Capturing Managers and Experts' Perspectives on Organizational Transformation in Iranian Fisheries Organization Using Q Methodology

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ABSTRACT

The present research was conducted with the aim of identifying the subjective patterns of managers and experts of Iranian Fisheries Organization regarding organizational transformation. The research was carried out with the participation of a number of managers and experts of the Fisheries Organization who were selected by a purposeful sampling approach. The main research method for collecting the required data was in-depth interview. After reviewing and summarizing 75 statements extracted from the interviews, 41 statements were finally selected as Q samples. After sorting Q statements, exploratory factor analysis and varimax rotation approach were employed to identify subjective patterns. The results revealed that five different subjective patterns can be identified among the managers and experts of the Iranian Fisheries Organization regarding the organizational transformation, which explained 72.87% of the total variance in the factor analysis model. The results of factor analysis indicated that the subjective patterns identified included participatory policies, capacity development and change management, appropriate organizational structures, incentives for change, and clarification of financial and administrative affairs. In the end, it was recommended that it was very important to develop more units and mechanisms within the organization for communication and interaction with other actors. Rereading and amending the regulations related to the support of the information system in the organization is an undeniable necessity that can develop and institutionalize the teamwork culture in the fisheries organization. In addition, the results of the present study can facilitate the organizational transformation and ultimately increase the success and responsiveness of the fisheries organization.

Keywords: Factor analysis model, Q methodology.

INTRODUCTION

The change is the only stable principle of the world (Sterman, 2000; Filho and Raath, 2018; Insulander, 2019), because, in the current uncertain context and conditions, instability is the most dangerous threat for the organizations (Farjoun, 2007). Based on this, organizations are forced to innovation and continuous and permanent changes for their survival and dynamism (Tim *et al*., 2019; Abdul-Kahar, 2020). Organizations often make decisions considering operational improvements or choosing new business opportunities to maximize their profits. Therefore, in the process of change, managers must have high skills to make others aware of the necessity of change. In other words, they should be able to convince their subordinates and guide changes in the desired direction (Logemann *et al*., 2018). In general, in today's world, it is not enough to use past experiences to solve the current and future problems of the organization.

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Therefore, the managers of the organizations should think of another way to provide goods and services with minimum cost and superior quality according to market and customer needs. Thus, cooperative behaviors are performed with the intention of helping others (Ben Slimane and Padilla-Angulo, 2018).

According to what was mentioned earlier, in the current era, investigating and studying the process of managing organizational change is essential, important, and necessary (Sudhir, 2018). In fact, transformation is a special type of change. Change means the process of innovation in the members of an organization (Chen *et al*., 2015). In other words, organizational transformation is a continuous and fundamental change based on theory, values, and practical methods that leads to the reconstruction and dynamism of the entire organization (Hanif *et al*., 2014; Hornstein, 2015). Nevertheless, organizational transformation and human capital management in organizations of different countries are facing many challenges (Garcia *et al*., 2015). For example, globalization, lack of skilled and committed workforce, lack of recognition of employees' needs, lack of plan, lack of meritocracy, discrimination, insufficient productivity of human resources, lack of motivation, lack of employee participation (in decision-makings, organization policy meetings, and other affaires), and lack of cooperation between the organizations and experienced employees are just some of the main challenges of the organization in many countries of the world (Sudhir, 2018; Chen *et al*., 2015).

In the meantime, due to international sanctions and their specific national and international policies, organizations in countries such as Iran inherently experience more difficult conditions than those in countries with more economic stability. For example, review of the reports of the Iranian Fisheries Organization shows that this organization has the following problems (Kotwani, 2020):

- Lack of experienced labor,
- Decrease in the productivity of human resources,
- Lack of motivation in the employees,
- Decrease in hope for the future,
- Lack of active participation,
- Lack of effective communication with other organizations,
- Lack of satisfaction of employees and clients,
- Weakness in planning.

In addition, due to the rapid changes and developments in the environment, the Iranian Fisheries Organization is not an exception to this rule and must be able to respond to the diverse demands of the users and owners in accordance with their needs and at the right time (Adeniji *et al*., 2018). From the perspective of researchers (see Janežič *et al*., 2018; Khan, 2019; Tim *et al*., 2019), organizational transformation is one of the most key answers to these challenges. In other words, such fast and complex business environments in today's organizations require organizational transformation (Khan, 2019). This is despite the fact that there is not much desire for organizational transformation in Iranian organizations such as the Iranian Fisheries Organization. There are many obstacles for non-transformation in Iranian organizations. For example, issues such as stagnation, monotony, deterioration of work ethics, lack of innovation, centralized planning system, lack of designing power (Yasini *et al.*, 2017), lack of evaluation system performance, structural and organizational problems, overlapping tasks, not prioritizing quality policies, lack of appropriate criteria for selecting employees, lack of meritocracy in taking organizational positions (Seyedjavadin and Moshfegh, 2008) are among the most important obstacles to the lack of organizational transformation in Iran (Imran *et al*., 2019; Nazifi *et al.* 2018).

Also, studies (see Nazifi *et al*., 2018; Tielen, 2008) show that the mental patterns of managers of organizations such as the Iranian Fisheries Organization can play a key role in organizational transformation. For example, Nazifi *et al*. (2018) sate that

identifying the mental patterns of managers can help to change the future policies of organizations. Yasini *et al*. (2017) also claim that identifying mental patterns can lead to increased sensitivity and responsibility of managers in line with organizational transformation.

Despite the importance and role of the mental patterns of managers of the Iranian Fisheries Organization in the organizational transformation, preliminary investigations show that sufficient studies have not been conducted in this field (Jalilian *et al*., 2021). In addition, organizational transformation in any organization is dynamic, and this process depends on the various organizational, social, and economic components specific to that organization. Therefore, the results of researches that have examined the role of managers' mental patterns on organizational transformation in other organizations cannot be generalized for the fisheries organization. As a result, the current research suggests the lack of sufficient understanding of the mental patterns of managers of the Iranian Fisheries Organization as the main research gap. In order to fill this research gap, identifying the mental patterns of managers and experts of this organization regarding organizational transformation was determined as the main goal of the research.

In general, this research has three novelties or original contributions. First, the current research is innovative because it examines the issue of organizational transformation in the Iranian Fisheries Organization. To the best of our knowledge, no other research has been done in the field of organizational transformation in this organization. Second, this research uses the Q methodology to identify the mental patterns of managers and experts in the fisheries organization. The application of this methodology to examine the mental patterns of managers and experts in the Iranian Fisheries Organization has also been done for the first time. Thirdly, this research leads to the identification and development of the intellectual framework of managers and experts in the fisheries

organization. By identifying the determinants of organizational transformation from the point of view of managers and experts, the present research provides insights for practical organizational transformation and improving the success and accountability of the organization.

MATERIALS AND METHODS

Type of Research

This study was conducted in January and February 2023. In terms of paradigm, it is a mixed (combination of qualitative and quantitative methods) study, and in terms of purpose, it is considered as an applied exploratory study. Q methodology steps were used to sequence the research steps. Therefore, the phase of examining the situation and forming the concourse environment was done using a qualitative approach. Quantitative stage was also done using Q factor analysis approach.

Population

The statistical population was managers and experts of Iran Fisheries Organization. According to the report of the organization, the number of experts and managers was 30, of which 14 were selected as samples. Details about the number of samples and the sampling method have been provided in Q methodology section (Section 4-2). However, it should generally be noted that the Iranian Fisheries Organization consists of 4 general directors, each of whom has 2 deputies, and each deputy has 2 to 3 heads of specialized groups. Finally, head of the specialized group works with 2 to 3 subject experts.

Steps of Q Methodology

The Q method is a quasi-quantitative method whose purpose is to find and

describe mental patterns and identify the agreement and contradiction in people's perspectives, opinions, and preferences about a specific issue (Stevenson, 2015; Ramlo, 2016).

Choosing the Participants and Definition of the Concourse or Q Population

In order to create a concourse environment in Q methodology, it was necessary to select participants who can provide sufficient and accurate information in the field of organizational transformation in the Iranian Fisheries Organization. For this purpose, by consulting various members of the organization, one of the experts was selected as the first participant and a semi-structured questionnaire was provided to him. After finishing the interview with the first participant, he was asked to introduce another person for the second interview. This process continued until the selection of the 14th expert and/or manager. It should be noted that the researchers from the 11th to the 14th interview concluded that the continuation of the sampling process did not add new insights to the previous results about the organizational transformation. In this regard, after the end of the semi-structured interview with the 14th participant, the sampling process was stopped. In other words, at this stage, the researchers came to the conclusion that theoretical saturation had been achieved about the organizational transformation in the Iranian Fisheries Organization. The validity of the semi-structured questionnaire that was used at this stage was reviewed and confirmed by several experts in the field of behavioral and management sciences. In order to analyze the text of the interviews, MAXQDA12 textual data analysis software was used. The results of these 14 interviews were used to form the concourse environment, which actually includes a comprehensive and diverse set of materials related to the literature of the research

subject (Van Exel and De Graaf, 2005). In this research, Q population/concourse environment included 75 statements that were drawn through 14 semi-structured interviews and research and study of scientific articles.

Forming and Evaluating the Q Sample

Q samples are actually statements or phrases about the research topic (Adams _et al_., 2021). At this stage, in order to summarize the statements related to the concourse environment and create a manageable set of statements, the concourse matrix method was used. In other words, 75 statements constituting Q concourse environment/population were evaluated. In order to obtain a suitable sample of the concourse environment, similar and repeated statements were combined, or some of them that had less connection with the issue of organizational transformation in the Iranian Fisheries Organization were removed. In addition, the selected statements were given to four participants to give their opinions. After collecting the opinions and making the requested corrections for the statements, the research questionnaire was finalized. This helped to verify the validity of the research tool. After summarizing the results, a special set of statements was obtained, which was considered as the Q sample that included 41 statements. The complete list is given in the following sections and in Table 3.

Q Ranking

According to Yoshizawa _et al_. (2016), the final cards for ranking were given to the managers and experts, who were asked to rank the statements based on forced distribution in the charts. For this purpose, a matrix was provided to the managers/experts to easily sort Q samples based on forced distribution. In order to achieve the purpose of classification, the Q-chart for 41 statements of the research was adjusted in such a way that they could

evaluate the set of statements in a symmetrical distribution from strongly agree (+5) to strongly disagree (-5) (Figure 1).

Q Factor Analysis

In the last step, the statements of the Q sample were analyzed using Q factor analysis method and SPSS$_{25}$ software. Varimax rotation method was applied to perform Q factor analysis. The suitability of the data for analysis was also checked with the help of KMO statistic and Bartlett's test. In general, the different stages of Q methodology are represented in Figure 2.

RESULTS

In order to analyze organizational development in the Iranian Fisheries Organization, 14 managers and experts who were experts in this field and had work experience or skills were interviewed in a targeted manner. 11 of them were men and 3 were women. There were several major reasons for the low participation of women in the study. First, the senior managers generally do not have a positive attitude towards the managerial and specialized skills of women in the fisheries organization. Second, in many Iranian organizations such as the Fisheries Organization, there are cultural beliefs against women's management. In other words, many members of organizations believe that the head of organizations should not be a woman. Thirdly, historically, women in Iran have always been placed in positions where they had to do repetitive work and occupy low-level organizational positions. Fourthly, organizations such as the Fisheries Organization are not compatible with women's characteristics and these organizations are generally patriarchal. The analysis of the data collected from the interviews resulted in 75 propositions that formed the discourse space in the field of

Figure 1. Chart of ranking and evaluation of Q statements.

Figure 2. Q methodology steps.

Table 1. Subjective patterns extracted from Q factor analysis and the amount of variance explained by each subjective pattern.

Group	Subjective pattern	Variance %	Cumulative variance percentage	Eigen value
1	Participatory policies	24.45	24.45	3.42
2	Capacity development and change management	15.52	39.98	2.17
3	Appropriate organizational structure	11.20	51.18	1.56
4	Incentives for change	11.00	62.18	1.54
5	Clarification of financial and administrative affairs	10.69	72.87	1.49

organizational transformation in the Iranian Fisheries Organization. Then, the validity of the propositions was evaluated based on the views of four interviewees and three university professors (with expertise in organizational transformation). After making the necessary corrections, 41 statements were finally selected as Q samples. The results of this section are presented in the form of mental patterns in Table 3.

Q Factor Analysis

In the quantitative part, 41 statements related to the Q sample were evaluated in the form of a forced distribution matrix by 14 managers and experts of the Fisheries Organization. The results of Q factor analysis demonstrated that the reported values for KMO statistic and Bartlett's Sphericity test were 0.62 and 219.859, respectively. Based on the results of this section, the values of these indices were significant at the 0.01 level, which indicated the suitability of the data for Q factor analysis. Also, a scree plot diagram was used to show the amount of variance explained by the most important factors (Figure 3). The results of this figure are based on the eigenvalue index. According to the results of this diagram, it can be concluded that there are five distinct subjective patterns among managers and experts. Based on the results of the Q factor analysis using the principal components method, managers and experts were divided into five groups according to the difference in their perspectives and opinions about the effective factors in organizational transformation. As shown in Table 1, the first (first factor), second, third, fourth, and fifth factor of the subjective patterns could account for 24.45, 15.52, 11.20, 11, and 10.69% of the total variance of the factor analysis model, respectively.
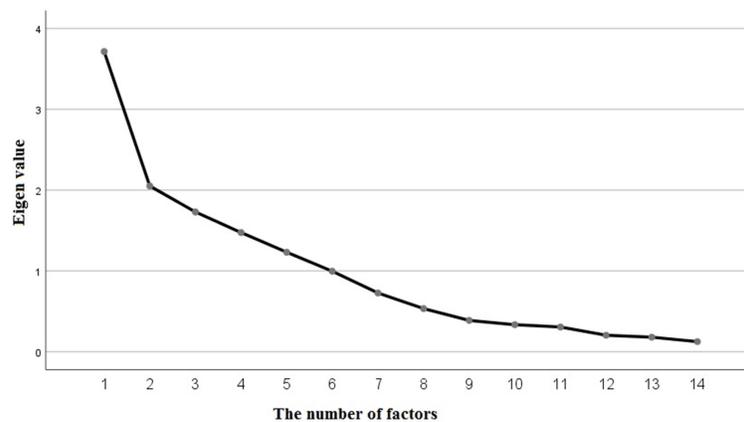
Figure 3. Scree plot diagram.

746

Rotated Matrix of the Factors

Table 2 shows the summary of the results related to the rotated matrix of the factors. The results of this section also show the managers who have the subjective patterns in a classified manner. Considering that the loading factors are greater than $\frac{2.58}{\sqrt{n}}$, It should be noted that n is equal to the Q sample (41 statements). According to the above formula, the standard limit for loading factors was calculated as 0.40. It can be claimed with 99% confidence that the obtained loading factors are statistically significant (Table 2). It should be noted that *n* is equal to the Q sample (41 statements). According to the above formula, the standard limit for loading factors was calculated as 0.40. Considering that the loading factors specified in Table 2 have values greater than 0.40, it can be mentioned that the first, second, third, and fourth managers and experts jointly had subjective pattern 1. Sixth, seventh and fourteenth managers and experts all had subjective pattern 2. In addition, the fifth and eighth managers and experts were the only participants who had subjective pattern 3. Based on the results of Q factor analysis, the ninth and thirteenth participants had subjective pattern 4. Finally, tenth, eleventh and twelfth managers and experts were also categorized in the subjective pattern 5. The basis of naming the subjective patterns was the existence of common traits and characteristics among the types of mentalities among the managers and experts participating in the research.

In Table 3, the views of each of the managers and experts were ranked on Q statements. This made it possible to find out what rank each of the Q statements get in each of the mental patterns. As Table 3 shows, in the first, second, third, fourth, fifth, and sixth mental patterns, the items related to participatory policies, capacity development and change management, appropriate organizational structures, incentives for change, and clarification of financial and administrative affairs have been assigned the highest ranks.

DISCUSSION

Subjective Pattern 1: Participatory Policies

The first subjective pattern had an Eigen

Table 2. The rotated matrix of the correlation of the managers and experts' perspectives in each of the subjective patterns.

Participants' code	Subjective pattern 1	Subjective pattern 2	Subjective pattern 3	Subjective pattern 4	Subjective pattern 5
1	0.897	- 0.009	0.052	0.067	- 0.052
2	0.884	0.013	0.017	0.001	- 0.010
3	0.886	- 0.085	0.005	- 0.027	- 0.053
4	0.820	- 0.274	- 0.058	-0.013	- 0.006
6	- 0.224	0.850	0.226	0.035	- 0.025
7	- 0.014	0.919	- 0.108	0.004	0.033
14	- 0.025	0.504	0.132	0.574	0.014
5	- 0.118	0.029	0.825	0.097	0.089
8	0.257	0.215	0.0.504	- 0.172	- 0.097
9	- 0.330	- 0.149	0.463	0.507	- 0.024
13	0.173	- 0.043	- 0.147	0.879	0.068
10	0.111	-0.024	0.213	- 0.137	0.832
11	- 0.272	0.444	- 0.483	0.284	0.448
12	- 0.161	-0.043	- 0.181	0.189	0.757

Table 3. Scores of each statement based on the load factor in the subjective patterns of experts and managers.

Statement	Subjective pattern 1: Participatory policies	Subjective pattern 2: Capacity development and change management	Subjective pattern 3: Appropriate organizational structure	Subjective pattern 4: Incentives for change	Subjective pattern 5: Clarification of financial and administrative affairs
Advising and seeking advice from colleagues	39	1	27	10	11
Interaction and communication with other organizations related to Fisheries Organization	33	2	9	24	12
Involving representatives of fisheries-related organizations in decision-makings	32	4	28	14	7
Conducting collaborative research with other organizations and institutions related to Fisheries Organization	38	6	17	23	4
Involving all stakeholders in all processes related to decision-making and evaluations	31	5	41	6	39
Creating continuous learning opportunities for experts	37	7	20	4	2
The value of learning and teaching in the organizational culture of Fisheries Organization	35	41	36	2	5
Changing the attitude of managers towards creating transformation in the organization	21	29	10	5	41
Managers' support for organizational transformation	16	12	14	8	37
Operationalizing the initiatives, ideas, and opinions of experts in order to improve services	18	18	15	11	9
Communication and interaction with research institutes and universities in order to support aquaculture	20	9	7	1	40
Identifying information fields related to different fisheries sectors	26	11	11	32	10
The serious determination of senior managers for organizational transformation	22	37	6	30	3

Continued…

748

Continue of Table 3. Scores of each statement based on the load factor in the subjective patterns of experts and managers.

Statement	Subjective pattern 1: Participatory policies	Subjective pattern 2: Capacity development and change management	Subjective pattern 3: Appropriate organizational structure	Subjective pattern 4: Incentives for change	Subjective pattern 5: Clarification of financial and administrative affairs
Producing and transferring the required and valid findings to other relevant departments and organizations	19	33	1	22	14
Strengthening interactions between research, education, and extension with the Fisheries Organization	27	19	2	28	21
Creating the opportunity for fair participation of experts in internal and external conferences	23	28	23	34	15
Needs assessment and targeting of educational courses	24	24	18	38	31
Accepting employees and reducing their resistance to organizational change	29	8	29	39	34
Selection of people with expertise and experience in management positions of the Fisheries Organization	36	15	21	25	29
Selection of managers familiar with fisheries management positions	25	25	34	23	25
Connection and communication with other information systems	30	32	12	17	28
Recruitment of skilled and experienced personnel	28	31	16	21	23
Providing the possibility of communication between different units and departments of the organization	15	34	30	19	36
Merging posts with similar duties	11	22	8	41	38
Justifying employees by enumerating the benefits of organizational transformation	3	16	13	35	32
Providing fair insurance and welfare services to experts	2	21	4	12	16

Continued…

Continue of Table 3. Scores of each statement based on the load factor in the subjective patterns of experts and managers.

Statement	Subjective pattern 1: Participatory policies	Subjective pattern 2: Capacity development and change management	Subjective pattern 3: Appropriate organizational structure	Subjective pattern 4: Incentives for change	Subjective pattern 5: Clarification of financial and administrative affairs
Encouraging experts to present new programs and activities	1	14	26	7	20
Organizing discussion forums and educational workshops	8	26	22	3	6
Supporting officials and policy-makers for organizational transformation and improving its position in the organization	13	30	31	15	8
Everyone's determination to replace the traditional management system with a new system	5	17	38	29	17
Giving importance and encouraging experts to acquire new skills and knowledge in the field of information	6	27	40	27	24
The justification of organizational transformation costs	4	23	35	36	19
Providing incentives for the initiative of experts	17	36	25	16	22
Encouraging group learning	7	35	34	13	26
Compliance with legal regulations and activity standards	9	13	33	31	13
Allocation of necessary credit for the development of information and communication technology	12	20	5	18	27
Investing in order to create aquaculture databases	34	38	3	26	18
Compilation of clear procedures and instructions	40	40	39	20	35
Preventing parallel work of departments	41	39	37	37	30
Specific and clear responsibilities	10	10	19	9	1
Increasing the quantity and quality of standards	14	3	32	40	33

value of 3.42 and could explain 24.45% of the total variance. Due to the conceptual and semantic affinity of the statements, this subjective pattern was named "participatory policies". According to the ranking of the statements (Table 3) and based on the subjective pattern of the managers who were categorized in this pattern, it can be argued that participatory policies create the basis for interaction and communication with other organizations. In addition, such policies lead to strengthening interactions between institutions and receiving support from these institutions. As a result, the feeling of effectiveness of giving and receiving advice from colleagues and experts is strengthened. Involving all the stakeholders in the processes related to decision-making and evaluation of reports of aquaculture activities leads to increasing recognition and awareness about the importance of the participation of representatives of fisheries-related organizations in decision-making and solving challenges. To implement this subjective pattern and use it for organizational transformation, it is suggested to use three key strategies. Firstly, participatory policy-making for the purpose of organizational transformation requires consulting and seeking advice from colleagues. Secondly, the organization should try to interact constructively with other fisheries-related organizations and involve their representatives in decision-makings. Thirdly, the organization should try to do collaborative research with other organizations and institutions. This can help to involve all the stakeholders in all the processes of decision-making and evaluations and, ultimately, organizational transformation.

Subjective Pattern 2: Capacity Development and Management Change

The Eigen value and explained variance of this subjective pattern were 2.17 and 15.52%, respectively. The interviewees believed that having new competencies related to communication, facilitation, and intermediacy can accelerate identifying and developing new opportunities for technical and organizational innovations and building skills in the field of information and communication technology for organizational transformation. In addition, a employees' desire to use these technologies and innovations in their job activities can lead to their empowerment in the field of skills and competencies required by the information system and organizational transformation. In addition, rapid sharing of information has a significant effect on better acquisition of knowledge and new information on job duties. This issue can make employees play a role as an effective member in the organization. In other words, they can properly analyze the existing issues and problems and provide solutions for them through communication with different parts of the organization's information system in crisis situations. In other words, the conditions within the organization should be such that it leads to strengthening the interactions of the employees of the research, education, and extension departments of the fisheries organization. They should believe that they can influence the organization's goals and help to accept and establish the information system in the fisheries organization. In order to implement this subjective pattern (capacity development and management change) and create organizational transformation using it, some key strategies are suggested. Firstly, opportunities for continuous learning of experts and managers should be created in order to change their attitude towards the organizational transformation. Secondly, managers should provide meaningful support for organizational transformation in order to operationalize initiatives, ideas, and opinions of experts in order to improve services. Thirdly, the communication and interaction of research institutes and universities should be strengthened. This can lead to the support

of aquaculture as well as the production and transfer of valid findings to other relevant departments and organizations. Fourthly, interactions between the research, education, and extension departments with the fisheries organization should be strengthened. This can provide opportunities for more experts of this organization to attend internal and external conferences. Fifthly, in order to increase the willingness to accept organizational change among employees and reduce their resistance to organizational change, a preliminary needs assessment study should be conducted.

Subjective Pattern 3: Appropriate Organizational Structure

The Eigen value and the explained variance of the third subjective pattern were equal to 1.56 and 11.20%, respectively. According to the perspectives of the managers and experts in this subjective pattern and the importance score of the statements (Table 3), it can be concluded that according to the existing organizational structures, communication with other information systems of the organization is possible. Of course, it should be mentioned that this work requires the support of the senior managers of the fisheries organization. Therefore, it is very important to develop more units and mechanisms within the organization for communication and interaction with other actors. Rereading and amending the regulations related to the support of the information system in the organization is an undeniable necessity that can develop and institutionalize the teamwork culture in the fisheries organization. In order to take advantage of the opportunity that this subjective model has created in the organization, some important considerations should be taken into account. Firstly, efforts should be made to use individuals with expertise and experience in the management positions of the Fisheries Organization. Secondly,

positions with similar or identical duties should be merged with each other to avoid parallel work in the organization. Thirdly, proper communications should be formed between different units and departments of the organization. Fourthly, in the recruitment process, the organization should try to hire human resources who have more skills and experience than other applicants.

Subjective Pattern 4: Incentives for Change

Two of the study participants had this subjective pattern. Its Eigen value was 1.54 and explained 11% of the total variance. The subjective pattern of change incentives shows that managers and experts believe that employees can be justified by explaining the benefits of establishing a suitable information system in the organization, assigning appropriate salaries to experts, providing fair insurance and welfare services, and justifying the cost. The information system causes an increase in employees' desire to replace the traditional management system with new information systems. In this regard, it seems that paying more attention to/providing incentives for the initiative of experts and encouraging them to acquire new skills in the field of information can be an efficient strategy in the field of organizational transformation. Also, the support of officials and policy-makers for organizational transformation and the formation of discussion forums and training workshops can lead to an increase in people's interest in group work that produces practical results. In addition to these cases, a person's belief that something is wrong in the fisheries organization and must be changed, and that there is a deep gap between the current structure of the organization and the desired situation, provides the basis for concrete changes in this field. In other words, the conditions within the fisheries organization should be such that the members can understand the

relationship between their work and its consequences.

Subjective pattern 5: Clarification of Financial and Administrative Affairs

According to the results of the research, three of the participants had this subjective pattern. The Eigen value of this pattern was 1.49 and it explained about 10.69% of the total variance. The perspectives of the managers and experts of this group show that, in order to develop transparent procedures and instructions, it is necessary to define the responsibilities in a more specific and transparent manner, because this prevents the parallel work of devices and departments under the supervision of the organization. Also, clearly specifying the program implementation procedure leads to increasing the credit allocation necessary for the development of information and communication technology. Therefore, it is recommended that the rules and regulations in the organization to support the information system be reviewed and modified to create a teamwork culture in the organization. Also, hiring skilled and experienced human resources can be effective in determining the goals and strategies related to the organizational transformation in the organization. This action itself can be effective in determining the duties of different departments in connection with the organizational transformation in the fisheries organization.

CONCLUSIONS

The general conclusion of the study was that the managers and experts have five different subjective patterns, in which order of importance (the variance explained by each of these patterns) include participatory policies, capacity development and change management, appropriate organizational structures, incentives for change, and clarification of financial and administrative affairs. Present research ended with three important conclusions. Firstly, for the purpose of organizational transformation, organizations such as the Iranian Fisheries Organization should consider cooperative policies and the development of organizational capacities for management change as a turning point. Secondly, organizations should provide infrastructure and organizational structures suitable for organizational transformation. It can be mentioned that providing change incentives at this stage can act as a trigger. Change incentives usually originate from the organizational environment or the environment outside the organization. These incentives include factors like new technology or changes in government regulations. Also, the inefficiency of managers can be an incentive for change in the organization. There are forces and incentives in the environment that increase the need for change. These incentives include external and internal incentives such as the environment, organizational requirements, cultural requirements, the nature of the workforce, technology, economic shocks, competition, social trends, global policies, the behavior of employees and managers, and the mindset of leaders and employees. Thirdly, lack of financial and administrative transparency leads to lack of trust and unwillingness to implement the principles of organizational transformation. In this regard, organizations and their managers should try to approve and implement the regulations related to the transparency of financial and administrative affairs in order to lay the groundwork for the realization of organizational transformation. Although in many cases there are limitations for this work and in the initial stages of implementing such a policy, the efficiency of the organization may experience decreases due to the competition of the organization's management competitors, in the long term it can lead to an increase in efficiency and

concentration of tasks in the organization. In this way, organizational transformation will happen in the long term. In general, it can be noted that the present research, by identifying the subjective patterns of managers and experts, proposes three operational steps for organizational transformation. Following these three steps and the strategies proposed in each of them can help governments, organizations, policy-makers, managers, experts, employees, and other users so that organizational transformation happens more easily. The realization of this can help organizations to adapt to the ever-increasing developments and changes of the present era in a more practical way.

This study had some limitations that should be discussed in this section. First, organizational transformation is a complex phenomenon and different constructs (subjective patterns) are considered as factors affecting it. Therefore, beyond the factors identified in this research, there may be other constructs for the organizational transformation of Iranian Fisheries Organization that the current research did not address. Secondly, this research was carried out only in the Iranian Fisheries Organization and the sampling was done scientifically. Therefore, the results indicate that the model of subjective patterns is of great reliability. Nevertheless, testing the model of present research using other statistical methods such as structural equation modeling and repeating this research in other organizations can greatly contribute to the strength of the research results. Thirdly, due to the fact that the research tool was based on self-reporting system, some considerations and administrative issues may have influenced the responses of the participants in the process of conducting the research. Therefore, it is suggested that future researchers use other methods to collect similar information. Comparing the results of the present research with the results of researches that are conducted with methods other than

self-reporting system can provide further insights about the topic. This does not mean that the results of the present study are not suitable for the international readers, or Q methodology is not the best method to reveal subjective views of the respondents with their similarity and difference, but it refers to the limitations of the study that should be kept in mind by the readers and users of the results.

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بررسی دیدگاه مدیران و کارشناسان در مورد تحول سازمانی در سازمان شیلات ایران با استفاده از روش کیو (Q)

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چکیده

پژوهش حاضر با هدف شناسایی الگوهای ذهنی مدیران و کارشناسان سازمان شیلات ایران در خصوص تحول سازمانی انجام شد. این پژوهش با مشارکت تعدادی از مدیران و کارشناسان سازمان شیلات که با روش نمونه گیری هدفمند انتخاب شدند، انجام شد. روش اصلی تحقیق برای جمع آوری داده های مورد نیاز، مصاحبه عمیق بود. پس از بررسی و جمع بندی ۷۵ عبارت استخراج شده از مصاحبه ها، در نهایت ٤١ عبارت به عنوان نمونه کیو(Q) انتخاب شد. پس از مرتب‌سازی عبارات کیو (Q) ، از روش تحلیل عاملی اکتشافی و چرخش واریماکس برای شناسایی الگوهای ذهنی استفاده شد. نتایج نشان داد که پنج الگوی ذهنی مختلف در بین مدیران و کارشناسان سازمان شیلات ایران در خصوص تحول سازمانی قابل شناسایی است که ۷۲/۸۷ درصد از کل واریانس مدل تحلیل عاملی را تبیین می‌کند. نتایج تحلیل عاملی نشان داد که الگوهای ذهنی شناسایی شده شامل سیاست‌های مشارکتی، توسعه ظرفیت و مدیریت تغییر، ساختارهای سازمانی مناسب، مشوق‌های تغییر و شفاف‌سازی امور مالی و اداری است. در پایان توصیه شد توسعه واحدها و سازوکارهای بیشتر در درون سازمان برای ارتباط و تعامل با سایر بازیگران بسیار مهم است. بازخوانی و اصلاح مقررات مربوط به پشتیبانی از سیستم اطلاعاتی در سازمان ضرورتی انکارناپذیر است که می تواند فرهنگ کار گروهی

را در سازمان شیلات توسعه و نهادینه کند. علاوه بر این، نتایج مطالعه حاضر می تواند تحول سازمانی را تسهیل

کرده و در نهایت موفقیت و پاسخگویی سازمان شیلات را افزایش دهد.