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Key Factors in Achieving a Productive Organization According to the Achieve Model in Shiraz University of Medical Sciences, 2010

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Abstract: Now-a-days, productivity is an important success factor for all organizations thus, they must grow far more productive. They need special attention to the factors that directly and indirectly increase or decrease the productivity. This research studied the key factors in having a productive organization in Shiraz University of Medical Sciences in 2010. The indexes included ability, clarity, help, incentive, evaluation, validity and environment. This research was descriptive study in which 216 managers and staff were selected through Stratified random sampling. Data were collected using a Heresy questionnaire according to Achieve model. Its reliability was 0.90. The findings revealed that SUMS is at the average level. Consequently, specific attention should be paid to promote the organization as a productive system.

Key words: Productivity, Achieve model, ability, clarity, help, incentive, evaluation, validity and environment

INTRODUCTION

According to Sink (1983), the overall performance of a company is comprised of at least seven criteria; effectiveness, efficiency, quality, productivity, quality of work life, innovations and profitability. Productivity is thus, a key success factor for all companies (Sink, 1983). Hannula (1999) has stated that organizations must be able to continuously increase their productivity in order to stay profitable. It is noticeable to consider that attempts to improve productivity equals those for providing the best life.

This important success factor for all organizations should be managed and productivity measurement is a traditional tool for managing productivity. Improvements in productivity have been recognized to have a major impact on many economic and social phenomena, e.g., economic growth and higher standard of living (Sink, 1983; Kemppila and Lonnqvist, 2003; Uusi-Rauva and Hannula, 1996; Saari, 2006). On the other hand, effective variant resources such as human, money, material and information introduce main managerial mission and goal. According to the Human importance if each individual in systems are productive and incentive, he will use other resources to achieve a productive organization. But due to human authority and sense and remarkable relation to others, it is hard to use human resources easily. As a result, studying personnel productivity is one of the essential duties that must be evaluated more in university as a center of training specialists. This research aimed to study the key factors in achieving a productive organization in the view of managers and staff in Shiraz University of Medical Sciences (SUMS) in 2010.

Theoretical background: Companies can not survive in the modern competitive world without improving productivity. Without increase in productivity, companies can not improve cost ratios and increase profits. Researchers have to either make the same amount of product using fewer people or make the same number of people work harder (Johanides, 1996).

Productivity equals value divided by time. Value is a quality you must define for yourself. Hence, any definition of productivity depends on the definition of value. In the centers where people can agree on a common definition of value, they can also agree on a common definition of productivity. However in terms of your own personal productivity, you are not obligated to define value the same way anyone else would (Kemppila and Lonnqvist, 2003). On the other hand, productivity can be defined in terms of output per worker per hour, quality considered. It can be conceived as the worker's level of performance in a given job. The concept of worker productivity is valid to the extent to which there exist

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clearly defined standards for evaluating performance in a given task. According to Vroom, worker productivity is a function of the operator's goal, ability and motivation on the job (Shikdar and Das, 2003). A questionnaire can be used to measure the employees' attitude toward the changes in the labor productivity and some disturbing factors which may affect productivity (Kemppila and Lonnqvist, 2003). With regard to the literature review, there are many factors that indirectly and directly influence productivity:

Job satisfaction: Halkos and Bousinakis (2010) seek to focus on factors affecting stress and job satisfaction such as number of work hours, good relations between management and employees, good function of the group and work related to the employees' area of education. Increased stress leads to reduced productivity and increased satisfaction leads to increased productivity.

As Shikdar and Das (2003) point out, improving worker satisfaction and productivity, especially in repetitive production tasks are major concerns for management as these tasks are monotonous, boring, tiring and de-motivating and consequently affect satisfaction and productivity. Worker satisfaction is an emotional reaction whereas worker productivity is the performance output of the worker. Attempts have been made by researchers for >2 decades to establish a meaningful or significant relationship between worker satisfaction and productivity. As a result, higher worker satisfaction leads to higher productivity (Shikdar and Das, 2003).

Motivation: The most important factor in productivity is motivation that affects the productivity in 2 dimensions:

- Non-spiritual dimensions are salary, facilities and job environment safety
- Spiritual dimensions are job nature, equality, justice and training

To stimulate the employees' motivation, it is necessary to share them in the organization possession and also pay their salary according to justice (Hua and Quan, 2005):

Empowering: High performance employees are created in an empowered organization and they will increase the organization's efficiency and productivity (Hammuda and Dulaimi, 1997). Empowered employees were more effective in getting their work done and contributing to organizational productivity goals (Laschinger and Wong, 1999; McNeese-Smith, 1996 ; Sigler and Pearson, 2000) also, they demonstrated better performance in practice (Manojlovich, 2005). Chang and Liu (2008) also focused on the employee empowerment, innovative behaviors and job productivity of Public Health Nurses (PHNs). They showed that empowerment of the employees and innovative behaviors of PHNs have little influence on job productivity. But the employees with greater competency for delivering public health showed higher self-evaluated job productivity (Chang and Liu, 2008).

Work standard and feedback: Production standards with feedback generally improve worker satisfaction and productivity (Shikdar and Das, 2003).

Job nature: Job design or redesign is concerned with the deliberate planning of the job with regard to any or all of its structural or social aspects for basic purpose of improving productivity. Productivity appears to be affected by both job content and context factors (Shikdar and Das, 2003). Work habits as absenteeism, tardiness and safety rule violations and work climate such as the number of grievances and the employees' turnover also influence productivity (Smith, 1990; Uusi-Rauva and Hannula, 1996).

Wage and salary: Labor productivity is more adversely affected when regular wages are increasingly rigid. Because of such wage rigidity, many formal workers lose jobs and tend to join the informal labor force. As a result formal workers are transformed into informal workers, thereby transforming to low-productive wage earners. They earn less and create lower demand compared with the earlier situation and affect the overall growth. A rise in the number of informal workers exerts a downward pressure on casual wages which fall on the average. The findings show that global slowdown causes casual wages to decline, increasing wage and productivity inequalities between the formal and informal labor markets (Smith, 1990; Uusi-Rauva and Hannula, 1996; Laitinen *et al*., 1999).

Physical work environment: Productivity can be related to such factors as order and tidiness, ergonomics, walkways, noise, lighting (Uusi-Rauva and Hannula, 1996; Laitinen *et al*., 1999). Nicol and Kessler (1998) studied the effect of temperature on self-assessed productivity. Job safety has appositive effect on productivity.

Personal (human) factors: Little attention has been paid to personal factors such as experience, knowledge, attitude (Attitude changes, favorable reactions perceived changes in performance), mental and physical preparation and psychological feelings in assessments of the

productivity. Spreitzer (1996) suggests that the employees' psychological factors of trust have a positive impact on productivity in the organization. Interpersonal effectiveness and confidence in the role improve productivity indirectly (Worthington and Lee, 2008). Quality of work is more related to conscientiousness and personal satisfaction than work load. When work begins to overlap with workers' personal life, this implies a negative effect on productivity. So, energetic and active individuals affect productivity positively (Halkos and Bousinakis, 2010).

Research and development: It seems that cooperation in R&D activities is not enough to ensure a firm's innovative performance or productivity because of shortened product lifecycles and increased R and D costs (Hwang and Lee, 2010; Fischer, 2001).

Information technology: Although, most of the studies agree that IT has a positive impact on firm performance and productivity, a few have conjectured that performance and productivity may also impact the level of IT investments (Hua and Quan, 2005).

Employee participation: Maghsodi and Ahirzad showed a weak relation between productivity and participative decision making while suggestion committee has the main effect on improvement of productivity.

Learning: For positive effect of training on productivity, the quality of learning courses needs to be improved. Training must be redesigned according to the productivity factors (Kim *et al*., 2010). E-learning can be helpful (Chang and Liu, 2008).

Demographic factors: There is no significant relationship between age and productivity. Moghadasi and Ahirzad showed a positive and significant relationship between education and work experience years with productivity while Bordbar found the opposite. Productivity rate is more in women than men. In addition, Leaman and Bordass (2000) have studied killer variables (Personal control, responsiveness, building depth and workgroups) and how these variables affect productivity. Educational endowment, foreign direct investment, agglomeration, producer's market accessibility and consumer's market accessibility have a major impact on regional productivity (Crouch and Crouch, 1988). Organization productivity is deeply related to knowledge, skills, abilities, attitude and behavior. New skills that are effective on productivity include decision making, avoiding conflicts, listening skills, reading speed and frequency of the use of new skills (Smith, 1990; Uusi-Rauva and Hannula, 1996; Laitinen *et al*., 1999). Studies suggest that work environment conditions such as leadership, organizational resources, organizational manpower and time distribution play vital roles in productivity (Hall, 2003; Holcomb *et al*., 2002; Moody, 2004).

MATERIALS AND METHODS

Shiraz University of Medical Sciences is one of the most successful universities in Iran that has 20,000 personnel. Many students graduate in Medicine and Paramedical fields yearly. There are 1,000 managers and staff in the central office divided into 3 groups; 100 managers with PhD, 640 expertise with bachelor and master degrees and 280 individuals with degrees less than bachelor. This study was descriptive. A total of 300 questionnaires were selected and using statistical random sampling, they were submitted to the head quarter to collect the data.

About 216 suitable questionnaires were returned. Productivity questionnaire was designed according to the Achieve model that was designed by Heresy and Blanchard (1983). It contains 36 questions in 7 indexes including ability, clarity, help, incentive, evaluation, validity and environment. Its reliability was 0.90 and validity was defined by specialists and factor analysis. This questionnaire is in 5 point Likert type scale ranging from so much to so, little. Additionally, the demographic data on age, sex, education degree, job type, firing situation, marital status and work experience years were collected. Data analysis was carried out using the statistical packages SPSS 15. p-value equal or <0.05 were considered as statistically significant. The questionnaire's indexes first defined by Heresy and Goldsmith:

Achieve model: Achieve model keeps ability, clarity, help, incentive, evaluation, validity and environment.

Ability: Does the person possess the skills necessary to perform the specific task at hand? As a personal growth organization, researchers want to give the members new experiences but sometimes, results are necessary and researchers do not intend to set people up for failure.

Clarity (Job and role recognition): Does the person understand exactly what I expect from him/her? Do not assume that everyone has the same knowledge as you do. Remember, the burden of communication falls on the communicator not the other way around.

Help (Organizational support): Does the person know that he/she can comfortably ask for help? The projects are more productive and achieve better results if they are run

by a committee rather than one person. It is okay for the delegated to delegate downward again if that is the most efficient way of doing things.

Incentive (Motivation): Does the person understand the reward or recognition system in my area? Does your chapter have an awards program or actively participate in your state's organization awards program?

Evaluation (Evaluation and feedback): Does the person understand the evaluation system used? If you are Chapter President, do you perform quarterly evaluations on your officers and directors in addition to your chapter's Plan of Action? This will help them understand what your expectations of them are and will help them if they want to seek advancement (hold future offices).

Validity (Especially in organization rule and decision): Does the person see this task as a part of his/her job? Is what I am asking legally or morally sound? Always consider how an activity relates to the Jaycees and your chapter's Plan of Action. In addition, asking an officer and/or member to perform illegal/immoral acts is the fastest way to destroy the credibility of yourself as a leader your chapter and the Jaycees brand as well!

Environment (External factors): Does the person understand the norms, rules, policies and procedures? New members tend to break these all the time do not assume that all members know proper procedures, they need to be taught. When was the last time, a formal Committee/Project or Office training was held? (Heresy and Blanchard, 1983; Martin Jr., 1998; Rezaian, 2002) (Fig. 1).

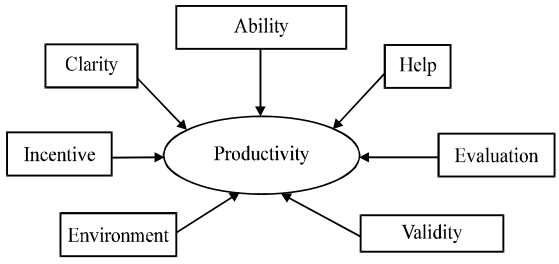

Fig. 1: Achive model

RESULTS AND DISCUSION

The participants were 53.2% male and 46.3% female with a mean age of 35 ranging from 23-50. According to the results, they were 14.4% manager, 50.5% expertise and 35.2% staff. Their degree of education was 25.9% less than bachelor, 60.6% bachelor, 13.4% master and PhD. They have been working at SUMS for an average 12 years. According to the analysis, researchers found that Shiraz University of Medical Sciences depending on key placed at the second stage has an acceptable level with 106.2. Therefore, keeping and improving the organizational productivity in SUMS needs an effective alternative.

Table 1 shows that clarity got the upper grade (17.98) and validity was located at the lowest level (12.90). According to the regularity and value there were evaluation, environment, ability, incentive and help. Correlation analysis of all research indexes is shown at Table 2. As data analysis shows, productivity has the most correlation with validity of organization rule and decision and motivation and the least correlation with external factors. All the coefficients are significant at the $p>0.01$.

The survey of the data of each question of questionnaire showed place and the view of the participants about the search in question's situation in Shiraz University of Medical Sciences (Table 3). The analysis of data showed that questions 3, 5, 11, 29, 31 and 35 were located at the weaker level however, the personnel estimated the state of others in a better situation (middle and much).

Productivity is about how firms can utilize labor and skills, innovation, technology and organizational structure to improve the quantity and quality of their output. In SUMS, productivity has the most correlation with incentive and validity and the least with environment. So, an attempt to provide a valid system and motivational environment is equal to productivity improvement. According to the analysis, the staffs in SUMS evaluate clarity better. They believe in exact understanding of what they are expected to do. They know the priorities, processes and procedures in their job. With regards to the results, validity is evaluated at the least level. Attention to the personnel's complaints and value to profitable

Table 1: Descriptive statistics of productivity and its indexes

Indexes	Ability	Help	Clarity	Incentive	Evaluation	Validity	Environment	Productivity
N	216.0000	216.0000	216.0000	216.0000	216.0000	216.0000	216.0000	216.0000
Minimum	5.0000	11.2500	9.0000	8.1300	8.7500	5.0000	7.5000	72.3800
Maximum	25.0000	25.0000	23.0000	21.2500	25.0000	23.0000	22.5000	106.5000
Mean	14.8270	17.9880	14.2100	14.7640	15.8170	12.9000	15.6860	106.1960
SD	5.0026	3.4284	2.5966	3.0786	2.9732	3.6674	3.2500	17.7332

Table 2: Correlation of productivity and its indexes

Index	Productivity	Environment	Validity	Evaluation	Incentive	Help	Clarity	Ability
Ability	0.79**	0.25**	0.59**	0.39**	0.68**	0.42**	0.49**	1
Clarity	0.78**	0.28**	0.53**	0.52**	0.65**	0.60**	1	0.49**
Help	0.73**	0.06	0.66**	0.55**	0.58**	1	0.60**	0.42**
Incentive	0.83**	0.1	0.75**	0.50**	1	0.58**	0.65**	0.68**
Evaluation	0.71**	0.30**	0.52**	1	0.50**	0.55**	0.52**	0.39**
Validity	0.83**	0.22**	1	0.52**	0.75**	0.66**	0.53**	0.59**
Environment	0.43**	1	0.22**	0.30**	0.1	0.06	0.28**	0.25**
Productivity	1	0.43**	0.83**	0.71**	0.83**	0.73**	0.78**	0.79**

Correlation is significant at the 0.01 level (2-tailed) (p>0.01)

Table 3: Frequency, upper valid percent and the state of each question

Question	Topics	Frequency	Upper valid percentage	State
1	Needs to specific knowledge and skill	216	36.6	Much
2	Rate of using your knowledge and skill	216	31.0	Much
3	Rate of relevance between job and previous	215	26.0	Very little
4	Rate of relevance between job and your talent	215	34.0	Much
5	Rate of relevance between job and your education	215	26.5	Very little
6	Rate of your duties' clarity	215	36.3	Middle
7	Rate of your recognition to the job process and procedures	215	47.4	Much
8	Rate of your recognition to the job priorities	214	54.7	Much
9	Rate of relevance between your job and organization goals	215	54.4	Much
10	Rate of receiving feedback	216	40.3	Much
11	Be sure about improving according to the competency or not?	214	32.2	Little
12	Rate of delegated supporting	215	46.5	Middle
13	Are there any threatening conditions for your success?	215	29.8	Much
14	Are there necessary situation and facilities relevant to your duties?	215	52.6	Middle
15	Rate of superior responsibilities to your administrative problems	215	34.0	Middle
16	Rate of being sure about your job safety and continuity	213	40.4	Middle
17	Do you feel system needs your job?	216	44.0	Much
18	Rate of calmness and convenience in your job	216	47.2	Middle
19	Do you worry about your job future?	216	37.0	Middle
20	Rate of pleasure from your duties	216	36.6	Middle
21	Rate of partnership in decision making	214	35.5	Middle
22	Rate of your motivation and tendency to the job and duties	216	30.1	Much
23	Rate of equality in your job with others in and out of system	216	38.9	Middle
24	Rate of awareness to the system goals and plan	215	29.8	Much
25	Are your duties evaluated continuously?	214	49.5	Middle
26	Do you receive your strength and weakness (feedback)?	215	53.0	Middle
27	Do you receive feedback from other relevant parts and system?	216	37.5	Much
28	Rate of logical support to personnel's complain	212	34.4	Middle
29	Rate of improving according to the competency	216	37.0	Little
30	Rate of importance and value to your profitable decision	216	38.4	Middle
31	Rate of superior influence in justice implementation according to the rules	215	28.4	Little
32	Rate of reaction to the appointment and discharge	215	46.5	Middle
33	Rate of financial factors (especially inflation) effect on your performance	216	29.2	Middle
34	Rate of administrative policies' changes affect on your performance	214	51.2	Middle
35	Do you have suitable social situation; home, insurance, pension	215	33.5	Very little
36	Rate of positive effect of idealistic competition in improving your performance	215	42.3	Middle

decisions should be focused more in SUMS. If researchers want to improve the productive system, researchers must assist in competency and implement justice. Although, SUMS has greatness in vision and mission perception, job recognition, clear process and procedure, job arrangement according to the goals, delegated support, pleasure to the job, suitable evaluating system and feedback with respect to the personnel view, SUMS is weak in the relevance of job and practitioner education, competency and improvement according to it, social situation and threatening condition to staff success. The staffs in SUMS compare their salaries and facilities with others to some extent they tend to be located at a better level.

CONCLUSION

This study show that productivity is important for companies, it helps them to measure their strengths and weaknesses alongside the threats and opportunities that the system brings. Once companies determine their researchers weakness, they can work hard and produce

the expected results. Consequently, researchers must pay a specific attention to perceive organizational productivity and improve the system to be more productive. Organizations which learn and apply the secrets of ability, competency, support, motivation and validity may be the first to attain higher achievement. All in all, always remember happy employees are a productive capital.

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