

RESEARCH ARTICLE

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Organizational Culture Model Based on Normative and Individual Variables in Education Staff Managers of Tehran province

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Abstract

The purpose of this article, extracted from the thesis, was to present the model of organizational culture based on normative and individual variables in the managers of the education staff of Tehran province. In terms of field position, and in terms of nature, it is among the foundation data research. The statistical community of the qualitative part included management experts using the principle of saturation and targeted non-random sampling method, and in the quantitative part, it also included the director general, deputies, and heads of departments of the general administration. And managers and vice presidents of education districts of Tehran province were selected as the sample size. Presentation of the organizational culture model based on normative and individual variables is considered a central category in the paradigm model of the research and other concepts in the form of categories of causal, contextual, and intervening conditions. Strategies and outcomes were included in the model and 10 categories with 57 indicators were introduced in the normative dimension and 10 categories were introduced in the individual dimension with 61 indicators. The evaluation findings based on Shannon's entropy method show; maliciousness and suspicion towards each other Self-esteem, sense of ownership over the organization, enjoyment of work, self-motivation, improvement of job skills and knowledge, personal development, and attention to positive points and job achievements, innovative decisions, and accountability are of the highest importance in realizing organizational culture.

Keywords: *Organizational Culture, Normative Variables, Individual Variables, Cultural model, Innovation, Expertise and Knowledge*

Introduction

Organizations need new ideas and new theories to survive in today's turbulent environment (Ramazanian Fahandary & Khatibi, 2021); one of the basic topics in the field of management knowledge is the topic of culture. They have called it the theory of "organizational culture and symbolic management" (Piwowar-Sulej, 2021). In expressing the importance of culture in the organization, some theorists believe that in general, the organization is nothing but culture, and to know an organization, the culture of that organization must be identified

(Harooni & Razeghi, 2020). Just as people in society have certain beliefs, values and behaviors that represent their personality, organizations also have common basic assumptions and beliefs that shape their culture. The management of organizational culture is a key challenge for the leaders of today's organizations (Xanthopoulou et al., 2022).

The organizational culture that governs the organization can be considered one of the main factors of its success or failure (Galli, 2022). For movement and dynamism or be considered an obstacle in the way of progress

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(Bamidele, 2022). This powerful phenomenon is called organizational culture and it plays an important role in shaping the behavior of employees and creating changes in undesirable behaviors and stability in desired behaviors in the organization (Pathirana et al., 2020). The important issue is that basically, due to the great impact of organizational culture in the phenomenon of organizational effectiveness, the leaders of organizations, managers and academic researchers are paying more attention to the category of culture and understanding this concept day by day (Rita, 2022). Achieving the transformational goals of organizations requires the creation of a necessary cultural platform and its management. Richard Morris defines organizational culture as relatively stable beliefs, values and common perceptions that are maintained by the members of the organization (Asamba, 2022). Organizational culture includes many elements and includes hidden cognitive elements such as assumptions, values and beliefs to more obvious elements such as patterns, operations and behaviors. For organizational innovation, development and transformation, one of the important organizational conditions that must be considered in the policies and implementation of programs is related organizational culture (Khademi & Saberi-Hekami, 2018).

Organizational culture is at the center of organizational innovation and plays an essential role in facilitating and expanding the processes of creativity and innovation in The author's years of experience in executive affairs show that not paying attention to organizational culture has not always led to the desired results of innovation, development, organizational transformation, change and productivity in organizations, so this concern caused The question should be raised, how should the organizational culture in organizations, especially educational organizations, be in order to achieve desired goals?

Literature Review

Organization: An organization is a social unit of people that is structured and succeeds in meeting the needs or pursuing collective goals. All organizations have a management structure that determines the relationship between different activities and members and the role it divides responsibilities and authorities to perform different tasks. Organizations are open systems, they affect and are affected by the environment (Aeiny et al., 2022). Today, organizations are recognized as developed, efficient, progressive and learning organizations based on their net income and profit. Organizations of the third millennium such as virtual, shamrock, cluster, two-faced, sun worshiper, chess, commissary, feudal organizations. The reasons for the emergence of organizations of the third millennium are: dynamism and instability and change in this age, speed, increasing competitive pressures, diversity in products, increasing the level of awareness and information and the level of customer expectations (Harhash et al., 2020).

Culture: The UNESCO definition of culture states: "Culture is an element including all the actions and reactions of the individual and the environment around him with the lower dimension of the life of social groups; that is, the set of methods and living conditions of a society based on a common foundation of traditions and knowledge and Also, different forms of expression and realization of the individual within the society are linked together" (Mingaleva et al., 2022). In a division of culture levels, it can be counted as follows:

1. Transnational culture; it has influencing components such as: religions and religions, languages and dialects, races, civilization and modernity, media and communication, political and social factors, etc.
2. National culture has components such as: native and traditional culture, civilization, language, race, religion, national identity, history, social capital, etc.
3. General culture, with characteristics such as: normativeism, legalism, social

discipline, work conscience, purity and honesty, value system, respect for public rights, etc.

4. Professional culture: based on the principles and requirements of competition, customer orientation, specialization, efficiency, facing difficulties, enduring hardships, etc.
5. Organizational culture: a collection of components and characteristics of the mentioned cultures, such as: faith, belief, traditions and ceremonies, work conscience, commitment, work relations, flexibility, creativity, control system, human orientation, task orientation, spirituality orientation and...
- 6) Group culture with sub-culture, with indicators such as: friendly relations, intimate communication, teamwork, participation in decisions, collective responsibility, etc., obviously, the components, characteristics and indicators of each of the mentioned cultures of the society They may be different from one society to another and from one organization to another, and they may be common in some dimensions (Aichouche et al., 2022).

Organizational culture: One of the basic topics in the field of management knowledge is the discussion of culture. In expressing the importance of culture in the organization, some theorists believe that the organization is nothing but culture and to know an organization, the culture of that organization must be identified (Kurniady, 2020). Organizational culture is the personality of the organization and is considered the basic infrastructure for transformation and change, and managers should understand its relationship with national culture and be diligent in using its strategic role in organizational cohesion. Organizational culture is an intertwined set of assumptions. It is basic, common inference and collective wisdom that is formed in the context of previous experiences and findings in facing internal or external issues and plays a role as a guiding light and an invigorating source in shaping the behavior of employees and the

present and future architecture of the organization (Strengers et al., 2022). Richard Morris defines organizational culture as relatively fixed beliefs of shared values and perceptions that are maintained by organizational members (Kim & Chang, 2019), and Cameron and Quinn believe that organizational culture is a set of values, assumptions, interpretations and basic attitudes that make an organization from It differentiates other organizations. The organizational culture governing the organization can be considered as one of the main factors of its success or failure (Tulcanaza-Prieto et al., 2021). Hoy and Miskel believe that the organizational culture is divided into three levels:

A. Principles: Principles at the high level of organizational culture are regulations and standards that are manifested in the form of social behavior, ethical behavior, submission, obedience to authority, and accepting the responsibility of employees.

B. Values: are concepts that are used as criteria in determining the success of employees. They cause the growth of the organization and determine the value position of people, objects and phenomena within the organization. Based on this, the concept of value it is deeper and more subjective than the principles.

C. Hidden things: They are more subjective than values and principles and include deep cultural elements. The employees of an organization expand and develop hidden things in relation to people and phenomena. They determine the basis of the organization's behavior and even deeply affect the organizational behavior of the employees (Graamans et al., 2022).

Change, transformation and development in the organization: Peter Drucker believes that the only constant thing in today's world is "change". Change means removing or putting something in another place. Change in organizations also means that the organization's activities change from the existing situation to a different situation (Leso et al., 2022). The transformation of the organization is a planned change process,

including changing the organizational culture towards a culture in which group and collective processes are institutionalized. Organization development is a planned activity or challenge that is managed throughout the organization by the top management of the organization and increases the effectiveness and health of the organization through planned change programs in the organization's processes, using behavioral sciences (Bashar et al., 2021).

The concept of norm: a detailed analysis of the concept of norm in different languages and fields shows that at the individual and social level, norms play three basic functions in human life (action and evolution), which include: formation and understanding of concepts, differentiation and judging between normal and abnormal and predicting events and guiding actions and the course of individual and social evolution of man. The need for a standard and reference for the triple functions of the norm is rooted in one of the most obvious characteristics of "feeling and perception" of man. One of the important features of feeling and perception that all theorists agree on is "the dependence of perception on the text" (Dung, 2021). The dependence of perception on the text implies the influence of stimuli adjacent in time and place on the way of perception (Madani, 2023). In other words, the discovery and formation of concepts is formed in confrontation and in the face of differences (presence of a criterion), not in isolation and single space. Quality and the intensity of any type of concept always depends on the existence and quality of stimuli that are temporally and spatially adjacent to the object of perception or are placed as criteria.

Organizational Culture Indicators: The word index generally means a diagram or an indicator or a representative and is a standard for evaluation. The organizational culture index was designed by Zeitz et al. (1997). Has introduced. These 10 factors have been reduced to five dimensions by Carmeli (2005) using the statistical technique of factor analysis:

- Innovation: This dimension refers to the supportive environment for creativity, problem solving and advancing new ideas;
- Communication: This dimension of organizational culture refers to the effectiveness of communication between top management and employees, as well as the effectiveness of communication between employees;
- Trust: This dimension refers to the existence of trust between employees and managers, as well as between employees themselves; a type of trust that enables free dialogue and the creation of a free-thinking environment;
- Social cohesion: This dimension refers to the strength of the mutual relations between the members of the organization and the extent and size of these relations and is manifested by a sense of cooperation and cohesion;
- Job challenge: This aspect of organizational culture refers to the diversity and complexity of work (Saleem & Ilkhanizadeh, 2021).

Hofstede and his colleagues in 2010-2011 in their book entitled "Culture and Organizations" while paying attention to the national dimension of culture, also paid attention to organizational culture and on this basis introduced the components of organizational culture that are influenced by national culture:

- ✓ Process / result-oriented;
- ✓ job/employee-oriented;
- ✓ limited/professional view;
- ✓ closed/open system view;
- ✓ systematic and unsystematic control;
- ✓ Pragmatic/ normative view (Hendrith, 2018).

The main question of the research: What is the model of organizational culture based on normative and individual variables in the managers of education headquarters in Tehran province ?

Research sub-questions:

1. What are the dimensions, components and indicators of the organizational culture model based on normative and individual variables in the managers of the education headquarters

of Tehran province ?

2. What are the causal conditions of the organizational culture model based on normative and individual variables in the managers of education headquarters in Tehran province ?

3. What are the basic conditions (facilitators) of the organizational culture model based on normative and individual variables in the managers of education headquarters in Tehran province ?

4. What are the intervening conditions (obstacles) to create an organizational culture model based on normative and individual variables in the managers of education headquarters in Tehran province ?

5. What are the strategies of the organizational culture model based on normative and individual variables in the managers of education headquarters in Tehran province ?

6. What are the (effective) consequences of the organizational culture model based on normative and individual variables in the managers of education headquarters in Tehran province ?

7. What are the priorities of the dimensions, components and indicators of the organizational culture model based on normative and individual variables in the managers of the education headquarters of Tehran province ?

8. What is the validity of the organizational culture model based on normative and individual variables in the managers of the education and training headquarters of Tehran province?

-The results of Tidor & Morar (2022) Article showed changing culture is a difficult task and a long- term one, but in our opinion change is more easy to achieve considering the special attributes of SMEs and the period in which culture may be changed will be shorter. Any change within an organization must start with the change of culture.

-The results of Srimulyani & Hermanto (2022) Article showed (1) credible leadership has a significant positive influence on organizational culture; (2) organizational culture has a significant positive influence on

work engagement; (3) organizational culture is the perfect mediator of credible leadership influences on work engagement. This study's results confirm that leaders' role in shaping a positive organizational culture through good credible leadership practices, while organizational culture can increase employee work engagement.

-The results of Lotfikia et al., (2022) Article showed the factor loading is a positive value, there is a direct, significant, and positive relationship between the dimensions of organizational culture (involvement in work, adaptation, adaptability, and mission) and the development of knowledge management. Therefore, by further supporting and developing the dimensions of organizational culture and creating infrastructure in ACECR, better implementation of knowledge management development can be achieved.

-The results of Mali (2022) Article showed organizational culture has a greater impact on individual performance, social relations, personal feelings, and satisfaction of employees, while financial performance is also influenced by numerous external factors, such as the state of the industry, the strength, and performance of the competition, consumer needs, and requirements.

-The results of Nouf et al., (2022) Article showed variety of factors in the domains of culture, values, and setting that were identified as significant in affecting leadership performance and provide insight into key factors of radical innovation culture in this vital sector. The originality of this research lies in understanding the impact of appropriate organizational culture and leadership practices on radical innovation, especially in mature manufacturing organizations. The implications of these findings are highlighted, as well as the need to further explore how cultural factors and leadership practices can affect the level of innovation in this vital sector.

- The results of Yuliasuti & Tandio (2022) Article showed organizational culture provides a partial mediation effect on relationship between charismatic leadership

styles and GCG, while in the relationship between transformational leadership styles and GCG, organizational culture provide full mediation. The implication of this research is that a good organizational culture of the institution will improve GCG in the institution.

The innovation of this article can be examined in several ways:

1. Explaining the effective organizational culture among the managers of the education staff of Tehran province;

2. The Most important challenges of organizational culture in the managers of education headquarters in Tehran province;

3. The Most important strategies for promoting organizational culture among the managers of the education staff of Tehran province;

4. Presentation of the organizational culture model based on normative and individual variables in the managers of the education headquarters of Tehran province.

Table 1.

Normative and individual indicators in organizational culture models

Theorist	Components of organizational culture	Normative indicators	Individual indicators
Gerard Hendrik Hofstede	*Focus (high power distance) * Decentralization (low power distance) * Male dominance * Feminism * Individualism * Collectivism * Ambiguity avoidance * Ambiguity	Concentration (high power distance) patriarchy - patriarchy - individualism - collectivism - ambiguity avoidance - ambiguity tolerance	Lack of focus (low power distance)
Schermerhorn	*Time-oriented (emphasis on time) * Religion (emphasis on religious standards) * Language (use of literary arrays) * Personal space (emphasis on maintaining personal space)	Religion (insisting on religious standards)	Timekeeper- Language - Personal space (emphasis on maintaining personal space)
Peters & Waterman	* practical bias * customer orientation * autonomy and entrepreneurship * human productivity * access to management * managerial expertise * simple form (broad administrative structure) * stability with instability	Customer orientation - human productivity - access to management - specialization - simple form (broad administrative structure) - stability with instability	Pragmatic bias - autonomy and entrepreneurship
Litwin and Stringer	*Standards * Responsibilities *Encouragement and persuasion * Risk taking * Behavioral support * Intimacy and warmth * Structure * Identity	Standards - responsibilities - encouragement and persuasion - risk taking - structure - behavior support	Intimacy and warmth - identity
Kurt Lewin	*Management style * Motivation *Communication * Decision making * Targeting * Interaction * Control	Management-decision-making style, Control	Motivation- Communication- Interaction-Control
William Ouchi	*Supporting employees throughout their service life *Creating intimacy *Deep understanding *Participation in decision-making *Joint responsibility *Avoid controlling and closely monitoring the work of organization members	Supporting employees throughout their service life - participation in decision-making - joint responsibility - refraining from controlling and closely monitoring the work of organization members	Creating intimacy- deep understanding
Parsons	* Compatibility * Integration * Realization of goals * Legitimacy	Integration - Realization of goals - Legitimacy	Matching

Theorist	Components of organizational culture	Normative indicators	Individual indicators
Ronen & Shenkar	*Traditionalism against Modernism *Ethnicism against Globalism* Idealism against prejudice * collectivism against individualism	Traditionalism against Modernism - Ethnicism against Universalism - Idealism against Prejudice - Collectivism against Individualism	
Trice & Beyer	* Organizational communication * Organizational actions * Common language * Physical culture	Organizational actions - physical culture	Organizational communication - common language
Davis	* Guiding beliefs * Everyday beliefs * Strategy * Structure * Employees * Systems	Guiding beliefs - strategy - structure - systems	Everyday beliefs of employees
Marshall Sashkin	*Individual and organizational goals *Coordinated working group *Creating a strong culture *Customer orientation	Organizational goals - coordinated work group - creating a strong culture - customer oriented	Individual goals
Robbins	* Individual creativity * Risk taking * Guidance and leadership * Integration and unity * Management support * Control and supervision * Reward system identity * Conflict sensitivity * Communication pattern	risk-taking - guidance and leadership - integrity and unity - management support - control and supervision - reward system identity - conflict	Individual creativity - control and supervision - communication pattern - conflict sensitivity
Seven (7)	* Strategy * Skill * Structure * Employees * Systems * Management style * Governing goals	Strategy - structure - systems - management style - governing goals	Staff skills

Research Methodology

This research is fundamental and practical in terms of its purpose and based on the type of data collected from the type of exploratory mixed designs. Since in some cases, using each of the qualitative or quantitative methods alone, the researcher will know better as expected. The phenomena does not help, the research process should be advanced by combining these two methods (Dane, 2022). University elites and specialists in the field of management were extracted after theoretical saturation, and since the interview provides the possibility of investigating complex issues (Creswell, 2018). In the current research, the construct "organizational culture and normative and individual variables" Badi is used, so there is a need to investigate these structures through interviews. In the current research, a semi-structured interview made by the researcher is used based on the theoretical foundations and the codes obtained from the interview.

In the current research, semi-structured interviews were used for two reasons: firstly, there was not much information about the

new structure available to be used in designing the questions. The second reason is that the interviewee has more freedom in answering the questions. To be able to express new topics that had not occurred to the researcher. After conducting the interview and completing the forms, a data matrix was formed to be used in finding the interview texts. Then, they were coded, classified, analyzed and interpreted. It should be noted that by conducting the interview process, factors the previous factors extracted from the theoretical bases and previous researches were added, which were applied in the design of the final research questionnaire. In the interview with the interviewees, a semi-structured questionnaire was used. The basis of the study was documentation, which the researcher asked open-ended questions to understand the experiences of the participants. In this research, according to the priority of the qualitative method, the results of the interviews were first analyzed, and after the interviews, all the interviews were written down and the texts were recorded in the relevant tables, each row of which is

assigned to a raw data, and then using the method of comparison and continuous questioning about what concept this data is more similar to? Than the raw data of conceptual titles also, after identifying the research indicators based on the foundation's data analysis and determining the units Analysis (words and themes), Shannon's entropy method was used to determine the importance of indicators in data analysis. In Shannon's entropy method, data processing is discussed in the foundation's data analysis discussion with a new perspective and qualitatively and quantitatively. Entropy in information theory, is an index to measure the uncertainty expressed by a probability distribution. Based on this method, which is known as the compensation model, the content of the plan was analyzed (Chilisa, 2019).

And finally, indicators that have a great impact on organizational culture were identified and validated, and mostly two normative and individual factors were the basis for the design of the research conceptual model, and the concepts and components identified in the qualitative section were finally prepared in the form of a researcher's

questionnaire and prepared for Quantitative data collection was used from the statistical population. The statistical population in the qualitative section included experts and experts who were well-informed and proficient in the subject of research in the field of management, who had a valid scientific background in this field, and were selected using a non-random sampling method that purpose of the interview is to explore and describe the opinions and attitudes of the interviewees, in this case, according to the available time and resources, the principle of saturation can be used for the number of interviews.12 of the experts reached saturation. The statistical population of this research in the quantitative part is the directors of the headquarters, which include the director general, deputies, heads of departments of the general administration (38 people) and directors and deputy directors of the 19 educational districts of Tehran province (144 people), which is a total of 182 people. Our sample is calculated based on Cochran's table with an error of 0.1, the number of 123/69 people.

Demographic characteristics of experts

Table 2.

Frequency of experts based on gender

Gender	Abundance	Percentage
Male	7	58.33
Female	5	41.67
Total	12	100

Table 3.

Frequency of experts based on age

Gender	Abundance	Percentage
40 to 50 years	4	33.33
51 to above	8	66.67
Total	12	100

Table 4.

Frequency of experts based on marriage

Gender	Abundance	Percentage
Single	1	8.33
Married	11	91.67
Total	12	100

Table 5.
Frequency of experts based on Academic rank

Gender	Abundance	Percentage
Assistant Professor	8	66.67
Associate Professor	4	33.33
Total	12	100

Table 6.
Frequency of experts based on teaching experience

Gender	Abundance	Percentage
Less than 10 years	2	16.66
Between 11 and 20 years	3	25
Between 21 and 30 years	7	58.34
Total	12	100

Validity and Reliability

To examine the validity and reliability of the tool in the qualitative section, reliability accuracy, validity versus validity, trustworthiness versus reliability, transferability versus generalizability (external validity) and confirmability versus objectivity were examined. The validity of the questionnaire was based on content validity, content validity by CVR method and

confirmatory factor analysis, and regarding the data analysis method in the qualitative part of theme analysis (open, axial and selective coding) with Atlas.ti software and in the section Some descriptive statistics (mean, standard deviation, frequency percentage, table and graph) and inferential statistics were used with SPSS-V26 and SmartPLS2 software.

Table 7.
Information related to the research questionnaire

Dimension	Component	Index number	Dimension	Component	Index number
1. Normative	1. Organizational Justice	5	2. Individual	Sense of belonging	7
	2. Work maturity	5		Responsibility	4
	3. Ambiguity avoidance	5		Individual creativity	5
	4. External supervision	6		Connections	7
	5. Decision making	11		Participation	7
	6. Job promotion	4		Identity	6
	7. Male masculinity	4		Self-control	4
	8. Focus (power distance)	8		Motivation	9
	9. Customer Orientation	4		Conflictability	7
	10. Efficiency	5		Interaction	5
Total	10	57	Total	10	61

Research Findings

The research data were analyzed through the coding process based on the systematic design of the theory arising from the data of Strauss and Corbin (2015). Coding is an analytical process during which the data is conceptualized and combined to form the theory.

Analysis of interviews and coding: according to the data collected in the

interview format, which has reached the point of theoretical saturation with the process of continuous adaptation, after defining the main questions of the research (interview) for which a quantitative scale has been defined, it is possible to code the interviews started the collection by defining its features and dimensions and the diagrams describing these features. It is worth mentioning that 12 experts in this field were interviewed based

on a semi-structured interview in the form of 8 general questions, and using the grand theory approach and the use of Atlas.ti software, the answers provided for each question, content analysis and Coded.

Open coding: The data obtained from the interviews were examined and analyzed and

conceptualization was done and the data that are conceptually similar to each other were labeled with suitable names. In the first step, the semantic units in total 168 identified concepts or open codes were extracted, which is shown in Table 8 as an example of the primary codes.

Table 8.

Concepts obtained from the answers of the interviewees (example of matching the codes obtained from the interview)

Open Code
Communication in the organization
The existence of professional relationships between managers
The capacity to establish mutual relations
Managers' ability to establish communication skills
Performance-based relationships
Clarity of the communication cycle
Masculinist management

In the second step, the process of comparing the codes with each other to find a common axis led to the formation of concepts from the codes. The 168 concepts obtained were classified in the form of categories (Central phenomenon, Causal conditions, Intervening conditions, Contextual conditions, Strategies, Consequences) and further, those concepts were extracted which, according to the researcher, belong to a common theme or concept have mentioned, under a more abstract title and placed in 31 categories as a category.

Axial Coding: After the formation of the categories, one of the categories was chosen as the central category and was explored under the title of the central phenomenon in the center of the process, and then the other categories were related to it, the relationship of the other categories with the category It was realized in five main topics: Causal

conditions, strategies, Contextual conditions, Intervening conditions, Consequences (Strauss & Corbin, 2015). This stage consists of drawing a diagram called a coding pattern. This model shows the relationship between the categories.

In this research, the category of organizational culture was selected as the central category based on normative and individual variables in the managers of the education headquarters of Tehran province.

Selective coding: The main stage of theorizing is based on the results of the previous two stages of coding, and the researcher tries to create a picture by putting together the categories and the relationships between them. In this stage, the different classes that were expressed in the axial coding stage are merged together and the overall analysis is done based on the paradigm model.

Table 9.

Selective coding

Selective encoding	Category	Open code
	Communication factors	-Communication in the organization -The existence of professional relationships between managers -The capacity to establish mutual relations -Managers' ability to establish communication skills -Performance-based relationships -Clarity of the communication cycle

Selective encoding	Category	Open code
Causal factors	Orbital gender and the glass ceiling	<ul style="list-style-type: none"> -Masculine management -Attention to gender in management positions -Masculinity in the organization -Individual competence regardless of gender - Fixing the organizational glass ceiling
	Management inefficiency	<ul style="list-style-type: none"> -Authoritarian management -Creating tension in the work environment -Arbitrary interference -Political and group behaviors -Lack of specialized knowledge -Late decisions without using statistics and environmental information -Distrust of colleagues and subordinates -Intentionality and suspicion of their peers
	External supervision	<ul style="list-style-type: none"> -Clarity in supervision -Feedback on work results -Type of monitoring -Needs attention from others the trust -Narrow-mindedness in small matters Periodic evaluation -Identifying the strengths and weaknesses of the organization
	Personality and psychological factors	<ul style="list-style-type: none"> -Managers' negativity -Powerism -Individual development -Skill in empathy -Age -Organizational position -Education -Gender -Work experience -Marital status -Native and non-native
	Creativity and Innovation	<ul style="list-style-type: none"> -Turn threats into opportunities -Support innovation and creativity -Risk taking -Innovative decisions -Individual freedom and independence -Sufficient executive power to innovate
	Responsibility	<ul style="list-style-type: none"> -Acceptance of responsibility -Commitment to goals -Opportunity for responsibility -Responsiveness
	Disambiguation	<ul style="list-style-type: none"> -Avoid uncertainty -Emphasis on equal sharing -The importance of internal coherence of the organization -Maintaining the stability of the status quo -Role transparency
	Conflictability	<ul style="list-style-type: none"> -Clarity of expectations, tasks and responsibilities of people -Job compatibility -Patience -Passive and indifferent in conflicts -Tolerating mistakes at work -Failure of personal space in the organization -The compatibility of the task with the individual's value system

Selective encoding	Category	Open code
Contextual factors	A sense of belonging	<ul style="list-style-type: none"> -A sense of ownership of the organization -Giving importance to work goals -Valuing your goals and the organization -Fit between work requirements and beliefs, values and behaviors -Aligning activities with the goals of the organization -Use experience in doing work -Feeling effective
	Strategic organizational knowledge	<ul style="list-style-type: none"> -Macro view -Targeting -Strategic planning and management -Foresight -Future studies and foresight -Problem solving ability
	Organizational communication management	<ul style="list-style-type: none"> -Networking -Influencing and influencing employees -Moderation in dealing with others -Interaction and cooperation -The power of negotiation and persuasion team work -Informing and informing employees
	Support educational systems	<ul style="list-style-type: none"> -Easy access to the Internet -Providing sufficient facilities and funds for - Organization training -Approval of laws facilitating the learning organization -Support and supervise the training of employees and managers -Creating an incentive system for more participation in teaching and learning -Compilation of legal laws in the vocational training system
	Organizational Justice	<ul style="list-style-type: none"> Distributive justice Procedural justice
	Interactive justice	<ul style="list-style-type: none"> -Elimination of organizational discrimination -Financial factors -Providing necessary credit to support organizational culture change
	Individual characteristics	<ul style="list-style-type: none"> -Collaborative spirit -Flexibility and adaptation to the environment -Persistence in getting the right job position -Personal development -Creativity and innovation -Learning power and transfer speed -Having sense and intuition (sensory sharpness) -Self-esteem
	Participation	<ul style="list-style-type: none"> -Group cooperation -Network collaboration -Common goals in the group -Having group commitment and responsibility -Ability to work and learn through cooperation -Synergistic interactions -Being involved in programs

Selective encoding	Category	Open code
	Management process	<ul style="list-style-type: none"> -Performance management -System management -Systemic approach, establishment and) (institutionalization of the system -Policy making -Planning -Organize -Pragmatism -Finalism -Work experience -Time Management -Independence in decision making -Thinking positive -Reward and compensation management -Human resources management facilitation -Management of the implementation process
	Decision making	<ul style="list-style-type: none"> -Independence in decision making -Ability to make independent decisions -Being involved and interfering in the decision-making process -Self-decision -The right to determine work activities -The opportunity to make decisions and policies -Clarity of decision-making boundaries -Delegation of decision-making power -Freedom of action and acceptance of decision-making responsibility -Deciding on work methods -Deciding on specific organizational tasks
	Power distance	<ul style="list-style-type: none"> -Gain power -Exploitation -Work space -Competitive advantage and use of opportunities -Social base -Ability to make change -Power sharing -Confidence in the managers of the centers or those in power
	Corporate identity	<ul style="list-style-type: none"> -Importance to the organization -The importance of organization for managers -Influencing decisions -Individual development -Enjoy the work -Manager's antisociality
	Infrastructure strategies	<ul style="list-style-type: none"> -Establishing effective regulations -Creating the necessary physical space -Creating inclusive databases -Infrastructure investment -Cultivation -Monitoring system
	Creativity strategies	<ul style="list-style-type: none"> -New training of human resources -Focus on working group -Development of open organizational communication -Agile organization structure -Use of new technologies
Strategies		<ul style="list-style-type: none"> -Great emphasis on meeting the needs of customers

Selective encoding	Category	Open code
Consequences	Customer oriented strategies	<ul style="list-style-type: none"> -Organizational image -External compliance -Legitimacy -Creating an electronic survey unit -Promotion of research and development unit -Innovation in service delivery -Creating a unique educational approach
	Structural strategies	<ul style="list-style-type: none"> -Creating a positive organizational atmosphere -Collaborative organizational structure -Development of human relations -Organizational flexibility -Positive organizational behavior (optimism, optimism) -Attention to the flat organizational structure
	Motivational strategies	<ul style="list-style-type: none"> -Internal motivation -Financial incentive -Effectiveness and enjoyment of work -Attention to the positive points and achievements of the job -Attention to the need for success and competence -Self-motivation -Respect in social settings -Giving a reward -Supporting individual values
	Self-control strategies	<ul style="list-style-type: none"> -Existence of self-evaluation and self-control Feedback based control- -De-stressing at work -Time Management
	Efficiency	<ul style="list-style-type: none"> -Suitability of jobs and competence of people -Constructive competition Encouragement- -Increasing the efficiency and effectiveness of laws and regulations -Increasing the efficiency and effectiveness of strategic plans -Organizational development
	Job improvement	<ul style="list-style-type: none"> -The opportunity to grow, develop and acquire new -Professional skills and knowledge- -Succession -Vertical career path (staircase) -Ensuring the impact of performance on the progress of organizational affairs -Meritocracy
	Empowering human resources	<ul style="list-style-type: none"> -Increasing the motivation of employees and managers -Job commitment and belonging -Improving the quality of work life -Increasing the resilience of human capital -Creating a positive competitive atmosphere among colleagues -Development of individual learning -Improving the job attitude of managers and employees -Improving professional skills and knowledge -Improving the performance and efficiency of employees and managers -Increasing the ability to do teamwork -Realization of the learning organization

Selective encoding	Category	Open code
	Career maturity	-Continuous improvement of organizational intelligence -Self-driving -Active participation -Innovation based on expertise and knowledge -Innovation in service delivery -Creating a sustainable competitive advantage -Keeping up with global changes

First question findings: What are the dimensions, components and indicators of the organizational culture model based on normative and individual variables in the managers of the education headquarters of Tehran province? In the normative dimension, 10 categories: organizational justice, work maturity, ambiguity avoidance, external supervision, decision-making, Career advancement, masculinity or feminism, concentration (power distance), customer orientation, productivity with 57 indicators and 10 categories in the personal dimension: sense of belonging, responsibility, individual creativity, communication, participation (kartime), identity, self-control, motivation, conflict Interaction was identified in 61 indicators.

Second question findings: What are the causal conditions (effectors) of the organizational culture model based on normative and individual variables in the managers of education headquarters in Tehran province? In this research, ten categories of conflict sensitivity, external supervision, accountability, communication factors, creativity and innovation Ambiguity avoidance, sense of belonging, gender orientation and glass ceiling, personality and psychological factors and managerial inefficiency have been introduced as causal conditions.

Third question findings: What are the basic conditions (facilitators) of the organizational culture model based on normative and individual variables in the education staff managers of Tehran province? In this research, five categories of strategic organizational knowledge, management of

organizational communication and support of educational systems and financial factors were identified as contextual conditions.

Fourth question findings: What are the intervening conditions (obstacles) to create an organizational culture model based on normative and individual variables in the managers of education headquarters in Tehran province? In this research, individual characteristics, decision making and management process, power distance, participation and Organizational identity is considered as an intervening condition.

Fifth question findings: What are the strategies of the organizational culture model based on normative and individual variables in the managers of the education headquarters of Tehran province? Strategies or actions are purposeful actions that provide solutions for the desired phenomenon. Strategies are a set of actions that people, teams and organizations, in response to the causal conditions and background and according to the intervening factors, in order to realize the core category of "presenting the organizational culture model based on normative and individual variables in managers". This category includes infrastructure strategies, creativity strategies, Interactive strategies are self-control strategies, customer-oriented strategies and structural strategies.

Sixth question findings: What are the (effective) consequences of the organizational culture model based on normative and individual variables in the managers of education headquarters in Tehran province? Productivity was classified.

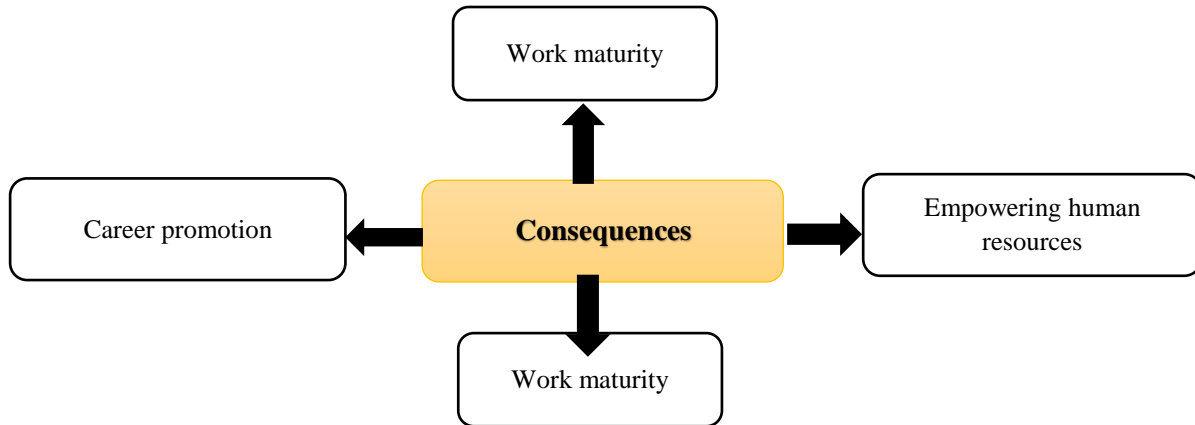


Figure 1. *Consequences of presenting the organizational culture model based on normative and individual variables in managers*

Seventh question findings: What are the priorities of the dimensions, components and indicators of the organizational culture model based on normative and individual variables in the managers of the education headquarters of Tehran province? The findings of the research evaluation based on Shannon's entropy method show that the categories: the ability to establish relationships reciprocity, delegation of decision-making power, level of education, external adaptation, intentionality and suspicion of one's peers, sense of ownership over the organization, enjoyment of work, self-motivation, improvement of specializations and job knowledge, personal development and attention to positive points and job achievements, innovative decisions and accountability in the realization of organizational culture have the highest importance of attention and priority.

Eighth question findings: What is the credibility of the organizational culture model based on normative and individual variables in the managers of the education headquarters in Tehran province? To answer this question, a model evaluation questionnaire was set up to determine the degree of suitability of the model in the form of a five-point scale and It was provided to the experts in this field and then the collected data was evaluated using the t-test of a sample, the results of the adaptation, comprehensibility, generalizability and control of the model showed that the

organizational culture model based on normative and individual variables in The managers of the education headquarters of Tehran province have an acceptable reputation.

Partial least squares technique and test of research hypotheses

In the current research, structural equation modeling methods, namely the partial least squares (PLS) method, have been used to test the measurement model and research hypotheses. SmartPLS software is less dependent on the sample size, does not require the data to be normal and focuses on variance maximization is more suitable for real applications unlike Lisrel and Amos software.

Each research hypothesis has been analyzed separately using partial least squares technique. Finally, the general research model has been put to the test using the same technique. In the partial least squares technique, several points are very important:

1- The strength of the relationship between the factor (hidden variable) and the observable variable is shown by the factor load. The factor load value is a value between zero and one. In the standard measurement model, if the factor loading value between a question and the related dimension is less than 0.4, that index (questionnaire question) should be removed from the model, and questions with a factor loading between 0.3 and 0.7 should also be considered for

elimination and the threshold value for factor load is 0.7 and above.

2- When the correlation of the variables is identified, a significance test should be performed. To check the significance of observed correlations, bootstrap or jackknife cross cutting methods are used. In this study, the self-adjustment method is used, which gives the t statistic. At the 5% error level, if the bootstrapping t-value is greater than 1.96, the observed correlations are significant.

In general, the relationships between variables in the partial least squares technique are of two categories:

1. *External model:* The external model is equivalent to the measurement model (confirmatory factor analysis) in structural equations and shows the relationships between hidden variables and manifest variables.

2. *Internal model:* The internal model is equivalent to the structural model (path analysis) in structural equations and examines the relationships between hidden variables.

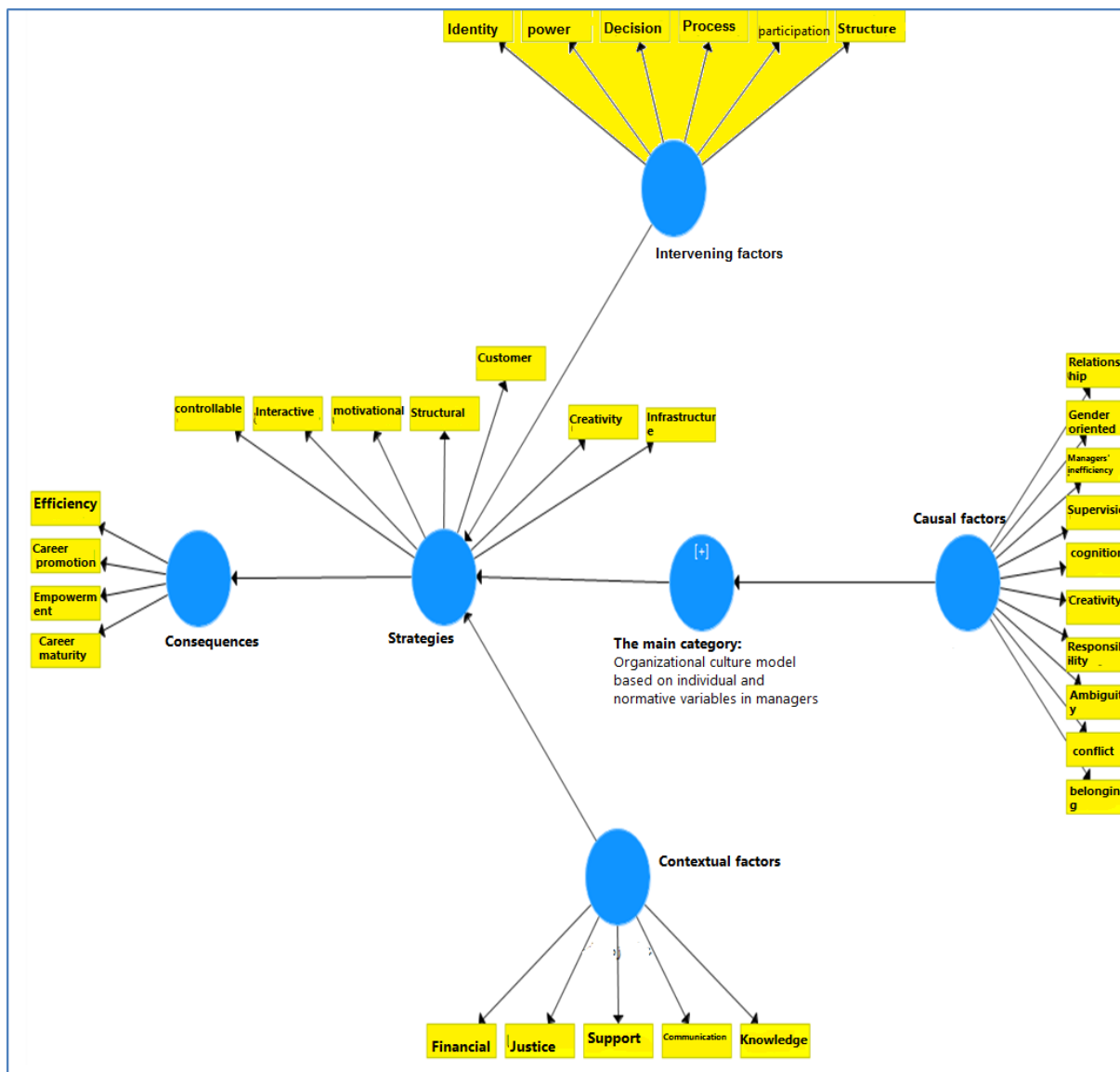


Figure 2. Basic model designed in PLS software

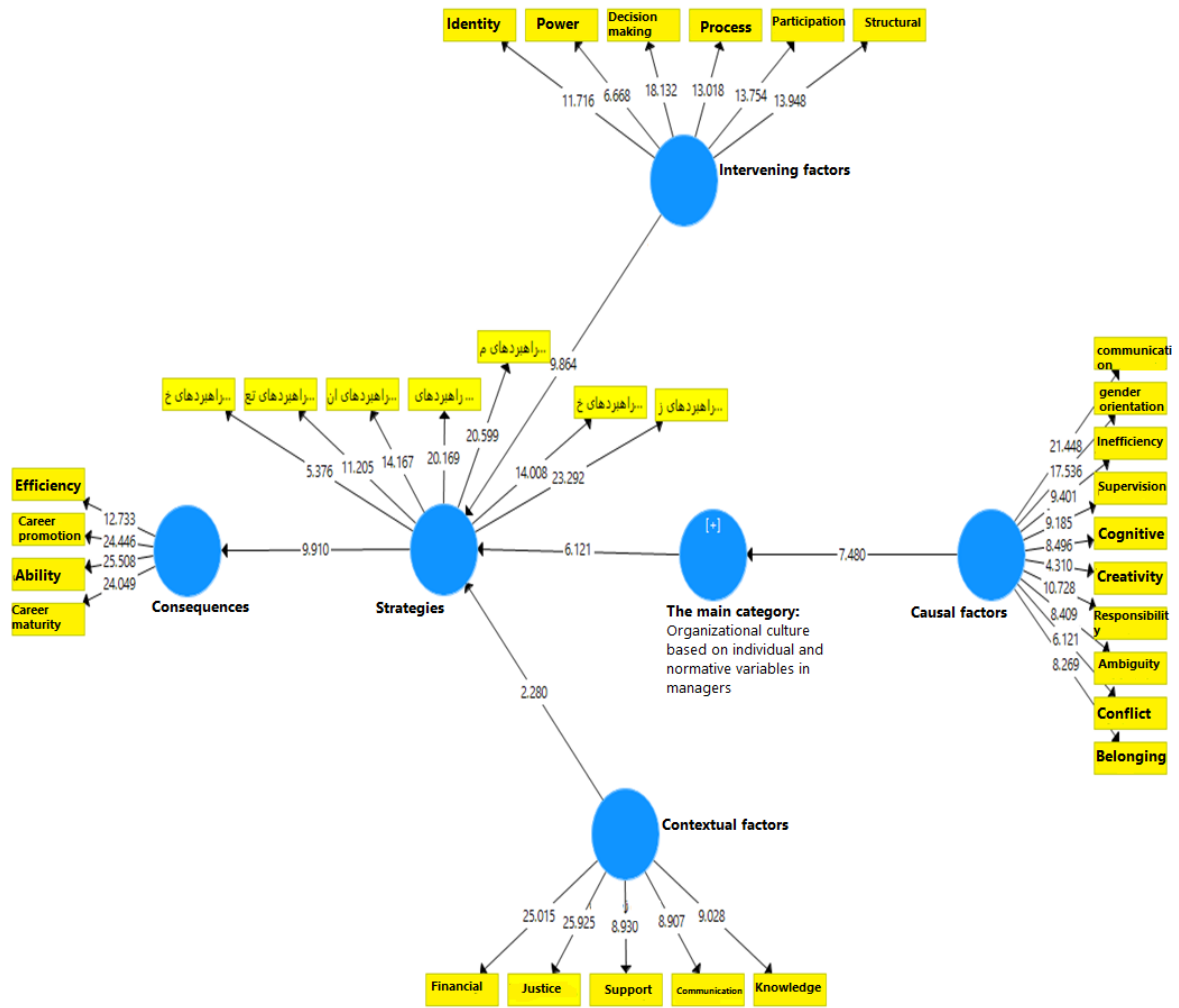


Figure 3. Factor load of the research model (external model)

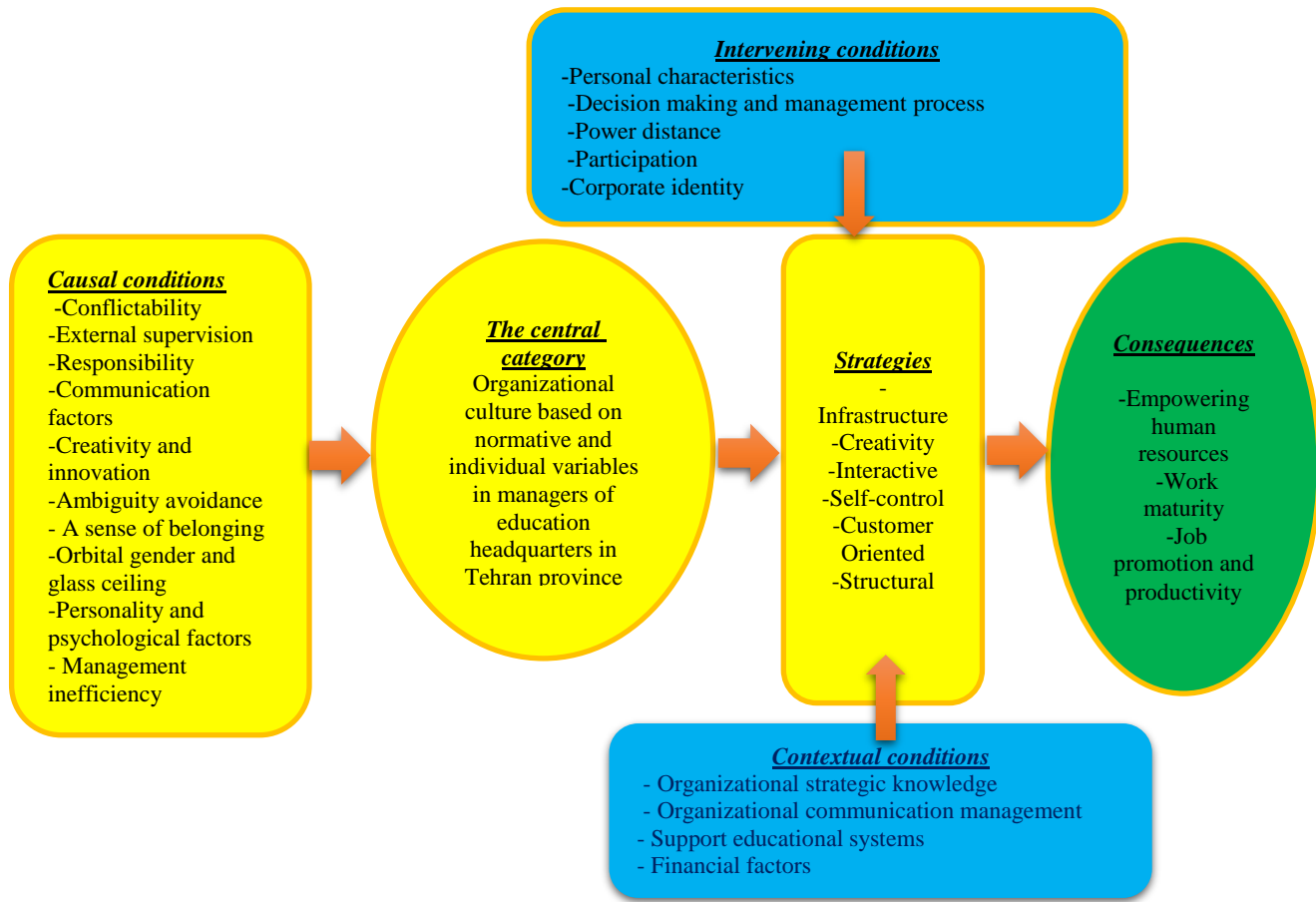


Figure 4. Presentation of the research paradigm model

Evaluating the importance of identified factors based on Shannon's entropy: Based on Shannon's entropy method, data processing in the foundation's data analysis discussion is presented with a new quantitative and qualitative approach. Entropy in information theory is an index to

measure the uncertainty expressed by a probability distribution. This method, which is also known as the compensatory model, analyzes the content of the plan (Rodriguez & Miramontes, 2022). It is shown in Table 10 as an example.

Table 10.

An example of the task of determining the importance and emphasis of the factors identified in the interviews

Code	Abundance	$\sum P_{ij} \times knP_{ij}$	Importance factor	Unreliability
Communication in the organization	2	-0.0282	0.0061	0.0063
The existence of professional relationships between managers	5	-0.0582	0.0125	0.0129
The capacity to establish mutual relations	11	-0.1045	0.0225	0.0232
The ability of managers to establish communication skills	4	-0.0489	0.0105	0.0109
Performance-based relationships	4	-0.0489	0.0105	0.0109

Conclusion

By examining the first question of the research based on the recognition of indicators, the components of the organizational culture model based on normative and individual variables in the managers of the education and training staff of Tehran province, after analyzing the data, it was determined based on factor analysis that the identified factors formed the main structure in the form explain meaningfully. The necessity of maintaining the survival of organizations today is their ability to present new behaviors based on new conditions. Often, managers consider change as vital for organizational success and are constantly looking for ways to make organizational changes work. The main factors in the change process are: proponents of change, amount of change, time frame, dealing with culture, evaluation of reforms. Philip Coombs reminds that: "If there is going to be a transformation in the field of education, this transformation must start from the management of education." And because, according to Peter Drucker, we can say with almost certainty that our challenges in the change process will be management challenges. Change is an integral part of the organization and organizations will be successful in the face of changes that have the power to plan and direct changes in order to increase the effectiveness and strategies of the organization, and one of the most important components affecting the efficiency and effectiveness of organizations is "organizational culture". Culture in the organizational field has three components: outward appearances, supported values, and hidden common beliefs or basic assumptions. Sometimes the culture of some organizations is not worthy of the current situation and has hindered the realization of some visions, so it must be changed. The most difficult feature of organizational culture is its changeability. The findings of this article are consistent with the findings of Nouf et al., (2022), Mali (2022), Yulastuti & Tandio (2022), and Tidor & Morar (2022) researches but it is not completely aligned with the findings of the

Srimulyani & Hermanto (2022) Lotfikia et al., (2022) articles.

At the end, some of the most important practical suggestions are presented:

1. To improve the motivation of managers to create team and collaborative activities and to strengthen the organizational collaborative structure by creating a positive organizational atmosphere;
2. The opportunity to grow, develop and acquire new professional skills and effective knowledge for managers;
3. The conditions of sustainable competitive advantage should be designed;
4. Provide the ground for continuous improvement of organizational intelligence to realize the learning organization;
5. Individual development and reinforcement of positive behaviors of managers should be taken into consideration;
6. Agility of the organization's structure according to the suitability of the job and the competence of the people and increasing the efficiency and effectiveness of the rules and regulations by simplifying matters should be considered;
7. By supporting individual values and de-stressing people, inner motivation and sense of belonging to the organization should be improved;
8. Influence in decision-making and implementation by delegating authority should be considered.

References

- Aeiny, A., Mousavi, S., Sepahvand, R., & Nazarpouri, A. H. (2022). Design and validation of a model of organizational Insensibility in human capital (Case study; National Gas Company of Kermanshah Province). *Organizational Culture Management*, 20(4): 1-20.
Doi:10.22059/jomc.2022.332579.1008364
- Aichouche, R., Chergui, K., Brika, S., Mezher, M., Musa, A., & Laamari, A. (2022). Exploring the Relationship between Organizational Culture Types and Knowledge Management Processes: A Meta-Analytic Path Analysis. *Journal of Frontiers*, 8(2): 407-422. Doi: 10.3389/fpsyg.2022.856234

- Asamba, M. (2022). *Organizational Development*. London: SAGE.
- Bamidele, R. (2022). *Organizational Culture*. London: Routledge.
- Bashar, A., Ali, J., Ismail, F., Sharif, Z., Hamawandy, N., & Othman, B. (2021). The organizational culture influence as a mediator between training development and employee performance in Iraqi Academic sector: University of Middle Technical. *Journal of Contemporary Issues in Business and Government*, 27(1): 1927-1960. www.researchgate.net/publication/349734257
- Chilisa, B. (2019). *Indigenous Research Methodologies*. London: Routledge.
- Creswell, J. (2018). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. London: SAGE.
- Dane, F. (2022). *Evaluating Research: Methodology for People Who Need to Read Research*. London: SAGE.
- Dung, T. (2021). The Influence of Organizational Culture on Employees' Satisfaction and Commitment in SMEs: A Case Study in Vietnam. *Journal of Asian Finance, Economics and Business*, 8(5): 1031-1038. Doi:10.13106/jafeb.2021.vol8.no5.1031
- Galli, M. (2022). Organizational Culture and Its Importance. *Journal of Social Management*, 12(6): 1-18. Doi:10.1051/shsconf/20221310300
- Graamans, E., Ten Have, W., & Ten Have, S. (2021). Against the current: cultural psychology and culture change management. *Culture and Psychology*, 27(2): 325-343. Doi: 10.1177/1354067X21993789
- Harhash, D., Ahmed, M., Shereif, H. (2020). Healthcare Organizational Culture: A Concept Analysis. *Menoufia Nursing Journal*, 5(1): 65-77. www.researchgate.net/publication/359195738
- Harooni, M., & Razeghi, S. (2020). Investigating the Relationship between Organizational Culture, Total Quality Management and Performance. *Journal of System Management*, 6(2): 169-181. Doi:10.30495/jsm.2020.677242
- Hendrith, M. (2018). The Effects Culture and Communication have on Businesses. *Integrated Studies*, 1(4): 10-19. Doi.org/10.1016/j.jwb.2020.101126
- Khademi, A., & Saberi-Hekami, M. (2018). The Effect of Organizational Culture on Organizational Performance with Role of Mediator Intellectual Capital. *Journal of System Management*, 4(1): 1-26. https://sjsm.shiraz.iau.ir/article_537205.html
- Kim, T., & Chang, J. (2019). Organizational culture and performance: a macro-level longitudinal study. *Leadership and Organization Development Journal*, 41(1): 65-84. Doi.org/10.1108/LODJ-08-2018-0291
- Kurniady, D. (2020). Analysis of the Role of Organizational Culture at the Center for Employee Education and Training. *Journal of Propositosy Representaciones*, 8(2): 1-13. doi.org/10.20511/pyr2020.v8nSPE3.773
- Leso, B., Cortimiglia, M., & Ghezzi, A. (2022). The contribution of organizational culture, structure, and leadership factors in the digital transformation of SMEs: a mixed-methods approach. *Journal of Cognition, Technology & Work*, 26(8): 166-183. Doi: 10.1007/s10111-022-00714-2
- Lotfikia, K., Kabaranzad Ghadim, M., Haghghat Monfared, J., & Marjani, T. (2022). The Effect of Organizational Culture Dimensions on the Development of Knowledge Management in Academic Center for Education, Culture and Research. *Sciences and Techniques of Information Management*, 8(2): 257-288. Doi: 10.22091/stim.2022.7126.1614
- Madani, J. (2022). Conceptual Link between Organizational Transparency and Sound Organizational Culture in Public Institutions: The Case Study of Judicial Regulatory Agencies. *Organizational Culture Management*, 20(4): 801-825. Doi: 10.22059/jomc.2022.335126.1008385
- Mali, P. (2022). The Effects of organizational culture on job satisfaction and financial performance. *Journal of Engineering Management and Competitiveness*, 12(1): 44-56. Doi: 10.5937/jemc2201044M
- Mingaleva, Z., Shironina, E., Lobova, E., Olenev, V., Plyusnina, L., Oborina, A. (2022). Organizational Culture Management as an Element of Innovative and Sustainable Development of Enterprises. *Journal of Sustainability*, 14(6): 346-362. Doi: 10.3390/su14106289
- Nouf, M., Alqarni, P., McLaughlin, A., AL-ashab, A. (2022). Factors Influencing Organizational Culture to Facilitate Radical Innovation in Mature Manufacturing Organizations. *Journal of Innovation & Business Best Practice*, 28(6): 380-398. Doi: 10.5171/2022.752939
- Pathiranage, Y., Jayatilake, L., & Abeysekera, R. (2020). A Literature Review on

- Organizational Culture towards Corporate Performance. *International Journal of Management, Accounting and Economics*, 7(9): 284-296.
www.researchgate.net/publication/344667769
- Piowar-Sulej, K. (2021). Organizational culture and project management methodology: research in the financial industry. *International Journal of Managing Projects in Business*, 14(6): 1270-1289.
 Doi.org/10.1108/IJMPB-08-2020-0252
- Ramazanian Fahandary, H., & Khatibi, S. (2021). The Relationship between Organizational Culture and Knowledge Management Measures in the Country's Judicial System (Case Study: Justice of Mashhad City). *Scientific Journal of Strategic Management of Organizational Knowledge*, 3(4): 47-70.
jkm.ihu.ac.ir/article_205985.html?lang=en
- Rita, S. (2022). Organizational culture: Conceptual discussion. *Scholars Journal of Research in Social Science*, 2(1): 22-27.
 Doi.org/10.5281/zenodo.6309726
- Rodriguez, N., Miramontes, O. (2022). Shannon Entropy: An Econophysical Approach to Cryptocurrency Portfolios. *Journal of Entropy*, 14(8): 47-60.
 Doi.org/10.3390/e24111583
- Saleem, N., & Ilkhanizadeh, S. (2021). The Mediating Role of Organizational Culture in the Effect of Business Intelligence on Corporate Performance Management. *International Journal of Research in Humanities and Social Studies*, 8(1): 1-14.
 Doi:10.22259/2694-6296.0801001
- Srimulyani, V., & Hermanto, Y. (2022). Organizational culture as a mediator of credible leadership influence on work engagement: empirical studies in private hospitals in East Java, Indonesia. *Journal of Humanities and social sciences communications*, 9(27): 17-32.
 Doi: 10.1057/s41599-022-01289-z
- Strauss, A., & Corbin, J. (2015). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. London: SAGE.
- Strengers, J., Mutsaers, L., Van Rossum, L., & Graamans, E. (2022). The organizational culture of scale-ups and performance. *Journal of Organizational Change Management*, 35(8): 115-130.
- Tidor, A., & Morar, L., (2022). Changing Organizational Culture for Enterprise Performance. *International Journal of Operations Management*, 2(2): 28-33.
 Doi.org/10.1108/JOCM-09-2021-0268
- Tulcanaza-Prieto, A., Aguilar-Rodríguez, I., & Artieda, C. (2021). Organizational Culture and Corporate Performance in the Ecuadorian Environment. *Administrative Sciences*, 11(5): 66-82. doi.org/10.3390/admsci11040132
- Yuliasuti, I., & Tandio, D. (2020) Leadership style on organizational culture and good corporate governance. *International Journal of Applied Business*, 5(1): 23-33.
 Doi:10.32535/ijabim.v5i1.764
- Xanthopoulou, P., Sahinidis, A., Bakaki, Z. (2022). The Impact of Strong Cultures on Organisational Performance in Public Organisations: The Case of the Greek Public Administration. *Journal of Social Science*, 11(486): 171-190.
 doi.org/10.3390/socsci11100486