Research methodology**

Tools of data collection were questionnaires to test the hypotheses. The population included employees of the Ministry of Agriculture and its agencies in different cities and the data has been collected through online survey. The participants were asked to evaluate a direct supervisor or leader of the employees they are currently a part of. They were asked to respond to all questions describing the attributes of their direct superior or manager. All participants have been informed that the answers and their information will be kept confidential.

### **Transformational leadership**

To measure transformational leadership, the independent variable, we adapted the short measure of transformational leadership developed by Carless et al. (Carless et al., 2000) which contains seven questions. Response categories are loaded on a five-degree scale varying from 1 = to a very large extent, to 5 = to a very small extent.

### **Development of human resources**

To measure the development of human resources, Tabibi et al.'s questionnaire (2011) was used. This tool is prepared in 15 items and in three categories (commitment, planning, measures and assessment) and a 5-point Likert scale is used for answering.

### Entrepreneurial orientation

To measure entrepreneurial orientation, Mohammadi's questionnaire (2018) was used, which has 28 items in four dimensions (flexible structure, efficient organizational atmosphere, supportive and stimulating culture of creativity and innovation, capabilities, and individual motivations of employees). The questionnaire was based on a five-point Likert spectrum.

The means and standard deviations are shown in Table 1 for the predictor and criterion variables of the study.

**Table 1.**

*Dimensions and mean and standard deviation of research variables*

Concept	Dimensions	items	Mean and SD
Transformational leadership $\alpha = .87$	-	7	mean= 3.7; SD= 1.51
Human resource development $\alpha = .92$	Commitment	3	mean=4.2; SD=1.62
	Planning	4	
	measures	4	
	Assessment	4	
Entrepreneurial orientation $\alpha = .96$	Flexible structure	5	mean=3.9; SD=1.54
	Efficient organizational atmosphere	5	
	Supportive and stimulating culture of creativity and innovation	11	
	Individual capabilities and motivations of employees	7	

### Findings

To study the relationships between the variables, the fit of the research variables was checked first. The obtained results from the Amos software show that the CMIN/DF index of the model is equal to 3.379, which is less than 5 and therefore has a good fit. Also, other comparative fit indices also have a good fit. RMSEA is also 0.073, which is 0.1 less than the quorum and shows a good amount of squared error. The result of the model fitness is provided in Table 2.

**Table 2.**

*View of the standard model with standard coefficients*

Indicators				Acceptable fit
Comparative fit indices	Minimum difference	CMIN/DF	3/379	< 5
	Tucker-Lewis fit index	TLI	0/948	TLI >/.90
	Normalized fit index	NFI	0/917	NFI >/.90
	Relative fit index	CFI	0/904	CFI >/.90
	Incremental fit index	IFI	0/905	IFI >/.90
Parsimonious fit indices	Normalized parsimonious fit index	PNFI	0/591	> 50%
	Parsimonious adaptive fit index	PCFI	0/635	> 50%
	The root mean square of the estimation error	RMSEA	0/073	< 8%

### Testing research hypothesis

Studying the research hypothesis “entrepreneurial orientation plays a mediating role in the impact of transformational leadership on human resources development” was carried out with Baron and Kenny’s four-step method. Baron and Kenny stated that a variable can be a mediating variable when the variance of the independent variable significantly predicts the variance of the mediating variable and vice versa; and if the role of the mediating variable is removed, the relationship between the independent and dependent variables will decrease or not be significant. Therefore, by using the method of Preacher and Hayes (2004) in addition to the method of Baron and Kenny, bootstrapping was used in order to directly evaluate the role of the mediator and have more statistical power in the test as well (MacKinnon, Lockwood, & Williams, 2004).

The results of direct and general effects between predictor variables and dependent variables are presented in Table 3. According to this table, transformational leadership directly and significantly ( $r=.411$ ) predicts the development of human resources. Also, transformational leadership significantly affects the entrepreneurial orientation of people ( $r=.805$ ). Moreover, entrepreneurial orientation as a mediating variable directly affects the development of human resources ( $r=.458$ ).

**Table 3.**

*Significance of path analysis coefficients for the first step*

Effect	Regression coefficient	S.E.	t	P VALUE
Transformational leadership → Development of human resources	0/411	0/055	5/851	0.01
Transformational leadership → Entrepreneurial orientation	0/374	0/073	/0275	0.01
Entrepreneurial orientation → Development of human resources	0/258	0/050	/5923	0.01

### Discussion

Through collecting data from employees of Ministry of Agriculture (Agricultural Jihad Organization) in Iran, this study analyzed the effect of transformational leadership on human resource development as mediated by entrepreneurial orientation.

To enhance employee development through engagement in entrepreneurial behaviors, the first objective of this research was to examine the impact of transformational leadership on human resource development (HRD). In general, the results showed that transformational leadership has an effect on HRD. This finding aligns with those of other previous studies (e.g. Pongpearchan, 2016; Akdere & Egan, 2020); this indicates that by increasing the cohesiveness, commitment, motivation and trust, transformational leaders can lead a positive impact on the performance of their staffs, which in turn, affects the performance results. Transformational leaders are known for their abilities to: stimulate employees to achieve their goals, build trust among employees, inspire them to do more than expected and support them to pursue and achieve an appealing vision.

These findings can be interpreted as transformational leadership in the organization helps to develop goodwill and trust, and this helps to improve the performance of human resources and their organizational commitment and increases job satisfaction.

The mediating role of entrepreneurial orientation showed that in organizations with human resources inclined to entrepreneurship, transformational leadership leads to a greater impact on the development of human resources, which has also been confirmed in similar research (Akdere & Egan, 2020; Engelen et al., 2015).

Entrepreneurial orientation includes dimensions that are directly and indirectly related to entrepreneurial leadership. Creating an innovative culture can grow in the organization if the leadership has a desire for transformation as well as building trust and confidence in subordinates; moreover, people's commitment to the organization, which is related to transformational leadership, makes more people try to help the organization by modeling leadership approaches. In fact, through increasing organizational commitment, employees try to provide a positive reaction to the trust built by the leader. Having an entrepreneurial approach can be the factor that people with high scores of organizational commitment have a greater desire to use the platform of created trust, which is also mentioned in Iqbal et al. (2021) furthermore, they look at organizational opportunities with a more innovative perspective and therefore try to achieve those goals and more personal development.

Despite the fact that this research was conducted in a government organization, but considering the activity of the expert forces of this ministry in economic sectors related to agriculture, as well as the importance of changing the approach of employees to create entrepreneurship in the field of organizational expertise, it can be shown that transformational leadership in the public sector, like the private sector, leads to individual and organizational development and provides an opportunity for people to grow. In particular, this research showed that despite the centralized system in the public sector, the leadership style can still lead to the improvement of organizational culture and help in the development of human resources.

But it is still necessary to investigate the exact amount of the influence of the other leadership styles on career development among people with and without entrepreneurial orientation; moreover, it is necessary to define which economic sectors this relationship is more pertinent, this is because according to the importance of the type of acquired and organizational knowledge of individuals, the entrepreneurial orientation, due adjusted interaction with organizational conditions, may not lead to appropriate and the same results in different organizations.

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