



University of Hormozgan

## Model of Factors Related to Job Plateauing in Employees of Ministry of Education: A Mixed Method Study

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### ABSTRACT

**Objective:** In contemporary organizational discourse, the phenomenon of career plateauing has garnered significant attention and is regarded as an indispensable concern for all institutions. This study has been undertaken with the objective of examining the analytical elements associated with the career plateauing of educational personnel and formulating an appropriate model in this context.

**Methods:** The methodology employed in this inquiry is predicated on objective criteria within the applied research framework, wherein the classification of data collection temporal criteria aligns with descriptive-relational research, executed through a mixed-method approach to elucidate, describe, and model the phenomenon. The research population, comprising 20 experts, was selected for the model's presentation, while a cohort of 384 individuals was designated for the validation of the model. Factors pertinent to the model were discerned through semi-structured interviews and the grounded theory methodology. Subsequently, the proposed model underwent validation via structural equation modeling techniques. Furthermore, the interrelationships, weight, and prioritization of model factors were determined utilizing fuzzy DEMATEL and analytical network process methodologies.

**Results:** The findings from this research indicate that the model possesses sufficient validity. In accordance with the factor weighting results, the "career plateau criterion" emerges as a principal factor, while the sub-factors "Burnout," "Beliefs and Islamic values," and "Lack of material and spiritual incentives" exhibit the highest weight and priority, sequentially ranked in terms of significance.

**Conclusions:** The results of this research may be utilized by administrators and policymakers within the education to mitigate this occurrence and address associated challenges.

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## Introduction

In contemporary times, alterations within the business landscape, particularly "structural transformations," have prompted a significant reduction in the competitive nature among employees for promotional prospects, resulting in numerous managers encountering career stagnation at a relatively earlier stage compared to their predecessors (Danneels et al., 2018). The term "plateau" is a concept adapted from geography, which has recently facilitated the development of the notion of "Career plateau" in relation to the career management of personnel. The synthesis of these two concepts gives rise to the phenomenon of job plateauing, which denotes a condition wherein an individual remains at a static level in their career, devoid of any potential for advancement and promotion (Naseri, 2016). Work-related attitudes and behaviors exhibit a more robust correlation with subjective perceptions of job level (Hu et al., 2022).

A career plateau represents a juncture in an individual's professional trajectory where the likelihood of attaining further promotional advancements is markedly diminished (Hossain, 2018). Conversely, the emphasis on the advancement and professional growth of employees has emerged as a paramount concern for both researchers and organizational managers (Wang et al., 2014).

Research conducted within the context of large-scale organizations globally indicates that a minimum of 4% of employees are actively seeking new employment opportunities due to feelings of dissatisfaction regarding their career advancement and promotional prospects (Shatreovich, 2014).

In an alternative classification proposed by Dawis (2015), this phenomenon is examined from both subjective and objective perspectives, with distinct criteria delineated for each. Objective criteria encompass factors such as age, seniority, length of service, and compensation, while subjective criteria are assessed based on an individual's perception of potential future promotional opportunities (Ongori & Agolla, 2009).

In general, the theoretical literature categorizes career plateau into two distinct dimensions: hierarchical career plateau (characterized by a deficit in promotion opportunities) and career content plateau (defined by an absence of challenge or responsibility in future job roles) (Hu et al., 2022).

Plateauing is the sense of disappointment, and mental failure that employees experience after a temporary or permanent seizure in their career and professional promotion (Foster et al, 2004).

This feeling occurs when the organization does not have jobs at higher levels of management or the abilities of an employee do not meet the job requirements, the needs that are normally on his career path and therefore the employee decides not to seek further advancement. In these cases, the impossibility of future promotion causes the employee to experience a lot of stress (FERENCE, 1977). The more organizational structures tend to be hierarchical, the more difficult the problems of promotion and development of employees' careers become (Jung & Tak, 2008). As a result, many employees reach the career plateau stage before they can achieve their defined goals (Ongori & Angolla, 2009). This factor is rapidly becoming a very important managerial and organizational issue that requires immediate investigation, so that employees do not reach that stage and do not experience this feeling (Zarjam, 2018). In general, research results have shown that the increase in absenteeism, psychological pressure, desire to leave the service, increased job burnout level, decreased level of career satisfaction and organizational commitment, role conflict, decreased self-respect, inability to adapt to changes, low level of job participation and lack of action initiative are inevitable consequences of job plateauing (Tabarsa et al., 2014). The phenomenon of job plateauing is a very remarkable subject for the organization, because it can have negative and harmful effects on the employees and consequently the whole organization if it is not managed (Shariatnejad et al., 2017). Shariatnejad (2017) identified and prioritized the factors causing job plateaus in government organizations using the fuzzy Delphi method. The research results show that the lack of adequate motivation among the employees, inability to improve the working environment conditions, few opportunities for promotion, challenge for unemployment, ambiguity in employment and organizational structure change, are the most important factors that cause career plateauing. Jiang (2016) investigated the relationship between job adaptability and content-job plateau. This study identified an antecedent (i.e. job adaptation) of job content plateau and revealed the functional mechanism underlying the effect of this antecedent. This program provides innovative and useful insights for career management practices. (Kim and Etela 2016) investigated the effect of job plateau on job satisfaction and turnover intention of hospital nurses. The results showed that a systematic management strategy must be created for nursing resources and applied in the field of nursing. This strategy should complement the content of the page by redesigning and enriching the job. (Karen Zarembo 1994) mentioned two factors (organizational and personal). Accordingly, various factors affect the plateauing.

However, much occupational research has identified antecedents of job content levels. For example, Zhu & Li (2023), have emphasized the individual factors affecting career plateau. Ng & Yang (2023) discussed negative emotions in job burnout when employees have acquired deep knowledge and skills in their current roles, but the opportunity for more responsibility in the future is low, they experience job burnout (Zhu & Li, 2023). This is associated with several negative consequences, including job dissatisfaction, lack of organizational commitment, reduced performance and even leaving the organization for employees (Kim & Kim, 2021). Recent reports have shown that the biggest reason for job plateauing is the lack of career advancement and development (Ng & Yang., 2023). In addition, job content plateau causes employees to hide their knowledge, and as a result, organizational performance decreases (Hu et al., 2023). In general, job burnout can lead to negative job attitudes and behaviors and has become an important organizational issue (Darling & Cunningham, 2023).

Unfortunately, despite identifying moderators and mediators for the creation of perceived career plateaus by studies such as Huo & Jiang (2023) and Yang et al. (2019), the empirical literature has not yet revealed the complex relationships between them.

Current literature has overlooked an important factor supporting hierarchical and content job burnout that may reduce the perception of job burnout. In addition, the literature lacks accurate estimates of organizational support in the relationship between both job and content plateaus. Therefore, a theoretical framework that acknowledges both hierarchical, content, organizational support and its behavioral consequences is felt in the current literature. Without this knowledge, HR managers will not be able to design and implement appropriate practices to control negative work experience and burnout.

The preliminary interviews that researchers conducted with some education ministry's manager have confirmed a kind of job indifference by employees, and it has also been claimed that many employees and managers have reached a point in the structure where there can be no promotion and this issue has caused a kind of structural or hierarchical plateau in this organization. All these observations, the managers' statements and the claims raised have formed the motivation for this research. Naturally, the claims and statements of some managers and employees cannot be generalized without conducting scientific research; therefore, the purpose of this research is to

determine the effective factors on career plateauing in the Education Organization of Tehran province, and three questions are raised in this research:

1. What are the factors related to the job plateauing of ministry of education's employees?
2. What is model of job plateauing of ministry of education's employees?
3. How are the relationships between the factors related to job plateauing of ministry of education's employees?
4. What is the weight and priority of the factors related to job plateauing of ministry of education's employees?

## Material and Methods

This research is based on a discovery purpose because it aims to analyze the factors related to job plateauing of education employees and to provide a suitable model. On the other hand, due to the fact that library study methods and field methods such as semi-structured interviews and questionnaires were used in this research, it can be acknowledged that the current research is considered a cross-sectional survey based on the data collection method. This research has been done in two parts, qualitative and quantitative. In the qualitative part, we identified and extracted factors and sub-factors using semi-structured interviews with experts. For this purpose, grounded theory method with the application of inductive reasoning and coding technique were used, and a set of structural relationships was formed in the form of a conceptual model and was shown visually. grounded theory identifies and classifies indicators for a social reality. Inductive reasoning is the process of developing conclusions from collected data by incorporating new information into theories (Bengtsson, 2016). The trustworthiness of grounded theory findings was examined through credibility, dependability, and transferability (Roller, 2019). For this purpose, evidence, documents, and research background were checked for credibility. The fuzzy Delphi method was used for the dependability of the findings. To confirm the transferability of the findings, interviews were conducted in different places and times. The statistical population of the qualitative part of the experts and includes the senior managers of ministry of education's in Tehran province, who were selected as 20 experts in the form of targeted non-probability sampling and theoretical saturation criteria.

The research method in the quantitative part consists of two components. In the first part, using the method of structural equation modeling (SEM) of conceptual variables in theoretical models with Smart PLS software, the validity of related assumptions in the proposed model has been tested. PLS-SEM is a popular technique for the validation of theoretical models (Çolak & Kağrıoğlu, 2023). The reason for using PLS-SEM is to estimate complex models with many hidden and observed variables, which achieves good convergence and increases the reliability of composite measures (Hair Jr & Sarstedt, 2019). The validity of SEM with two criteria: Convergent validity (Average Variance Extracted) ( $AVE > 0.5$ ) and discriminant validity, and for factor load reliability greater than 0.5, Cronbach's alpha greater than 0.7 and construct reliability (CR) greater than 0.7 We used (Henseler et al., 2009). The statistical population in this section was determined based on Kurkan's table as a statistical sample of 384 people who were selected randomly.

In the second quantitative part, based on the judgments of 20 experts, including the senior managers of ministry of educations in Tehran province, the relationships between the specified factors and sub-factors related to the career plateauing of employees are analyzed using the DEMATEL technique and the analytic network process with SEM does not have the power to do this. DEMATEL can increase the understanding of problems, interacting groups and criteria and provide a suitable solution (Zhang and Deng 2019). Therefore, according to Çolak & Kağrıoğlu (2023), we investigated the cause-and-effect influence relationships between model variables with the DEMATEL method to reveal new insights. On the other hand, the analytic network process (ANP) method, which complements the DEMATEL method, has been used to weight factors that are related to each other (Taherdoost & Madanchian, 2023). Finally, we have taken the help of the fuzzy set theory to evaluate the imprecise measurement to deal with the inaccuracy caused by verbal expressions or ambiguous answers regarding the degree of influence of factors on each other. The Delphi method is a process based on the structure of group communication and is used in cases where knowledge is limited and uncertain (Alamdari et al., 2023). In this section, fuzzy delphi technique is used to screen the extracted codes for community in the general agreement of validity of factors and sub-factors.

## Results

In this research, factors and sub-factors were identified based on Grounded theory method. Data integration is very important in fundamental theorizing. In the research process, after collecting, analyzing and interpreting the data, the model should be presented, results should be concluded and for the research. In the first step, by examining the current situation, the obtained data are classified into 6 main categories.

According to the opinion of professors and experts and with the help of fuzzy Delphi technique, out of all the indicators obtained from the qualitative data-based analysis of the interviews, 30 indicators have been used to analyze the factors related to the career plateau of education employees. The fuzzy Delphi technique was performed in three consecutive rounds and some sub-factors were not important according to the experts and were removed from the model. Table 1 and figure 1 show the paradigm model of the analytical investigation of factors related to job plateauing of education employees.

**Table 1.** Factors and sub-factors of the job plateauing of ministry of education's employees

Categories	factors	Sub- factors
Causal Factor	Organizational formality	Lack of job promotion system
		Lack of material and spiritual incentives
		Lack of adequate organizational positions
		Lack of alignment of people with the organization
	Management style of the organization	Lack of supervision of trainings
		Failure to establish justice in the organization
		Lack of sufficient support for employees
		Failure to establish meritocracy
Core category	repetition and job boredom	Work pressure and stress
		Job dissatisfaction
		Non-delegation
		Failure to do things successfully
		Routine boredom job
Context	Lack of collaborative culture	Lack of participation of employees in organizational affairs
		Lack of team and group cooperation
		Unfavorable social relations with colleagues
		Unhealthy competition
Intervening conditions	Change of employees' preferences by time change	The level of intelligence of people
		Previous unwillingness in the job
		individual identity and authenticity
		A gap between personal development and work
Strategies	Personal norms and values	Beliefs and Islamic values
		Accountability
		Work commitment and conscience
		Social position



consequences	Career Plateauing	Burnout
		Lack of job variety
		unfitted Job and employee
		External control center
		Existence of traditional attitudes in schools

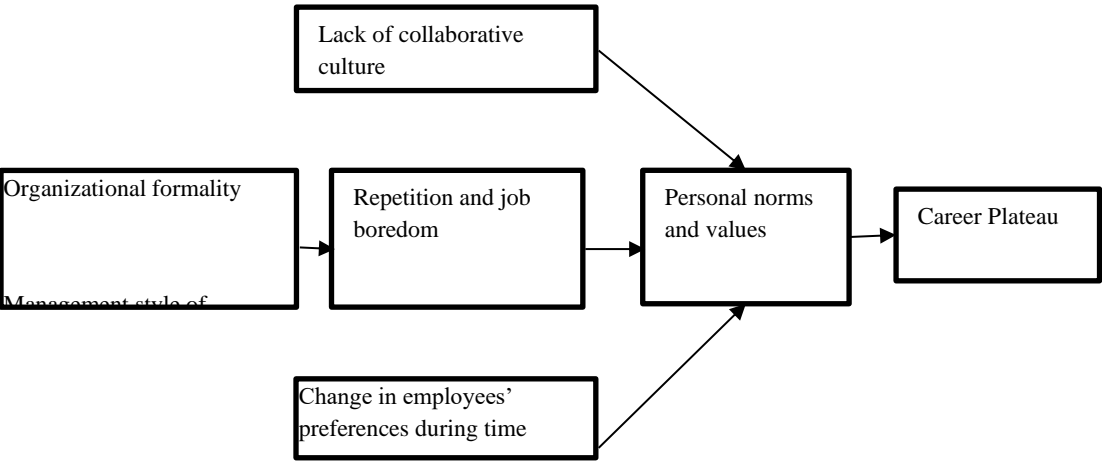


Fig. 1. Paradigm model of analytical studying of factors related to career plateauing of education employees

Partial least squares technique was used to validate the model of Figure 1. The results of running the model in the standard estimation mode show the direction and intensity of the relationship between the variables. Table 2 shows the results of the outer model. The strength of the relationship between the Items and the factors with their loading and significance is measured by the t statistic.

Table 2. Results of the external model

Main categories	Items	outer loading	t statistic
Organizational formality	Lack of job promotion system (Q01)	0.819	32.944
	Lack of material and spiritual incentives (Q02)	0.818	27.076
	Lack of organizational positions quantity (Q03)	0.7	16.702
	Lack of alignment of people with the organization (Q04)	0.751	20.675
Management style of the organization	Lack of supervision on trainings (Q05)	0.807	26.781
	Lack of justice in the organization (Q06)	0.788	21.476
	Lack of sufficient support for employees (Q07)	0.779	24.851
	Failure to establish meritocracy (Q08)	0.785	21.772
Lack of collaborative culture	Non-participation of employees in organizational affairs (Q09)	0.802	22.028
	Lack of team and group collaboration (Q10)	0.823	37.613



Dailiness and boredom in the job	Unsuitable social relations with colleagues (Q11)	0.818	29.24
	Unhealthy competitions (Q12)	0.812	24.646
	Work pressure and stress (Q13)	0.763	17.686
	Job dissatisfaction (Q14)	0.787	26.116
	Non-delegation of authority (Q15)	0.808	29.782
	Failure to accomplish duties (Q16)	0.624	13.947
	Dailiness in the job (Q17)	0.683	15.767
Change of employees' preferences over time	People's IQ (Q18)	0.694	13.443
	Previous unwillingness in the job (Q19)	0.728	13.949
	Individual identity and authenticity (Q20)	0.857	39.05
	Gap between personal development and work (Q21)	0.868	41.418
Individual values and norms	Beliefs and Islamic values (Q22)	0.752	16.746
	Accountability (Q23)	0.639	2.82
	Work commitment and conscience (Q24)	0.75	17.726
	Social status (Q25)	0.817	32.693
Job plateauing	Job Brnout (Q26)	0.677	12.884
	Lack of job variety (Q27)	0.811	25.947
	Lack of unfitted job and employee (Q28)	0.752	18.176
	External control center (Q29)	0.645	6.096
	Traditional attitudes in schools (Q30)	0.826	25.77

According to Table 2, the values of observed factor loadings are greater than 0.5 and the t statistic is greater than 1.96. Therefore, the external model (measurement) is approved (Henseler et al., 2009).

Three indicators have been used to evaluate the validity of the external model (measurement): convergent validity, composite reliability, and Cronbach's alpha. For convergent validity, and composite reliability (CR) the following relationships should hold (Henseler et al., 2009):

CR>0.7; AVE>0.5. table 3 shows the information about CR, AVE and Cronbach's alpha

**Table 3.** External validity of research constructs

Main structures	AVE	CR	Cronbach's alpha
Individual values and norms	0.578	0.772	0.808
Change of employees' preferences over time	0.625	0.868	0.798
Dailiness and boredom of the job	0.542	0.854	0.785
Organizational formality	0.598	0.856	0.775
Management style of the organization	0.624	0.869	0.799
Lack of collaborative culture	0.663	0.887	0.831
Job plateauing	0.512	0.835	0.748

The Average Variance Extracted (AVE) is greater than 0.5, so there is convergent validity. Cronbach's alpha of all the variables is greater than 0.7, so the reliability is confirmed. The composite reliability value (CR) is also greater than AVE and in all cases, it is greater than the threshold of 0.7, so the third condition is also met. Divergent validity is another criterion for measuring the fit of measurement models in PLS method. Divergent validity refers to the low correlation of the items of a latent variable with other latent variables. The divergent validity matrix is presented in Table 4.

**Table 4.** Divergent Validity Assessment Matrix

Main structures	1	2	3	4	5	6	7
Individual values and norms (1)	0.760						
Change of employees' preferences over time (2)	0.217	0.790					
Dailiness and job boredom (3)	0.630	0.297	0.736				
Organizational formality (4)	0.540	0.344	0.586	0.774			
Management style of the organization (5)	0.358	0.142	0.178	0.307	0.790		
Lack of collaborative culture (6)	0.429	0.317	0.391	0.671	0.618	0.814	
Job plateauning (7)	0.579	0.272	0.619	0.483	0.226	0.375	0.716

As it is observed in Table 4, the square root of the AVE reported for each construct (principal diameter) is greater than its correlation with other constructs in the model, which indicates acceptable divergent validity for the measurement models.

Therefore, according to the validity and reliability obtained from our model, according to the study Hair Jr & Sarstedt (2019), the measurement model is approved. After ensuring the measurement models through the reliability test, convergent validity and divergent validity, the results of the external model can be presented.

Figure 2 demonstrates the output of Smart PLS software for standard estimation. To check the significance of the relationships of the variables of the model, the bootstrap method has been used, which gives the t statistic. At the 5% error level, if the value of the bootstrapping statistic is greater than 1.96, the observed correlations are significant. The t statistic and bootstrapping value to measure the significance of relationships are shown in Figure 3 too.

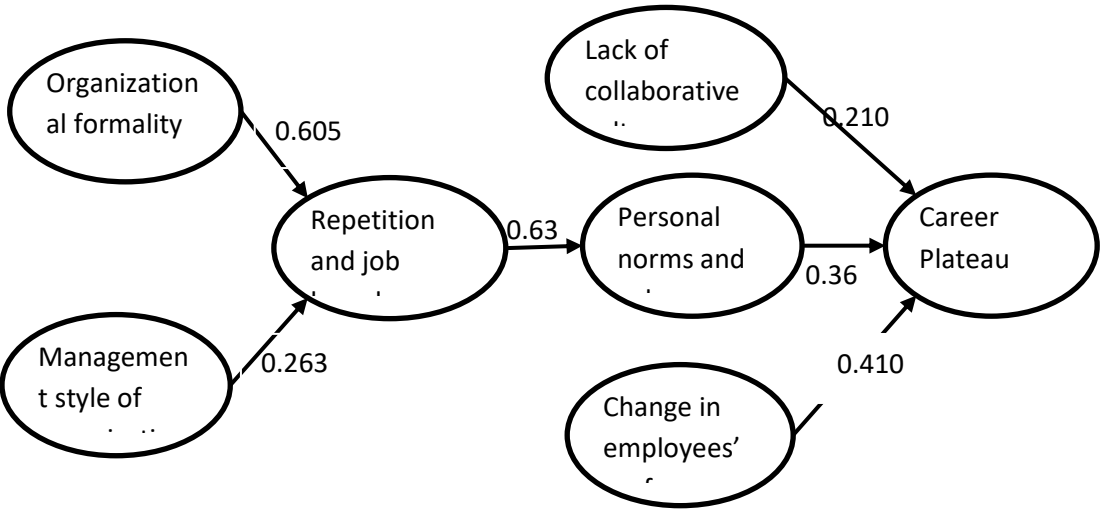


Fig. 2. Confirmatory factor analysis coefficients of job plateauing of ministry of education

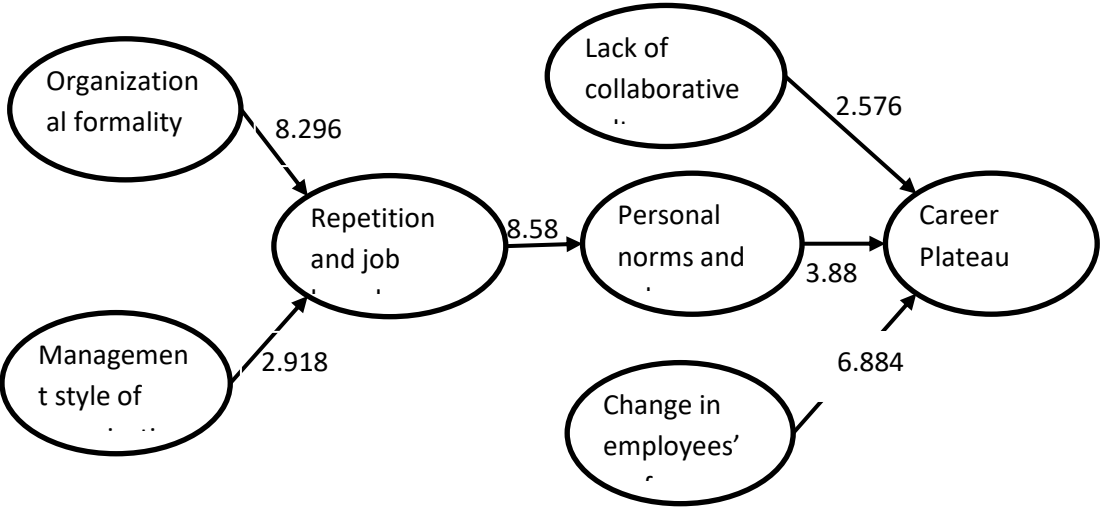


Fig. 3. Significance of relationships of variables with partial least squares method (bootstrapping)

The relationships between the main structures of the research have been investigated in the structural section. Based on the observed path coefficient and the value of the t statistic (bootstrapping), the relationships of the variables are as presented in Table 5.

**Table 5.** Results summary of the of the structural part of the model (relationships of model variables)

Independent variable	The dependent variable	Effective coefficient	T statistic	Result
Organizational formality	Dailiness and boredom of the job	0.606	8.296	Confirmed
Management style of the organization	Dailiness and boredom of the job	0.263	2.918	Confirmed
Dailiness and boredom of the job	Individual values and norms	0.635	8.584	Confirmed
Individual values and norms	Job plateauing	0.361	3.889	Confirmed
Lack of collaborative culture	Job plateauing	0.210	2.576	Confirmed
Change of employees' preferences over time	Job plateauing	0.410	6.884	Confirmed

Finally, the fit of the external model has been examined. The structural part of the model, contrary to the measurement models, does not deal with the obvious questions and variables of the model and only pays attention to the latent variables and the relationships between them. There are several indicators to evaluate the structural fit of the model, each of which has been examined and shown in Table 6.

**Table 6.** Summary of the evaluation results of model structure fit

Main structures	Detection coefficient	Q2	F2	GOF
Individual values and norms	0.404	0.163	0.389	0.596
Change of employee preferences over time	-	0.378	0.336	
Dailiness and boredom of the job	0.672	0.340	0.453	
Organizational formality	-	0.326	0.309	
Management style of the organization	-	0.365	0.335	
Lack of collaborative culture	-	0.436	0.474	
Job plateauing	0.727	0.339	-	

The coefficient value of determination is reported as 0.442, which is an acceptable value. The value of Q2 index has been obtained in all positive cases, which indicates that the model fits well. The value of the effect size (F2) for research variables is estimated to be at a medium to strong level. The GOF index evaluates the overall model fit based on both measurement and structural model parts. The GOF index is equal to 0.596, so the model is a good fit.

After identifying factors and sub-factors of the research, to answer research question 3, the factors and sub-factors of the model by using of the fuzzy DEMATEL technique them have been determined relationships between and then they are weighted and prioritized with the technique of fuzzy analytical network process, which is discussed further. Seven main factors and 30 sub-factors have been investigated for job plateauing of education employees. The factors and sub-factors of the research are given in table 2. The analysis steps are as follows:

Identifying the internal relationships between the factors with DEMATEL technique

Prioritizing the factors based on the objective through paired comparison

Prioritizing each sub- factors in its respective cluster through paired comparison

Calculating of initial Super matrix, balanced super matrix and limit super matrix

In order to reflect the internal relationships between the factors, the fuzzy DEMATEL technique has been used so that experts can express their opinions more precisely regarding the effects (direction and intensity of effects) among the factors. It is noteworthy to mention that the matrix resulting from the DEMATEL technique (matrix of internal communication) shows both the cause/effect relationship between the factors and the influence of the variables. First, the opinions of the experts have been collected and the fuzzy direct correlation matrix was obtained, which is shown in table 7.

**Table 7.** Calculating he Fuzzy direct relation matrix

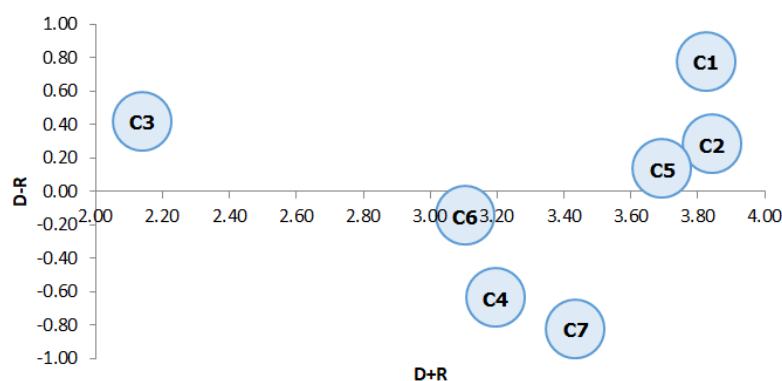
X	C1	C2	C3	C4	C5	C6	C7
C 1	(0, 0.1, 0.3)	(0.66, 0.86, 0.98)	(0.47, 0.66, 0.82)	(0.47, 0.65, 0.81)	(0.51, 0.71, 0.87)	(0.49, 0.67, 0.82)	(0.53, 0.71, 0.85)
C 2	(0.53, 0.71, 0.85)	(0, 0.1, 0.3)	(0.43, 0.62, 0.77)	(0.49, 0.67, 0.82)	(0.51, 0.7, 0.85)	(0.45, 0.65, 0.8)	(0.44, 0.62, 0.77)
C 3	(0.09, 0.23, 0.43)	(0.16, 0.34, 0.54)	(0, 0.1, 0.3)	(0.3, 0.47, 0.67)	(0.31, 0.5, 0.69)	(0.1, 0.23, 0.43)	(0.39, 0.55, 0.71)
C 4	(0.16, 0.34, 0.54)	(0.19, 0.34, 0.54)	(0.11, 0.27, 0.47)	(0, 0.1, 0.3)	(0.27, 0.46, 0.66)	(0.11, 0.25, 0.45)	(0.47, 0.66, 0.8)
C 5	(0.27, 0.46, 0.66)	(0.54, 0.74, 0.91)	(0.43, 0.62, 0.81)	(0.35, 0.54, 0.74)	(0, 0.1, 0.3)	(0.33, 0.51, 0.71)	(0.51, 0.7, 0.84)
C 6	(0.11, 0.25, 0.45)	(0.39, 0.55, 0.71)	(0.27, 0.43, 0.63)	(0.36, 0.54, 0.74)	(0.19, 0.33, 0.53)	(0, 0.1, 0.3)	(0.43, 0.62, 0.79)
C 7	(0.25, 0.42, 0.61)	(0.17, 0.33, 0.53)	(0.07, 0.23, 0.43)	(0.3, 0.46, 0.65)	(0.23, 0.42, 0.62)	(0.18, 0.35, 0.55)	(0, 0.1, 0.3)

Then, the normalized matrix and the total relationship matrix were obtained. Afterwards, in order to determine the cause-and-effect relationships, the values of D+R and D-R were obtained through the sum of column (D) in the middle (R) and these values are in Table 8.

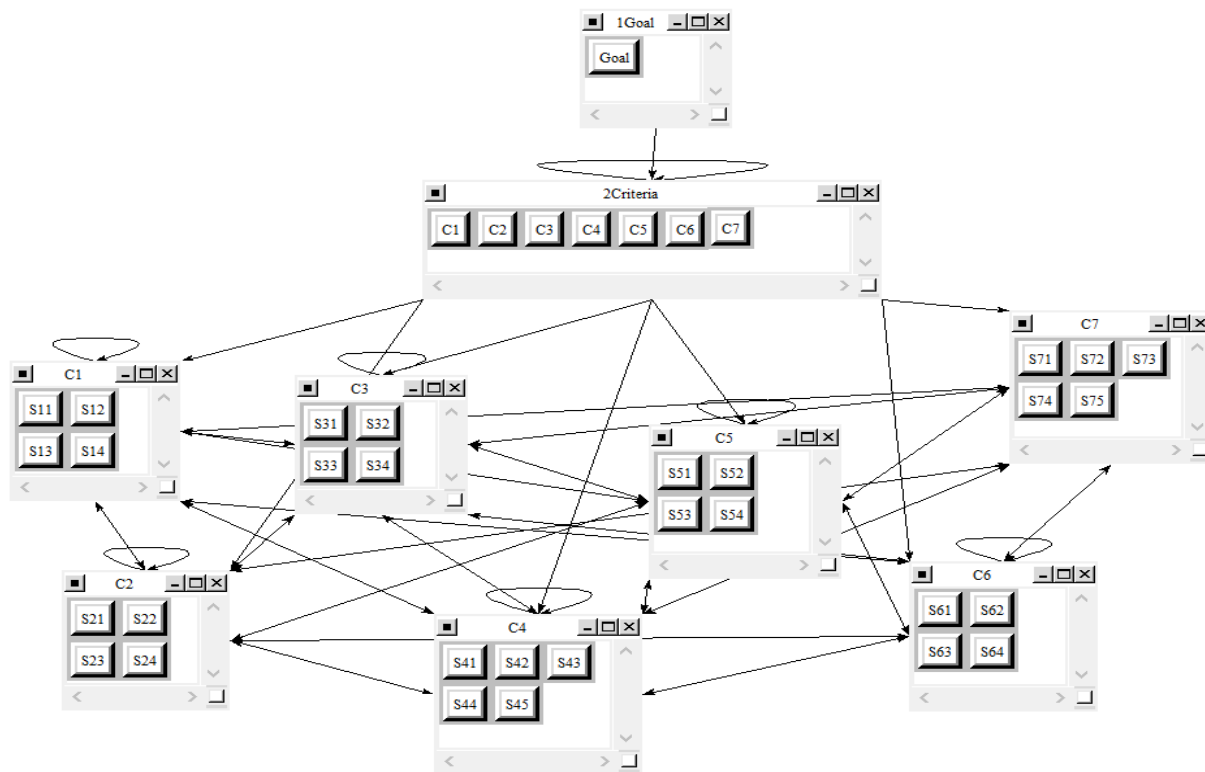
**Table 8.** Cause and effect of factors

factors	D	R	D+R	D-R
Organizational formality	2.30	1.53	3.83	0.78
Management style of the organization	2.06	1.78	3.84	0.28
Lack of collaborative culture	1.28	0.86	2.14	0.42
Dailiness and boredom of the job	1.28	1.92	3.20	-0.64
Changing employees' preferences over time	1.91	1.78	3.69	0.13
Individual values and norms	1.48	1.63	3.10	-0.15
Career plateau	1.31	2.13	3.44	-0.83

The sum of elements of each row (D) indicates the influence of that factor on other factors of the system. Organizational formality clearly has the greatest impact on other elements of the system, and the management style of the organization is the second influential factor. Sum of the column elements (R) for each factor indicates the degree of susceptibility of that factor on other factors of the system. Job plateauing takes the greatest impact from other factors, and dailiness and job boredom is the second most factor of susceptibility (D+R) is the degree of Influential and susceptibility of the related factor in the system. Organization management style and organizational formality have the most interactions with other variables. Figure 4 shows the cause-and-effect diagram. the vertical vector (D-R) shows the influence of each factor. In general, if D-R is positive, the variable is considered a causal variable, and if it is negative, it is considered an effect. Job burnout, individual values and norms, and job dailiness and boredom are disability variables and other causal variables.

**Fig 4.** Cause and effect relationships

The model of the relationship network between the studied variables is presented in Figure 4, which is extracted from DEMATEL results. It should be noted that in this model, the factors and sub-factors of the research are named in the form of a table with a numerical index so that they can be easily tracked and studied during the research.



**Fig. 4.** Model of career plateauing elements relations for education employees

Therefore, the final priority of the indicators has been determined. A nine-hour scale is used for paired comparison of elements. The nine-degree hour scale is presented by Saaty (1996), the author of the theory of hierarchical analysis. Also, in this study, the fuzzy approach is used to quantify the values. The fuzzy scale corresponding to nine-hour degrees in the fuzzy network analysis process method is shown in Table 9.



**Table 9.** The spectrum of nine degree with triangular fuzzy numbers by Saaty (1996)

The verbal expression of comparison state of I to J	FUZZY Equivalent
Equally Preferred	(1, 1, 1)
Moderate	(1, 2, 3)
moderately Preferred	(2, 3, 4)
Moderate	(3, 4, 5)
Strongly Preferred	(4, 5, 6)
Moderate	(5, 6, 7)
very strongly Preferred	(6, 7, 8)
Moderate	(7, 8, 9)
Extremely Preferred	(9, 9, 9)

The vector was calculated after forming the matrix of the obtained paired comparisons. It should be noted that the calculated weights are non-Fuzzy but should be normalized. The results of the calculating to determine the priority of the factors are shown in Figure 5:

**Fig. 5.** Priorities of the factors

According to Figure 5, the factor “Job plateauing (C7)” with a weight of 0.180 is more important and has won the first priority, which shows the lack of control of job plateauing in education and training staff. The “Dailiness and boredom in the job (C4)” factor, which is related to the job results of employees, has the second priority with a weight equal to 0.174. The third priority is the “Management style of the organization (C2)” factor with a weight of 0.158, which refers to the managerial characteristics of employees' jobs. The factor “Organizational formality (C1)” is in the fourth priority based on the results of ANP with a weight of 0.152, which shows the almost high importance of organizational structure in controlling job plateauing. The factors Lack collaborative culture (C3), Individual values and norms (C6) and change of employees' preferences over time (C5) are in low priorities respectively.

Comparing and determining the priority of sub- factors is the next step of the research. In the third step of the FANP technique, the sub- factors of each criterion were compared in pairs, and the calculations were done. The matrix of paired comparison of sub- factors of organizational formality is presented in Table 10.

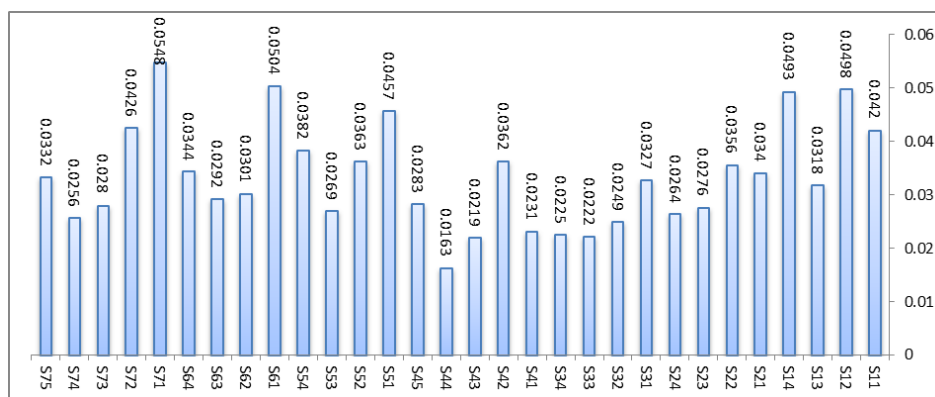
**Table 10.** Paired comparison matrix of organizational formality sub- factors

	S11	S12	S13	S14
S11	(1, 1, 1)	(0.61, 0.75, 0.94)	(1.02, 1.36, 1.8)	(0.82, 0.9, 0.98)
S12	(1.07, 1.33, 1.64)	(1, 1, 1)	(1.13, 1.41, 1.75)	(0.95, 1.06, 1.21)
S13	(0.55, 0.73, 0.98)	(0.57, 0.71, 0.89)	(1, 1, 1)	(0.45, 0.59, 0.78)
S14	(1.02, 1.11, 1.21)	(0.82, 0.94, 1.06)	(1.28, 1.71, 2.21)	(1, 1, 1)

After carrying out estimations by ANP method, the weight and priority of the factors were obtained, which are shown in Table 11 and Figure 5.

**Table 11.** The final priority of job plateau sub-factors for education employees

Indicators	cod	Ideal weight	global weight	Rank
Lack of job promotion system	S11	0.767	0.042	7
Lack of material and spiritual incentives	S12	0.909	0.0498	3
Lack of organizational posts	S13	0.581	0.0318	16
Lack of alignment of people with the organization	S14	0.9	0.0493	4
Lack of supervision on trainings	S21	0.621	0.034	13
Failure to establish justice in the organization	S22	0.65	0.0356	11
Lack of adequate support for employees	S23	0.503	0.0276	21
Failure to establish meritocracy	S24	0.483	0.0264	23
Non-participation of employees in organizational affairs	S31	0.597	0.0327	15
Lack of team and group collaboration	S32	0.455	0.0249	25
Unsuitable social relations with colleagues	S33	0.406	0.0222	28
Unhealthy competition	S34	0.412	0.0225	27
Work pressure and stress	S41	0.422	0.0231	26
Job dissatisfaction	S42	0.661	0.0362	10
Non-delegation of authority	S43	0.399	0.0219	29
Unsuccessful duties	S44	0.298	0.0163	30
Dailiness and boredom in job	S45	0.516	0.0283	19
The level of intelligence of people	S51	0.835	0.0457	5
Previous unwillingness and lack of interest in the job	S52	0.663	0.0363	9
Individual identity and authenticity	S53	0.491	0.0269	22
Gap between personal development and work	S54	0.698	0.0382	8
Beliefs and Islamic values	S61	0.921	0.0504	2
Accountability	S62	0.55	0.0301	17
Commitment and work conscience	S63	0.534	0.0292	18
Social position	S64	0.629	0.0344	12
Burnout	S71	1	0.0548	1
Lack of job variety	S72	0.778	0.0426	6
Unfitted job and employee	S73	0.512	0.028	20
External control center	S74	0.468	0.0256	24
Traditional attitudes in schools	S75	0.606	0.0332	14



**Fig. 6.** The priority of job plateauing sub-factors of education employees

Therefore, burnout (S71) is the most important index among all the available indicators, which shows that the manager does not pay attention to the job promotion of the employees. The index of beliefs and Islamic values (S61) is of the second priority, which is the result of lack of spiritual support from managers. The index of lack of material and spiritual incentives (S12) is the third priority, and it indicates the lack of attention of managers to the financial and motivational support of employees to improve their job status.

## Discussion

The resulting paradigm model was validated using the Partial Least Squares Method. The relationships between the main structures of the research have been investigated in the structural section. Based on the observed path coefficient and the value of the t statistic (bootstrapping), the relationships of the variables can be interpreted as follows:

Organizational formality has affected job dullness and boredom. The indicators of lack of job promotion system, lack of material and spiritual incentives, inadequate number of organizational posts, lack of alignment of people with the organization were selected as the categories of causal conditions in the analytical study of factors related to career plateauing of education employees. One of the important factors that shape the work attitude is career growth opportunities, the lack of attention to which creates career stagnation (Sijabat, 2023). In confirmation of our findings, Hu et al. (2022) emphasized the lack of challenge or future job responsibility and Yang et al. (2019) the normalization and unattractiveness of an employee's job content on negative job attitudes and

behaviors and job dissatisfaction. In addition, a flexible job structure causes commitment in people's jobs (Agu et al., 2023).

The management style of the organization affects job dullness and boredom. Indicators of lack of monitoring the trainings, lack of justice in the organization, lack of sufficient support for employees, lack of establishment of meritocracy were selected as the categories of causal conditions in the analytical study of factors related to job plateauing of education and training of employees.

The studies of Darling & Cunningham (2023) show that the lack of experience, skills and training is one of the reasons for job plateauing. To confirm this relationship, the study of Huaman-Ramirez & Lahlouh (2022), shows that the lack of support from colleagues and job content have a negative correlation with emotional commitment. Elsayed & Abd-Elmonem (2023) also emphasize that creating a supportive work environment for employees by providing all the necessary resources for their work is necessary and necessary. These findings support the results of our research.

Dullness and boredom of work Influence individual values and norms. Work pressure and stress indicators, job dissatisfaction, lack of delegation of authority, lack of success duties, dullness in the job were selected as the phenomenon-based category in the analytical study of factors related to job plateauing of education employees. According to Sijabat (2023), in work attitude, the existence of a relationship between job satisfaction and work commitment is an important issue in the management and development of human resources and can reduce the desire to leave the job. Also, based on Huo & Jiang (2023) studies, stressful work environments and individual differences in job plateauing have a direct relationship.

Individual values and norms have an effect on job plateauing. The indicators of beliefs and Islamic values, accountability, commitment and work conscience and social status were selected as the category of strategies and measures in the analytical study of factors related to career plateau of education workers. In this regard, studies show that stressful experiences (Lin & Chen, 2021) and emotional burnouts of employees (Wang et al., 2014) are effective on turnover intention and unproductive behavior of employees (Hu et al., 2022).

The lack of collaborative culture has an impact on job plateauing. The indicators of non-participation of employees in organizational affairs, lack of team and group cooperation, unsuitable social relations with colleagues and unhealthy competitions were selected as

background categories in the analytical study of factors related to job plateauing of education employees. Researchers have emphasized this finding that doing poor work due to the lack of participation and conflict at work is a critical determining factor that affects job plateaus, and they necessarily emphasize the use of job enrichment to increase employee work participation (Elsayed & Abd -Elmonem, 2023). Reducing managers' social support to employees and not allocating fair rewards exacerbates job plateauing (Farjam et al., 2023).

The change of employees' preferences over time has an effect on job plateauing. The indicators of people's IQ level, previous lack of desire and interest in the job, identity and individual authenticity, the existence of a gap between personal development and work were selected as the category of intervening conditions in the analytical study of the factors related to the career plateau of education workers. Darling & Cunningham (2023), show that employees who lack the personal characteristics needed for further promotion are personally under pressure. Studies show that personal factors related to employee preferences, such as adaptability and job interest (Jiang, 2016), and people's IQ, learning self-efficacy (Armstrong-Stassen, 2008), can be effective in reducing job plateauing, which in Our research has also been confirmed.

Any research is conducted to utilize its results to improve things or change conditions. The results of this research can also be used by managers and education experts of the country who are in dynamic and complex environments today and seek to use the career plateau model of education employees.

Regarding the relevant background categories, it is suggested that the relevant authorities should prepare the grounds to reduce job plateau of education employees by encouraging and persuading them to increase their participation in organizational affairs. The possibility of job plateauing of education employees will be reduced if there is team and group collaboration and sincere relations between employees.

The job plateaus among educational employees may also be reduced by establishing suitable social relations among colleagues and by creating healthy and effective competitions.

Regarding the causal conditions, it is suggested that by creating a job promotion system and providing material and spiritual incentives, we can promote the working environment of employees towards improved interactions to overcome environmental challenges resulting from job plateauing of education employees. Motivation and enthusiasm can also be created in

employees, by increasing the number of organizational posts and aligning people with the organization. Relevant managers will be able to establish meritocracy in education by closely monitoring the training process, establishing justice in the organization and providing sufficient support to employees.

Regarding the phenomenon-based subject, it is recommended to reduce the work pressure and stress of the employees with proper division of tasks on the basis of people's abilities also job plateauing of education employees caused by job dissatisfaction can be resolved by delegating authority, success of employees in doing assigned tasks and preventing the creation of routine affairs in the job, so as to obtain the employees' satisfaction.

In terms of strategies and measures, it is suggested that they should provide the basis for increasing the employees' accountability and commitment and work conscience by preserving and respecting their religious and Islamic values. Anyhow, it is also suggested that they should create a superior social status for education employee due to changing the careers in world by increasing in organizational reengineering in recent years factors such as changes in the business environment, downsizing the organizations, and utilizing the horizontal structures have all caused job plateauing to become a managerial crisis. Plateauing is a process by which the level of individual productivity decreases due to lower job motivation, which should be countered by adopting new measures and minimizing it to lower levels as possible.

Regarding the intervening conditions, it is suggested that they should solve the education employees' job plateau by hiring employees based on their level of IQ and maintaining their desire and interest in the job. Also, maintaining individual identity and authenticity and obviating the gap between personal development and work will encourage and motivate employees, because employees are the key to movement and struggle in the current competitive environment of organizations, and the sustainability of organizational activities depends on the creation and development of employees' capabilities in the work environment.

Regarding the consequences, it is suggested that by preventing job plateauing of education employees, we can expect results such as reducing job burnout, increasing job diversity, increasing the fitness between jobs and employees, removing the center of external control, and removing traditional attitudes in schools. In fact, numerous research has emphasized the impact of career path planning on employees' attitudes. Employees expect continuous progress and growth in their

career path, but the phenomenon of plateauing occurs when there is no learning for them in their occupation and they feel their skill development has stopped or it is not possible for them to be promoted in the organizational hierarchy. Education managers should prevent this phenomenon by considering the strategies proposed in this research.

This research was done in the Department of Education. Therefore, generalizing its findings to other organizations such as industrial organizations is one of the limitations of the research. Also, the generalization of the results of this research to the future is another limitation of the research, which may not be relied upon due to changes in the organizational structure. This study also faced limitations. Considering the extent of the educational organization, the lack of access to managers and experts was one of the most important limitations of the current research.

Finally, researchers are suggested to investigate and determine the necessary prerequisites for the implementation and establishment of the career plateau model of education workers. Also, the pathology of problems and obstacles facing the implementation and establishment of the model of job plateauing of employees at the level of several knowledge-based organizations can be useful.



### Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

### Ethics statement

The studies involving human participants were reviewed and approved by ethics committee of Islamic Azad University.

### Author contributions

All authors contributed to the study conception and design, material preparation, data collection and analysis. All authors contributed to the article and approved the submitted version.

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### Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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