

Determination of 5-S Ordering System Effect on the Working Life Quality and Staff Efficiency in the Fars Province Gas Company

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ABSTRACT — The purpose of present research is to determine the effect of ordering system on the working life quality and staff efficiency. The research independent variable is the ordering system and its five criterions and the dependent variable is the working life quality and staff efficiency. This research is practical in the purpose and it is descriptive in identity and data gathering and it is considered as the library and measuring studies, the statistical society in this research is 230 individuals from Gas Company and based on the Morgan table 140 individuals were selected as sample. The tool to gather data was the ordering system questionnaire and the staff working life quality and staff efficiency. The measuring tool validity is approved through the context and the stability is confirmed by the Cronbach's alpha. To analyze the data the Pierson coefficient and linear regression in spss software version 21 has been used. The result of research showed that the security level is 0.95 5-s and its criterions has meaningful relation with the working life quality and staff efficiency

KEY WORDS: ordering system, working life quality, human source efficiency

Introduction

Today the role and importance of quality and efficiency is not hidden for anybody and in this extend achieving the quality and increase of efficiency in organizations is one of the organizations managers' main challenges. The ordering 5s system is considered as methods which had been able to provide mangers satisfaction in organizations in this field, 5s was formed for the first time after the work war two and its principals is not the innovation of Japanese rather the primary idea about this system is derived from American protecting system, Japanese received the primary idea from American and presented in five formats of 1- organizing 2- ordering 3-cleannig 4- standardization 5- preparatio0n of 5s as Japanese call is Gvas (Arabian, 2007). At the present time and during the high inequality of economy the desire to take occupational opportunity in any way in the Iranian society official system has become a norm, on the other hand the economic pressure and also proceedings as the payment methods, attention to university degree and the possibility to use degree publishing centers for just specific number of people and use of governmental especial facilities as the organizational buildings, car, mobile phone and traveling to abroad for managers in long run will reduce the staff motivation about their current position (Khan Mokhtarrie, 2004). The supreme managers in an organization should pay attention to this point that an innovative organization needs different job positions with high signification and if positions should be given by the material or spiritual benefits unjustly, the faked values are made and other positions are considered unimportant and nobody feel responsibility about his job and frequently his motivation is reduced among other staff in organization (Arabiyan, 2007). Moving toward the better condition is the ideal and target for all mangers. In many organizations manager spend their time for the organizing current activities while it is necessary that more time is spent for programming, directing and control of efficiency increasing activities. People who do not think of efficiency in their daily activities do not have mentality to be able to concentrate the effective activities to achieve the organization purposes. During recent two decades the importance to make and develop the efficiency and wide management in organizations has found special signification, the efficiency management has attempted to pay attention to the human source motivation enhancement, improving their skills through training and making proper field for innovation and talents proliferation at organization and increasing the research and development, using the knowledge in affaire administration and improving quality of products in the maintaining a system for measuring and evaluating the programming and efficiency improvement in organization through application of management systems. By performing the prevalent efficiency model in organization in which the manager could realize the problems and solve the complicated issues based on the required information (Taherie, 2000). According to this matter, up to now in gas company no research has been done about the ordering system role effect on the working life and staff efficiency, therefore the research main issue is responding to this question that whether there is any meaningful relation between the life quality and staffs efficiency?

The research performance importance and necessity

All staffs in an organization will lead to increase efficiency in every related part of organization by application of proper methods to perform the determined activities. In this relation some models are applied for prevention of ineffective activities. Using the

ordering system on the basis of 5s model has led to many benefits for organizations, realization of wastes in organization, presenting effective solutions to remove problems and distinction of applied methods with organization staffs cooperation is the main base of this system. The 5s operation is done for many purposes, some of the most important targets are the security and safety, saving, efficiency, quality and prevention of damages (Abutalebi, 2002).

Environments which are managed by 5s, the unnecessary elements do not exist and the available items are ordered with special method and this issue is led to the saving and safety in the environment. The order performance of system will provide the clean and sanitary environment and the most important issue to make correct habits in staffs is the most important factor in ordered environment fulfillment and it is obtained in performing the article no.5, the presence of organized environment is essential in production or presentation of services with quality. According to the ordering system performance has special role in reducing unnecessary factors and as the result increase of efficiency in organization, its application could have effective role in performing other required systems in an organization (Nik Bakhshie, 2008). Because no research has been done about the ordering system role on the working life, it seems that the result of this research could play important role in staff efficiency and working life quality

The Research Literature

This research is trying to response to this question that what kind of effects does the ordering system have on the staffs' efficiency and working life quality?

In the research literature, some of models and related views about the research variables are described. In this research 5s variable is independent and it is used for evaluation of Bemany 2007 and Abutalebi in 184 theories. Based on their theories; the 5s criterions which are introduced as independent variables are: organizing, ordering, cleaning, standardization and neatness. Also in this research the life quality and staffs efficiency are the dependant variables. To evaluate and measure the efficiency the Achaea model in 1980 was used. Therefore the staffs' efficiency criterions are capability, realization and organizational support, motivation, reflection, validity and adaptation. To evaluate and measure the working life quality the Walton model in 1998 was used. Hence the staffs working life quality criterions are: the proper and justly compensation, safe working condition, human capabilities development, the progress opportunity provision and solidarity in organization society, the legitimacy in organization, the life total space, working life social dependency. Based on the theoretical presented framework, the research conceptual model is provided.

The Research Hypothesis:

The Research Main Hypotheses:

- There is meaningful relation between the ordering and staffs efficiency
- There is meaningful relation between the staffs working life quality and ordering
- The research subsidiary hypotheses:
 - There is meaningful relation between the staffs' efficiency and organizing
 - There is meaningful relation between the ordering and staffs efficiency
 - There is meaningful relation between the cleaning and staffs efficiency
 - There is meaningful relation between the standardization and staffs efficiency
 - There is meaningful relation between the ordering and staffs efficiency
 - There is meaningful relation between the staffs working life quality organizing
 - There is meaningful relation between the ordering and staffs working life quality
 - There is meaningful relation between clearing and staffs working life quality
 - There is meaningful relation between the standardization and staff working life quality
 - There is meaningful relation between the ordering and staffs working life quality

The Research Methodology

This research is the practical in its purpose and it is measuring in the data gathering method, the statistical society in this research includes 230 people of Gas Company in Fars province, based on the Morgan table the research intended number is 140 individuals who were chosen randomly.

To analyze the data first the information was transferred to the computer by SPSS software and the data analysis was done in two section, in the first part by the use of descriptive statistics as the amplitude tables and central scales and diversion, the sample population is described, in the second section by the use of statistical deduction as the Pierson correlation coefficient, T test and variation analysis test, we have evaluated the research hypotheses.

Data Analysis

- The first main hypothesis: there is meaningful relation between the ordering system and staff efficiency
- According to the normal distribution of ordering system criterions and efficiency for testing this hypothesis, the Pierson correlated test was used

Table 1: first hypothesis correlated matrix

variable		Efficiency	Ordering system	Capability	Realization	Organizational support	Reflection	Validity	Adaptation	Motivation
Efficiency	r sig N	1 - 140								
Ordering system	r sig N	0.952 0.001 140	1 - 140							
Capability	r sig N	0.97 0.001 140	0.867 0.001 140	1 - 140						
Realization	r sig N	0.958 0.001 140	0.981 0.001 140	0.872 0.001 140	1 - 140					
Organizational support	r sig N	0.943 0.001 140	0.815 0.001 140	0.983 0.001 140	0.819 0.001 140	1 - 140				
Motivation	r sig N	0.976 0.001 140	0.885 0.001 140	0.987 0.001 140	0.888 0.001 140	0.973 0.001 140	1 - 140			
Reflection	r sig N	0.976 0.001 140	0.977 0.001 140	0.903 0.001 140	0.981 0.001 140	0.869 0.001 140	0.911 0.001 140	1 - 140		
Validity	r sig N	0.993 0.001 140	0.946 0.001 140	0.960 0.001 140	0.952 0.001 140	0.925 0.001 140	0.966 0.001 140	0.967 0.001 140	1 - 140	
Adaptation	r sig N	0.981 0.001 140	0.968 0.001 140	0.917 0.001 140	0.97 0.001 140	0.879 0.001 140	0.928 0.001 140	0.984 0.001 140	0.978 0.001 140	1 - 140

Second main hypothesis: there is meaningful relation between the ordering system and staffs working life quality
 According to the normal distribution of data for the ordering system criterions and staffs working life quality for testing this hypothesis, we have applied the Pierson coefficient test

Table 2: the second hypothesis correlated matrix

Variable		Working life quality	Ordering system	Justly and proper compensation	Safety and sanitary condition	Human capabilities development	Growth oppertunity	Solidarity In Orgsnization Society	Legitimacy in organization	Living whole space	Working Life social dependancy
Working Life social dependancy	r sig N	1 - 140									
Working Life social dependancy	r sig N	0.89 0.001 140	1 - 140								
Working Life social dependancy	r sig N	0.304 0.001 140	0.223 0.008 140	1 - 140							
Working Life social dependancy	r sig N	0.784 0.001 140	0.484 0.001 140	0.111 0.192 140	1 - 140						
Working Life social dependancy	r sig N	0.802 0.001 140	0.502 0.001 140	0.038 0.652 140	0.923 0.001 140	1 - 140					
Working Life social dependancy	r sig N	0.91 0.001 140	0.814 0.001 140	0.073 0.389 140	0.696 0.001 140	0.738 0.001 140	1 - 140				
Working Life social dependancy	r sig N	0.819 0.001 140	0.801 0.001 140	0.242 0.004 140	0.519 0.001 140	0.592 0.001 140	0.901 0.001 140	1 - 140			
Working Life social dependancy	r sig N	0.856 0.001 140	0.893 0.001 140	0.045 0.006 140	0.478 0.001 140	0.527 0.001 140	0.908 0.001 140	0.853 0.001 140	1 - 140		
Working Life social dependancy	r sig N	0.786 0.001 140	0.823 0.001 140	0.492 0.001 140	0.422 0.001 140	0.409 0.001 140	0.536 0.001 140	0.487 0.001 140	0.612 0.001 140	1 - 140	
Working Life social dependancy	r sig N	0.801 0.001 140	0.852 0.001 140	0.413 0.001 140	0.399 0.001 140	0.400 0.001 140	0.569 0.001 140	0.568 0.001 140	0.659 0.001 140	0.976 0.001 140	1 - 140

Structural model fitness (the main hypotheses)

The designed model in software is as below: as it is observed 3 hidden variables by 20 observed variables are measured and determined

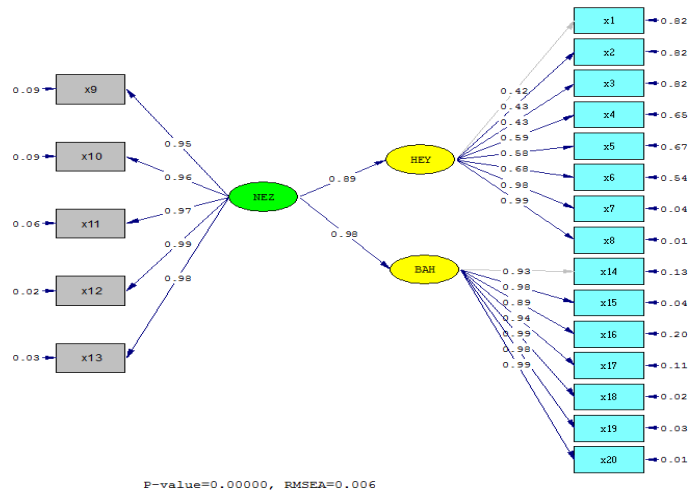


Figure1: designed model in software (main hypothesis)

According to the defined path analysis all related paths between variables are realized meaningful at 0.05 levels and all relations between variables are meaningful and the whole model is meaningful

The structural model fitness (the first subsidiary hypothesis)

The designed model in software is as below: as it is observed it is determined and measured by 6 variables

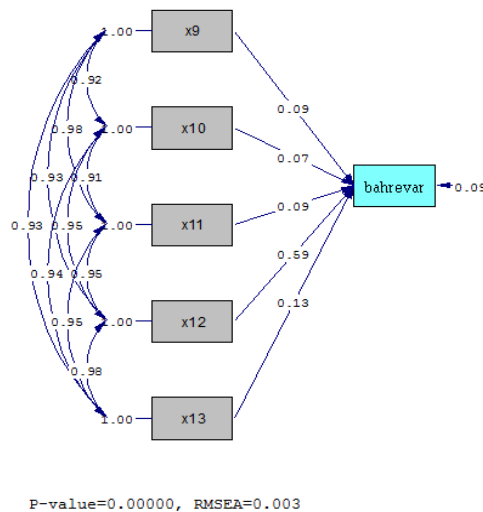


Figure 2: the designed model in software (the first subsidiary hypothesis)

According to the defined path analysis all related paths between variables are realized meaningful at 0.05 levels and all relations between variables are meaningful and the whole model is meaningful. P –value=0.01

The structural model fitness (second subsidiary hypothesis)

The designed model in software is as below: as it is observed it is determined and measured by 6 variables

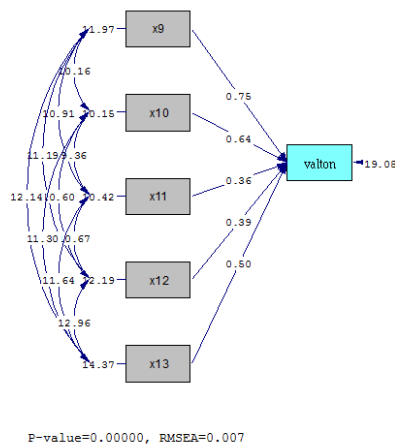


Figure 3: the designed model in software (second subsidiary hypothesis)

According to the defined path analysis all related paths between variables are realized meaningful at 0.05 levels and all relations between variables are meaningful and the whole model is meaningful. P –value=0.01

Practical suggestions

The gas company authorities could perform 5s techniques and provide the proper program in the field of staff efficiency enhancement and for cost reduction, increase of efficiency and improvement of duties for each staffs accurately and increase of benefits and enhancing the personnel service quality and as the result perform required proceedings in this field

- The gas company should not avoid any investment for holding training classes for staffs and encourage them for these periods because the results in this system could compensate the costs
- The necessity to apply this system could compensate the costs
- The necessity to pay attention to the proper working condition, physical and mental peace will be provided for staffs and it will cause happiness and improve of working life quality
- It is advised that to have efficiency and effectiveness and as the result the improvement in organization, the capable and talent staffs are realized and encouraged.
- It is advised that the programmers in organization provide the condition to select individuals based on their knowledge and skills and increase their working performance to increase the organizational effectiveness and efficiency
- Due to the importance of working life quality in staffs and the effectiveness rate in organizations, it is better that managers pay attention to three articles and provide conditions in the organization because one of the main present problems in system is lack of manager realization in high levels about the management issues and lack of information about correct dealing with staffs behavior and solving their problems
- Because attention to the working life quality different aspect could be effective in the organizational growth and existence, it is advised that for managers in high levels, some training classes are hold to realize the staffs problems and how to treat with them correctly
- Paying rewards to staffs justly based on the performance in the periodic and annual evaluations
- Standardization of duties and responsibilities and also clarification of targets because the clarity, and lack of ambiguity have the main role in the staff performance improvement
- Managers should evaluate the staff reactions to be informed about their activities to be able to conform their staff activities toward the organizational targets
- Gas company should establish a department named as the repairmen so that people indifferent skills will be able to remove damages as soon as possible and avoid further destructions
- The company supreme authorizes should be the frontier in cleaning and establishing everything at its own location and try to be the model for their staffs
- The 5s poster should be installed in the board to inform all personnel about it
- The annual program is planned to encourage the staffs who design their working environment neatly based on the 5s principals so it could be a motivation for others
- The company authorities should be informed by the use of 5s aspects as the part of staffs duties and every staff duties and responsibilities in different section should be identified accurately so every staff will know what kind of duties he has and what kind of role he performs in the 5S system performance

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