

Research Article

ON THE DESIGNING THE MODEL OF EMPOWERING THE APPLIED-SCIENCE COLLEGES MASTERS

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ABSTRACT

The concept of empowering involves the development of personnel to create Efficient, productivity, staff and administrators satisfaction in recent decades. In this study, at first, the main and inferior elements effecting directors' empowering from the perspectives of authorities and researches undertaken in this domain has been investigated in terms of research theoretical model. After being confirmed by authorities and professionals of applied-science colleges, this model will be implemented among the masters of applied-science colleges. The researchers have implemented qualitative and quantitative method as the research methodology. Participants of the research involve professionals and university authorities, staff directors, and applied-science colleges' masters in all around the country. Data collection has been done through questionnaire which was designed by the researchers. The results demonstrate that the suggested empowerment model is highly agreed among university authorities and masters. Furthermore, the results confirm the goodness of fit index for the secondary factors forming management, organizational, and individual main factors model in specific and general.

Keywords: Empowerment, Human Sources, Science-Applied Colleges, Academic Jahat

INTRODUCTION

Nowadays wide-spread and rapid changes in management studies and organizations' environments necessitate a more profound understanding of management concepts. The nature of the future management is to overcome the different challenges and move along with the technology progresses and keep on competing despite of the world increasing compete, unsecure environment, decrease in personnel and sources, and economic, political, and social wide-spread changes. The world developments require the managers benefit the most with the least facilities, exploit the staff potentials, consider the work as dynamic rather than static as the nature of the work and the culture values. Today and tomorrow managers should unify the basic skills of management to the new approaches that confirm human abilities, increase flexibility, and exploit the staff soul and body. Therefore, in this condition, there is an obvious need to the skillful and formidable managers more than ever (Deft, 2008).

There has been a vast development in processes, approaches, and high education outcomes in 21th century. The explosion of information, development in administration system, and the country unity developments has affected the attitudes toward higher education. These developments cause new expectations of the university academics as theorists and creators of new sciences and plans. Meeting those expectations and challenges require special strategies and actions from higher education administrators. Higher education can meet the challenges when the managers are capable, educated and aware of the higher education necessities and compulsions in the third millennium (Sebert *et al.*, 2004).

Iran higher education has not been without challenges and developments, and the managers have tried to manage the changes happened in different areas. It could be illustrated as missions' revisions and adjustments, and the politics and plans of higher education in a way that universities and higher education institutes adapt themselves to the conditions of the world and also meet the needs inside the country, and be able to keep the increase in productivity and decrease in expense.

The Applied_science University which is associated to the science and research ministry has an amendatory view to the higher education. This university has recently aimed at increasing the staff skills in different economic sections and the skills of professional and educated students who do not have

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enough experience. By exploiting the facilities and human resources of executives, this university tries to provide the students with associate and bachelor degree (Ghouchanchian *et al.*, 2004). Like other universities this university also confront with different challenges that should be able to face with all of those challenges and expectations (Maghni, 2001).

Because the government policies aims at developing these educations in higher education, therefore the managers and staff of these organizations are supposed to possess the required abilities to recognize the objectives and plans of the country, the needs of different economic sections of the country, and the ability to use and organize the facilities and the human resources. These capabilities enable the managers to play an important role in making effective decisions and know about the province needs, and also lead the experts and managers to design and implement the required education in a way that design an effective executive process (Sayour, 1988).

Considering the needs of the administrators of higher education, applied-science University has modified to an effective model of empowering the administrators and managers and aims at designing that model in the country. To achieve that goal the researcher tends to answer the following questions:

- 1) What primary and secondary dimensions do empowering applied science university administrators follow?
- 2) To what extent empowerment professionals agree with applied-science administrators empowering model introduced in this research?
- 3) To what extent staff managers of applied-science University agree with applied-science administrators empowering model introduced in this research?

Theoretical Background

Authorities and researchers have defined empowerment in different perspectives. Some define it as rational approach while others as motivational approach and some others as ultra motivational approach (Spreitzer and Quinn, 1997). According to rational approach, empowerment is a process that shares the abilities of the managers to the amateurs and focuses on organizational authorities. The outcomes would be based on techniques and methods of participatory management, quality cycling, self-management and mutual targeting (Burke, 1986). According to motivational approach, the empowerment source is motivational tendencies in individuals. Any attempt aiming at increasing job activities' right is considered as empowering. In contrast, any attempt causing those motivations to debilitate would intensify powerlessness feeling (Manueli 2003). According to the ultra motivation point of view empowerment is a process aims at providing internal motivation by preparing a suitable environment (Conger and Kanungo 1998).

Empowerment means to provide power which includes helping others to develop their self confidence, to overcome their weaknesses and provide them with the internal interest and motivation to have a better outcome (Blanchard, 2003).

Empowerment is a set of operations aiming at providing the facilities of participation, increasing motivation, efficiency, and also increasing internal motivation of organization members which is implemented by organization managers. The study of empowerment is an important principle in recent organization managements. This study provides a deep understanding staff and managers' behavior in a general sense and the extent to which a manager can manage an organization in an effective way. Furthermore, empowerment contributes to understanding the main skills of management in organizations and uses them practically to reach a solution to solve the organizations' and management problems. Empowerment issues deal with the following items: providing an environment where the organizations are able to find their required staff and make them motivated. Empowering the staff and members involve developing the skills, increasing self confidence, and providing a suitable atmosphere to grow (Blanchard, 2003).

Empowerment has been considered as a process of enhancing the empowerment culture and sharing information (Fox, 1988). Empowering the managers and staff could make the managers overcome the problems related to the human resources' adjustment and maintain the effectiveness of the organization in an international world. It also enhances the abilities of the staff to overcome their stress (Sovery and Kuls,

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2001). In a research about USA communication organizations it was demonstrated that there is a significant relationship between empowerment, stress, and the job satisfactory (Hold and Cartrought, 2003). Furthermore, there is a relationship between management styles, attitude, knowledge, managers’ experiences, and organizational commitment (Soleimian, 2002). Some of the researchers believe that empowering human sources should be taken place by education, training, organizing, supporting, and providing consultation services (Morales, 2004).

Empowerment has also some advantageous consequences. They can be illustrated as mutual effect, sharing the power, common responsibilities, increasing energy and developing democratic situation (Kan, & Meredith, 2004). Other outcomes could be illustrated as justice in organizations, job satisfaction, and increase in staff commitment (Franz and Chedliy, 2004). Some of the staff consider the strict hygiene and security rules as a limitation for freedom and think it hinders empowerment (Greasley *et al.*, 2005). The results of a longitudinal research which was implemented among nurses of a hospital in Canada demonstrated that a formidable organization would affect straightly on psychology changes and bring about job satisfaction (Spence *et al.*, 2004). Among styles of management, attitude, knowledge, managers’ experiences, and organizational commitments, there is a positive relationship between empowerment of human resource and not concentrating on making decisions (Salimian, 2002).

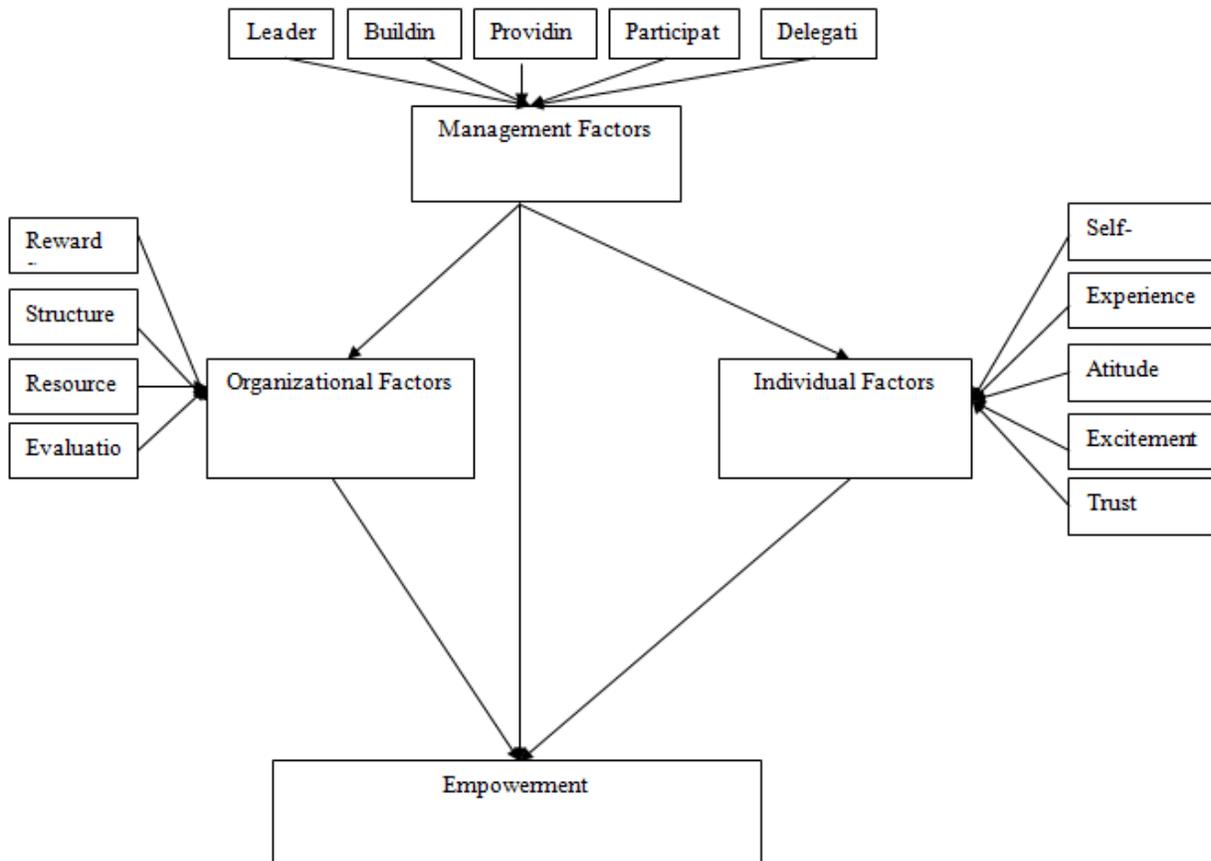


Figure 1: Theoretical model of the research

A lot of different researchers have been undertaken about psychology empowerment and its impact on experts’ skills based on psychological empowerment dimensions among science ministry in higher education domain (Abdollahi, 2004). In education and training domain different approaches about empowerment have been introduced and the suggested models are measured according to the researcher tools (Jahanian, 2006). Based on applied-science colleges nature, in these research different effective

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elements has been divided into three elements: management, organizational, and individual. According to different approaches about empowerment and requirements of applied-science colleges, effective elements of empowerment have been derived from the research review of literature and theoretical foundations and have been introduced as three theoretical categories: management, organizational, and individual; and fourteen subcategories: delegation, participative management, providing information, building trust, reward system, organizational structure, goals and vision and inspiration, resources, evaluation system, a feeling of self-efficiency, profession and experience, attitude, excitement quotient, and a feeling of trust.

After the agreement of authorities and professionals this model will be given to the administrators of applied-science colleges to be analyzed.

Aims and Research Questions of the Research

Aims of the study: This study aims at designing an empowering model to applied-science university administrators to increase their efficiency.

Research Questions

- 1) What are features, dimensions, and items of applied-science university administrators' model?
- 2) To what extent the empowering model is satisfactory to the eyes of authorities of empowerment?
- 3) To what extent the empowering model is satisfactory to the eyes of executives of applied-science university?

MATERIALS AND METHODS

This research is an applied research in which because it focuses on a special case (applied-science University), therefore, it is a case study that follows descriptive and non-experimental design.

The participants who have attended this research contain professionals and authorities of applied-science University in Iran and the managers of different branches of that university. Totally there are 32 professionals and authorities in the country in which 17 of them who were the most homogeneous according to the related questionnaire were chosen as the samples of the study.

Also, there are 33 branches of applied-science University in which contain 126 executives. Because of the limited number of the participants, all of them were chosen as the second group of the participants. According to the fact that this research is a qualitative and quantitative research which contains three samples, therefore, different instruments have been implemented. In the group of authorities and professionals a questionnaire of 15 items, 4 liker scales (range from agree to disagree), as well as interview. In the second group which contain organizational managers a questionnaire of 93 items is given to them.

14 items are essay questions and 79 are multiple choice questions in the scale of 0 to 10. The third groups that include managers of different branches are given questionnaire with 79 essay type items in the scale of 0 to 10.

Reliability and Validity of the Questionnaires

The internal validity of the research has been evaluated. To do so, the questionnaires have been given to the authorities and professionals of this field and were confirmed by them and some suggestions that were given by them were implemented to the research. Then the questionnaires were piloted to a group of managers of different branches and the reliability was proved to be highly reliable.

Table 1: Reliability

Category	Number of Items	Domain	Alpha Cronbach
1	24	management	0/94
2	28	organizational	0/95
3	26	individual	0/91

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RESULTS AND DISCUSSION

Results

1) Authorities and professionals

As mentioned previously after discovering some elements effecting on empowering managers, those elements were categorized into three main categories and fourteen subcategories. In order to find out the agreement index of the authorities and professionals about this model, they were asked some questions by the use of questionnaires. The results are displayed in table 2.

Table 2: The Analysis of the Results from Authorities and Professionals

Categories	Domain	Mean	Standard deviation	Efficient	Relatively Efficient	Inappropriate
1	management	3.76	0.27	*		
2	Organizational	3.82	0.27	*		
3	Individual	3.83	0.27	*		

According to table 2 the mean score in management domain is 3.76, organizational 3.82, and individual is 3.82. The mean score are near to 4 (strongly agree). Therefore, it has been proved that the model has been confirmed by authority’s professionals.

2) Managers of Applied Science University

In order to analyze the varieties AMOS SPSS version7 has been used. It has been analyzed in a way that at first the confirmatory of the varieties has been proved and then the relationship between the main and secondary elements has been analyzed. Finally, the results are documented and written.

1) Management Factors

Management factors that affect empowerment involve delegations, participative management, information access, and building trust. Among this group the coefficient of determination ranges from .48 to .88 which is considered to be acceptable.

Table 3: The Index of Fitness in Management Domain

RMSEA(CI)	CFI	TLI	LFI	RFI	NFI	χ^2 / df	P	df	χ^2
.076(.063-089)	.92	.90	.92	.79	.84	1.722	.000	226	389.135

According to table 3 management factors are suitable and acceptable in empowerment model. Because comparative fit index (CFI), incremental fit index (IFI), and Normed fit index (NFI) are near to 1.

2) Organizational Factors

The organizational factors that affect the empowerment are reward system, organizational structure, challenging outlook, access to sources, and the evaluation system of empowerment. Among the items of organizational domain questionnaire, items 32, 39, 47, 53, R² is the highest and items 33, 38, 55, 44, and 57 it is .41, .28, .46, .42, .59, which is the least. According to the relationships to determine the determinism index of secondary elements with organizational factors.

Table 4: The Index of Fitness in Organizational Domain

RMSEA(CI)	CFI	TLI	IFI	RFI	NFI	χ^2 / df	p	df	χ^2
.075(.064-.086)	.90	.88	.913	.75	.81	1.699	.000	317	538.677

According to the results the organizational factors are effective on empowerment. Because the division of k² to freedom degree is 1.699. Also, RMSEA is .75, and CFI, TLI, and LFI are .90, .88, and .91 that are acceptable for the results to demonstrate that the organizational factors are effective.

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3) Individual Elements

Different elements effective on empowering managers are: self-efficiency feeling, profession and experience, excitement quotient, and feeling of trust. According to the table 5 R² among the items 66, 74, 82, 87, 86, and 90 are .62, .64, .77, .77, .60, and .60 which were the highest and items 65, 75, 77, 78, and 92 are .37, .14, .16, .0001, .0, and .29 which were the lowest.

Table 5: The Index of Fitness in Individual Domain

RMSEA(CI)	CFI	TLI	LFI	RFI	NFI	χ^2 / df	P	Df	χ^2
.094(.083-105)	.85	.81	.85	.69	.75	2.097	.000	261	547.403

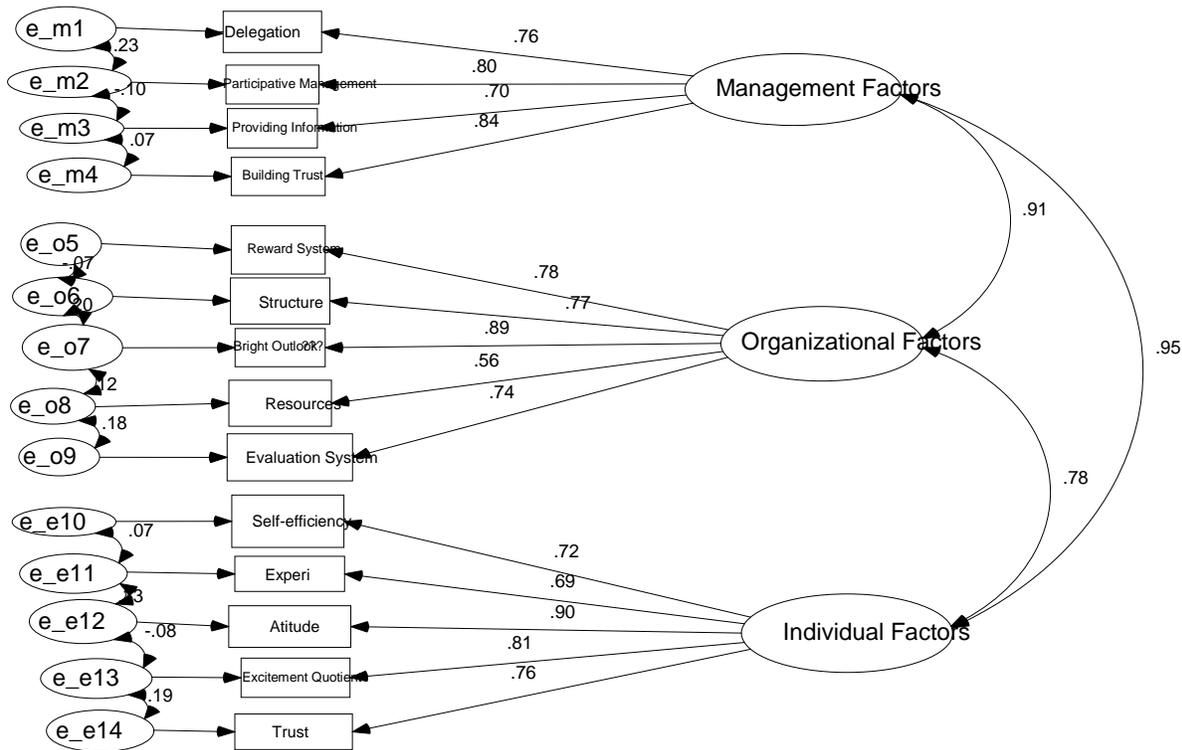


Figure 2: Factorial Analysis of empowerment main elements

Table 6: Lambda Coefficient and Coefficient of Determination

Individual Factors	Organizational Factors		Management factors					
	S	R ²	S	R ²				
Self-efficiency	07	0.5	Reward System	078	0.60	Delegation	07	0.58
Feeling	2	1					6	
Profession and Experience	06	0.4	Organizational Structure	077	0.59	Participative Management	06	0.36
Attitude	09	0.8	Bright Outlook	089	0.79	Access to Information	07	0.49
Excitement Quotient	08	0.6	Resources Access	055	0.30	Building Trust	08	0.70
Trust Feeling	07	0.5	Evaluation System	074	0.55		4	

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According to the results the individual factors are effective on empowering the managers. Because the division of k^2 to degree of freedom is 2.097 and RMSEA is .94 and CFL, TLI, and LFI are .85,.81, and .85 that are acceptable. Also, RFI and NFI are .69 and .75 that are acceptable for the individual factors to be effective on empowering the managers

In figure 2 the relation between main and secondary elements of empowering managers are shown.

Table 7: The Index of Fitness in Main Elements

RMSEA(CI)	CFI	TLI	LFI	RFI	NFI	χ^2 / df	P	Df	χ^2
.076	.92	.90	.92	.79	.84	1.722	.000	226	389.135

According to the results the main elements on management empowerment posses an acceptable index of fitness. The amount of K^2 on degree of freedom is 1.722 and the amount of RMSEA is 0.76 which is acceptable. CFI, TLI, and FLI are more than 0.9 and also RFI and NFI are acceptable.

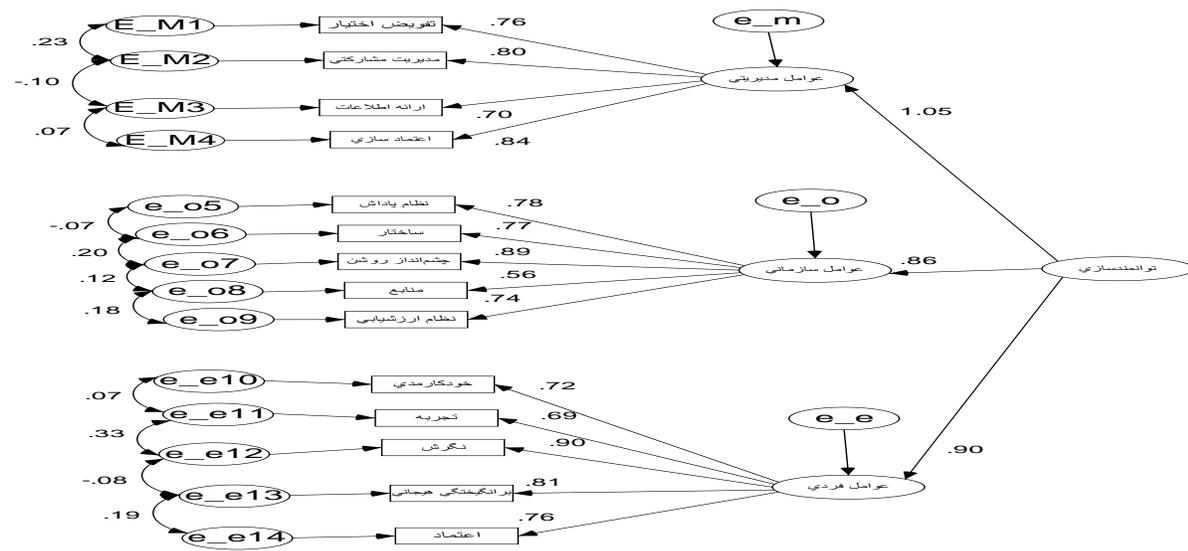


Figure 3: Determination Factorial Analysis of Empowerment Model

Table 8: Lambda Coefficient and Determination Index of Management Empowerment

	R	λ Main factors
1/10	1/05	Management factors
0/73	0/86	Organizational factors
0/81	0/9	Individual factors

According to the above information to empower the managers all the three factors are effective. The coefficient amounts range from 1.10 to 0.73. But the Management factor is more effective than the other two.

Table 9: The Index of Fitness in Main Elements

RMSEA(CI)	CFI	TLI	LFI	RFI	NFI	χ^2 / df	p	df	χ^2
.076	.96	.94	.96	.87	.91	1.722	.000	63	107.318

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According to table 9 the amount of K^2 to degree of freedom is 1.722 and amount of RMSEA is 0.76 which is acceptable. CFI, TLI, and LFI are more than 0.90 and also NFI and RFI amounts are acceptable.

Discussion

The indices are demonstrated in order to find out the relationship between the varieties and also to analyze them through three levels: main, secondary, and items show the index of fitness between items and secondary and main factors. The comparison of the indices demonstrated that three domain of the main factors that are management, organizational, and individual are effective on empowering the managers. Furthermore, Management factor is more effective than the other two, organizational is the second effective factor, and individual is the third effective factor.

According to the development of education and training that because different challenges in this domain, the managers need to be empowered enough to confront and deal with those challenges and exploit an efficient tool to solve the problems. This research would provide the applied-science colleges with a suitable model for empowering the managers. However, not so many researchers have been undertaken about managers empowerment but because universities provide students with education, therefore, they can be considered as service companies. Also, the results could be in harmonious with other researchers that have been undertaken about companies providing services. The recent research confirms the importance of fourteen secondary elements on managers' empowerment and provides the researchers with all aspects of empowerment information. The results of the study will provide the researchers and the managers with empowerment as a strategic profession and they would be able to find out the abilities of the staff and also will be able to eliminate inability and lack of interest by participatory system, delegation, organizational structure, building trust, evaluation system, and changing the attitudes.

Furthermore, the future managers should take into account the empowerment model introduced in this model. Because the development of the technology and education, the managers are supposed to change their attitudes accordingly and empowerment model be focused by the organizations and universities. Because of the plenty of universities in Iran (private and state), the decisions that are made should be harmonious with requirement and conditions of universities.

Implementing the empowerment model will face some limitations. The limitations could be illustrated as: the novelty of the title for the researcher, limit number of participants, the novelty of the title for the participants, limitation in comparing the results of the research among the universities (private, state, Paramour, and applied-science), and finally collection of data from all over the country had its own limitations.

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