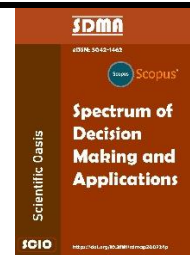




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Ranking of Factors Affecting Transformational Leadership in Organizations: Application of AHP Method in Optimizing Leadership Strategies

Ameneh Malmir^{1,*}

¹ Department of Management, Farahan Branch, Islamic Azad University, Farahan, Iran

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ABSTRACT

Transformational leaders play a crucial role by introducing new ideas and visionary pathways, fostering organizational growth, enhanced performance, and competitive advantage. This study identifies and ranks the key factors influencing transformational leadership at Arak University of Medical Sciences. This descriptive-analytical, survey-based research targeted experts at Arak University of Medical Sciences, all of whom held doctoral degrees and had at least five years of experience in senior organizational management. Data collection began with factor identification using the Delphi method, followed by application of the Analytic Hierarchy Process (AHP) technique, with computations performed according to AHP's algorithmic formulation. The analysis revealed that transformational leadership not only guides organizational direction but also empowers and develops employees by identifying latent talents and fostering growth. The study identified and prioritized key influencing factors, providing managers with a framework to improve organizational performance and cultivate a culture of transformational change. The findings suggest that organizations and managers should focus on essential elements of transformational leadership while enhancing leadership skills to drive positive change and innovation. Recognizing these factors can significantly help universities and other institutions strengthen their competitive advantage and improve organizational effectiveness.

1. Introduction

In today's world, increasingly characterized by environmental complexity, uncertainty, and rapid technological changes, organizations need leaders capable of crafting innovative and transformational visions. Such leaders define the path of progress for the organization and foster the necessary motivation and commitment among employees [1]. Transformational leadership, which focuses on positive change and organizational improvement, can play a crucial role in achieving these goals. By fostering a culture of continuous growth and development, transformational leaders

* Corresponding author.

E-mail address: amenehmalmir@yahoo.com

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empower employees and organizations to attain a competitive advantage and excel even in challenging environments [2]. Considering the significance of transformational leadership within educational organizations, this research specifically focuses on Arak University of Medical Sciences, aiming to identify and rank key components influencing transformational leadership. Using the Analytic Hierarchy Process (AHP) technique enables a precise evaluation and prioritization of influential factors, providing a comprehensive framework for managers in this field. Such research can effectively guide managers to enhance a transformational culture and achieve strategic organizational goals [3].

Transformational leaders play a vital role in guiding individuals and inspiring them to embrace change, especially in educational organizations, where they facilitate continuous improvement and innovation. Research has shown that transformational leadership not only enhances organizational efficiency and effectiveness but also contributes to employees' professional growth and job satisfaction [4]. Given the necessity for universities and educational institutions to adapt to rapidly evolving environments, identifying and prioritizing the key factors influencing transformational leadership within these organizations is of paramount importance [5]. This study identifies and prioritizes the key components of transformational leadership at Arak University of Medical Sciences using the AHP technique. This model not only assists managers in setting organizational priorities but can also serve as a framework for other medical and educational organizations to enhance performance and establish a culture of innovation.

Transformational leadership is a key concept in modern management, widely recognized as a crucial theory in organizational and educational research [6]. This leadership style refers to the ability of leaders to inspire significant positive changes within organizations and communities. Transformational leaders motivate employees by providing a compelling vision and encouraging active participation in organizational processes, ultimately helping to achieve shared goals [7]. These characteristics are particularly important in dynamic educational organizations requiring continuous transformation [8]. Research indicates that transformational leadership can improve organizational performance by increasing efficiency and productivity. For example, a study showed that organizations led by transformational leaders are better able to respond to environmental changes and competitive pressures [9]. These leaders foster an environment where employees feel secure and supported, enabling them to innovate and grow [10]. According to social learning theory, individuals learn by observing the behaviors of others, including leaders, and reinforcing positive traits within themselves [11]. Transformational leaders serve as role models through their behaviors, and employees learn from these behaviors and apply them in their work [12]. This learning process not only enhances employee self-efficacy but also contributes to the development of an innovative culture within the organization [13]. In educational settings, transformational leadership plays a crucial role in guiding transformation and improving educational quality. Studies have shown that transformational leadership can enhance collaboration among staff, improve job satisfaction, and foster professional development, thereby improving the quality of education and learning [14]. Furthermore, in universities and educational institutions, this leadership style can lead to increased creativity, innovation, and efforts to achieve long-term educational goals [15].

Alizadeh [16] conducted a study to examine the impact of transformational leadership on job satisfaction and employee performance in public sector organizations. The results indicated that by increasing employees' trust in their managers and enhancing job satisfaction, transformational leadership significantly improved individual and organizational performance. Moreover, transformational leaders foster motivation and develop individual competencies, which strengthens collaboration and creativity within the organization [16]. Niknafes and Yousefi [17] explored how transformational leadership can contribute to enhancing teaching and learning quality in universities.

The study found that by creating flexible learning environments and encouraging innovation, transformational leaders significantly increased student and faculty involvement in the learning process [17]. Sharifi and Kazemi [18] focused on the influence of transformational leadership on organizational culture improvement in hospitals. The findings revealed that by establishing a shared vision and promoting employee participation, transformational leaders steered hospital culture toward greater attention to patient needs and enhanced service quality [18]. Bass and Avolio [9], in their seminal work, introduced the transformational leadership model, which includes four core components: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. They demonstrated that this leadership style directly affects organizational performance and employee satisfaction [9]. Avolio and Yammarino [6] explored the traits and effects of transformational leadership on organizations and employees. The research showed that transformational leaders could enhance motivation among employees and promote innovation and creativity [6]. Zhu *et al.*, [2] analyzed the relationship between transformational leadership and organizational identity. They found that transformational leaders strengthen employees' sense of belonging, leading to improved performance and increased collaboration within organizations [2]. Garcia-Morales *et al.*, [1] explored how transformational leadership affects organizational innovation. They demonstrated that this leadership style, by fostering a learning and innovation-based organizational culture, enhances the organization's competitive capabilities [1].

2. Materials and Methods

The current research aims to "identify and rank the key components influencing transformational leadership in Arak University of Medical Sciences using the AHP technique" based on descriptive-surveillance statistical methods AHP in such a way that it can be seen from the results. Obtained as a comprehensive and scientific framework It was used to evaluate the implementation of the knowledge management system in the supply chain. In addition to the hierarchical analysis method (AHP) for the ranking of factors and sub-criteria related to the implementation of the knowledge management system, it is also explained.

Society and research sample: The statistical population of this research is the experts in Arak University of Medical Sciences who have a doctorate (higher level) education and have more than 5 years of work experience at the macro level of the organization, and only 30 people have this resume and education related to our research. And on this basis, we have considered the basis in this way.

3. Research Questions

The main question: What are the key components influencing transformational leadership in Arak University of Medical Sciences?

Table 1 presents a summary of the identified dimensions and components affecting transformational leadership [9].

Table 1

A summary of the identified dimensions and components affecting transformational leadership

English Translation	Contextual Meaning
Structure	Framework, organization, or system
Dimension	Aspect, perspective, or quality
Component	Part, element, or constituent
Transformational Leadership	Leadership focused on inspiring and motivating change
Organizational Identity	The character and personality of an organization
Organizational Dynamics	The ongoing processes and interactions within an organization
Organizational Synergy	The combined effect of elements being greater than the sum of their separate effects
Organizational Structure	The formal arrangement of roles, responsibilities, and relationships within an organization
Lack of Transparency in Administrative Rules	A lack of clarity or openness in organizational regulations
Organizational Inflexibility	An inability to adapt to change or new circumstances
Organizational Motivation	The factors that stimulate and sustain employee effort
Meeting Employees' Material and Psychological Needs	Satisfying both the physical and emotional requirements of employees
Promoting Valued Behaviors	Encouraging and spreading desired behaviors within an organization
Promoting Ethical Behaviors	Fostering a culture of ethical conduct
Organizational Communication	The exchange of information within an organization
Managers Possessing Leadership Qualities	Managers exhibiting traits associated with effective leadership
Organizational Support	The degree to which an organization supports its employees
Possessing Intellectual and Educational Abilities	Having the cognitive and academic skills required
Possessing Innovative Decision-Making	The ability to make original and creative decisions
Organizational Culture	The shared beliefs, values, and norms of an organization
Emphasis on Behavioral Skills	A focus on developing interpersonal and social skills
Emphasis on Humanism	A focus on the importance of human values and dignity
Emphasis on Scientism	A reliance on scientific methods and knowledge
Organizational Development	A planned effort to improve an organization's performance through interventions
Creating Strategic Thinking in the Organization	Fostering a culture of strategic planning and foresight
Organizational Adaptability	The ability of an organization to change and improve
Ethical Development of the Organization	The growth of an organization's moral compass
Organizational Performance Growth	The improvement of an organization's overall effectiveness

4. Results

To determine the final priority of the indicators with the AHP technique, it is enough to multiply the weight of the indicators based on each criterion by the weight of the main criteria. By having the weight of each of the main criteria and sub-criteria, the weight of each of the indicators is calculated. The results of the calculation and the weights and ranks of the indicators are shown in the following table (Table 2).

Table 2

The final priority of indicators with the AHP technique

No	Indicator	Standard weight	Sub criterion	Substandard weight	Final weight	Rank
1	Organizational identity	0.03	Dynamic organizational	0.28	0.008	10
			To increase organizational	0.72	0.0209	7
2	Organizational structure	0.38	Absence transparency in Compilation Regulations and Rules administrative	0.73	0.2748	2
			Absence flexibility adaptability organizational	0.27	0.1025	3
3	Organizational motivation	0.51	fix needs material and spiritual Staff	0.79	0.39	1
			Diffusion behaviors valuable	0.16	0.08	4
			diffusion behaviors moral	0.05	0.02	6
4	Organizational communication	0.07	Possession Managers from Features leadership	0.79	0.05	5
			Support organizational	0.02	0.001	13
			Possession from ability Hi mental and educational	0.04	0.003	12
			Possession from ability Hi mental and educational	0.14	0.0112	9
			Possession from decision get Abb	0.74	0.0111	8
5	Culture organizational	0.02	Emphasis on skills behavioral	0.74	0.0111	8
			Emphasis on human Gr	0.23	0.0034	11
6	Development organizational	0.002	Emphasis on scientific orientation	0.04	0.0006	15
			Creation thinking strategic in organization	0.02	0	18
			Correction adaptability organization	0.76	0.0011	14
			Development moral organization	0.19	0.0003	16
			Functional growth organization	0.03	0	17

Therefore, according to the calculations, the final weight of each model index has been calculated with the AHP technique. According to the opinions obtained from the experts, "meeting the material and spiritual needs of employees" with a final weight of 0.51 is in the first priority, "lack of transparency in the formulation of administrative rules and regulations" is in the second place with 0.27 and "organizational inflexibility" with 0.10 are ranked third and the rest of the sub-criteria can be seen according to the table.

Considering that in the current economic situation of the country, the condition of the employees is very sad, it was already predicted that the sub-criterion of meeting the material and spiritual needs of the employees would get the most important rank by a large margin. Of course, this result itself is a proof of the correctness and reliability of the obtained information.

5. Discussion

Transformational leadership represents a process that brings about significant change in individuals. Given that one of the key responsibilities of managers in organizations is to identify the potential talents of employees and create opportunities for their growth and development, this necessitates shaping both the internal and external environments of the organization in a way that aligns with the goals designed to meet the needs of employees. To generate motivation, it is essential to identify employees' needs and work toward satisfying them.

According to expert opinions, among the factors investigated, the most influential element of transformational leadership at Arak University of Medical Sciences is the fulfillment of employees' material and emotional needs. Given the current economic conditions, and the fact that addressing

material and emotional needs is crucial for human growth and survival, a comprehensive and root-level approach is needed to address these needs in order to bring about substantial organizational change. Based on the findings, it was determined that the components related to fulfilling material and emotional needs of employees are not in an optimal state. Therefore, it is recommended that managers focus on strengthening collaboration and teamwork, meeting economic needs, addressing life's essentials for employees, promoting respect for organizational laws, enhancing tolerance among educational staff, and adhering to principles of fairness and equality. Additionally, it is suggested that the administration of Arak University of Medical Sciences should increase employee motivation by assigning challenging responsibilities, enabling them to become future transformational leaders.

Another important factor, ranked second and third, is the lack of clarity in the formulation of administrative regulations and the inflexibility of Arak University of Medical Sciences. This is considered a major cause of demotivation and reduced creativity among employees, leading to an undesirable state that hinders the achievement of organizational goals. It is recommended that administrators draft practical and adaptable regulations based on current societal conditions and technological advancements, avoiding rigid rules that stifle progress and motivation. Creating a flexible environment that allows employees to innovate and utilize modern methods can increase job satisfaction, revive organizational ethics, and restore a value-oriented approach to the university's tired and discouraged system.

Among the other components considered, the promotion of value-based behaviors occupies a significant place in organizational motivation. This element suggests that the rigid and outdated regulations of Arak University of Medical Sciences have restricted employee growth and change, resulting in dissatisfaction and a lack of motivation to pursue growth. It is therefore recommended that both managers and staff make decisions based on core values, ensuring consistency between their words and actions. They should be encouraged to make decisions grounded in ethical values and follow high moral standards. Special attention should be paid to their relationship with God, and they should foster thoughtful connections among employees and educational stakeholders, making informed and beneficial decisions.

6. Conclusion

Regarding organizational communication, the ability of managers to demonstrate leadership qualities is ranked fifth. This emphasizes the importance of aligning managerial roles with the skills and characteristics of individuals in leadership positions, which can ignite foundational changes in the system of Arak University of Medical Sciences. Employing individuals from within the institution as managerial leaders can serve as a beacon of hope for the essential changes ahead. It is recommended that managers increase their focus through professional development programs, actively listen to employees, teachers, and students, and foster effective communication.

Enhancing Employee Engagement and Well-being: To foster a more motivated and innovative workforce, it is essential to create an environment where employees feel valued and supported. Organizing regular feedback sessions, providing professional development opportunities, and offering wellness programs can significantly improve employee satisfaction and well-being. Creating a clear pathway for career advancement and aligning employee roles with their strengths can further enhance motivation.

Clarifying and Updating Regulations: To address the issue of unclear and outdated administrative regulations, it is recommended that the university's management committee review and revise current policies to ensure they are in line with modern educational and organizational practices. This

process should involve input from faculty and staff to ensure that the policies are both practical and reflective of current needs.

Fostering Collaborative Leadership: The University should focus on cultivating a culture of collaborative leadership. Encouraging cross-departmental collaboration through team-building activities and joint projects can help enhance communication, break down silos, and foster innovation. Promoting shared leadership models where responsibility and decision-making are distributed among teams could also improve problem-solving and increase collective motivation.

Implementing Flexible Work Practices: In response to the evolving demands of the workforce, introducing flexible work schedules or hybrid work options where appropriate could increase job satisfaction and productivity. This flexibility would allow employees to better manage their work-life balance, ultimately contributing to greater organizational commitment and retention.

Strengthening Communication Channels: Establishing clear and open communication channels is essential for reducing misunderstandings and promoting transparency. Regular meetings, digital platforms for feedback, and a transparent decision-making process should be integrated to ensure that employees feel informed and involved in the organization's direction.

Providing Leadership Development Programs: To address the lack of leadership qualities among some managers, the university should invest in leadership training programs that focus on both technical skills and emotional intelligence. By equipping managers with the tools to lead with empathy, vision, and strategic thinking, the institution can develop more effective leaders who can drive change and inspire their teams.

Encouraging a Culture of Recognition: A culture of recognition can go a long way in improving employee motivation. Introducing employee recognition programs that highlight both individual and team achievements will help employees feel acknowledged and valued. This can be done through monthly awards, public acknowledgments during meetings, or creating a platform where employees can recognize their peers.

Increasing Faculty and Staff Involvement in Decision Making: To further enhance employee engagement, it is crucial to involve faculty and staff in key decision-making processes. Providing opportunities for employees to contribute to policy development, curriculum design, and organizational planning will not only boost morale but also foster a sense of ownership and accountability.

Utilizing Data-Driven Decision Making: Implementing data analytics tools to assess employee satisfaction, organizational performance, and educational outcomes can provide valuable insights. By tracking key performance indicators and regularly assessing employee feedback, the university can make informed decisions that align with both organizational goals and employee needs.

Promoting Ethical Leadership: Promoting ethical leadership at all levels within the university is essential for fostering a transparent, just, and accountable environment. Encouraging leaders to model ethical behavior, make decisions based on fairness, and demonstrate integrity will set a strong example for staff and students, cultivating a culture of trust and respect.

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Conflicts of Interest

The authors declare no conflicts of interest.

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