The Effects of Types of Employment on Human Resources Productivity: A Case Study In Ministry of Petroleum and Science, Research and Technology of Iran

Rahmatollah Gholipour, Gholamreza Jandaghi, Maria Hamidian

Faculty of Management, Qom Campus, Tehran University, Iran
MSc., Educational expert of National Iranian Oil Product Distribution.

Abstract: Management has been described as the proper and suitable use of financial, physical and human resources (HR). However, all of these resources are important, but today HRs. have been emphasized specially. The reason behind this emphasis is that at the moment, paying attention to these resources not only because of their common roles, but also due to their influence on other key factors in organization is ever increasing. Generally, organization management by planning HR. in different methods affects the productivity of organization and consequently, the society. One of these methods is the type of HR. employment and the main focus of the present paper is on various types of their employment from inside and outside of an organization. Thus, by stating the problems and opportunities that each of them can creative in it, a case study in the MOP and MSRT of Iran is done. The main hypothesis of research is that "the type of employment affects the productivity of the staff of MOP and MSRT of Iran". Questionnaires and interviews were the means of data collection and to analyze the questionnaires, analytical statistics of One-Way variance analysis and the T-student were used. Result showed that the type of employment does affect the productivity of the staffs of both minister; however there is no difference between the productivity of contractual and permanently employed HRs.. Of course, the main difference exists between the productivity of these types and other temporary and permanent employment with many years of service records which may be considered as other fundamental factors. Furthermore, studies indicated that in both minister the productivity of individuals with temporary employments other than contractual employment decreased with their higher service record. It was found that in the MOP permanent employees with many years had higher level of productivity while in the MSRT, the higher permanent employees’ service record, the lower their productivity.

Key words: employment, permanent employment, contractual employment, temporary employment, human resource productivity.

INTRODUCTION

At present HRs. are considered the most strategic organizational resources. Therefore, organizational managers are mostly concerned with rules and regulations related to HR. issues and employment of HR. is one of these issues which dose not has its own function in the present Iranian society. As a whole, employment instead of being a means of facility the work and increasing HR. productivity has become one of the organizational complications in the society. Usually, the personal would like to follow employment procedures, from temporary to permanent, as soon as possible so that they may be assured with no fear or threat of losing their positions. The issue of how to take advantage of employment changes, which are by themselves due to environmental and technological changes, to increase human resources productivity and consequently that of the society and to improve the quality of life of individuals not only exists in Iran, but also in many developed countries including the EU members, especially England along with Australia, Canada, the USA, Thailand, Indonesia and Malaysia (Connel & Burges, 2006; Althin & Behren, 2005; Chiristopoulos, 2005; Auer & Bergsad, 2004; Heap et al., 2007; Stiner, 1997 and 2005; Sthoven, 2001 and 2003; Savery, 1996; Pitts, 1998; Drucker, 2000; Bigg et al., 2002).

As we all know, if the productivity level of production factors, specifically HR..Case could be increased, many benefits including lower production and service costs, higher quality of goods and products and finally lower level of inflation, more welfare and higher quality of life for every individual in the society would be gained (Deljoudehi, 2001,p.3). Therefore, since late 1980s and in search of a way for reducing governmental and employment costs (lower input than output) in organizations, developed countries have started various
studies. Among these countries, Australia which was facing extreme changes in its environmental process during the last three decades was the pioneer. Although its civil and political plans were made in a way that changes would increase productivity, yet especially public and service sectors productivity decrease was observed. Iran was not an exception too and its employment changes have been productivity made in the last five years. In these papers, it has been tried to review the results of these changes on the productivity of human resources.

**Literature Review:**

HRs. not only for their common roles but also because of their influence on the key factors in an organization are being noticed more than ever now. Also experiences from developed successful countries show that one of the most important factors in their economic flourishing is their proper and organized planning for improving the productivity of production factors the most noticeable of which is HRs... However, these resources are only one end of development cycle that on one hand, are affected by structural, legal, technological and behavioral factors and on the other, their productivity can increases that of others and as a result, by increasing the total productivity paving the way to flourishing that national economy and the society's productivity would be possible.

Generally, productivity is a reflection of management's objectives in economic, political and supporting systems which express and show how the performance of production factors are analyzed (Stainer, 1997, p.54). Thus, as the main pivotal subject, it affects the performance of companies and organizations and to the same extent, that national competition and economy. It can be said that productivity is considered to be quite important and vital in similar fields, particularly in the countries development. Therefore, understanding the cause of productivity difference at international level, which depends on the difference at the national level that in turn depends on the organizational difference originating from the productivity of production and service factors is necessary for many organizations and the effect of these factors on their decisions prove essential (Steennuis & Debruijn, 2006, p 45).

Usually, the most important production and service providing factor is the human being and organizational productivity is often related to be productivity of every individual in an organization (Heap & Uk, 2007, p 172). HRs. productivity is defined as the actual output rate (working hours) provided by the organization personnel (Gayton, 2000, p1), but due to the difficulty of measuring the actual working hours in most organizations and economic, service institutes, to measure the HRs. productivity, the physical value the produced good or its price value and services and in some cases, their added value is divided by the number of human resources. If for the calculation of the productivity of the work force, added value is divided by the number of personnel, it shows that what the average added value of every individual is. Calculating the added value index can provide more information for managers and planers of institutions and organizations. By using this index, it is possible to assess management performance and efficiency and gives more information on factors such as personnel’s morale, demand for goods and services, etc. Of course, the high value of the index shows undesired factors such as low incentive of the work force, waste of resources and other factors. If the second formula is used for calculation, then the index would indicate the average amount of produced by the personnel.

Preliminary studies implied that the productivity depends on motivation and ability. In other words, the personnel must, to some extent, be interested in their jobs and required skills to perform (rezaeiyan, 2001, pp. 417-418). Hersy and Goldsmith have developed these factors to up to seven which are as follows (ACHIEVE):

1. Ability: is individuals' knowledge and skills which help them in successful carrying out of a job.
2. Clarity: This refers to understanding and acceptance of a job and how it is carried out by individuals.
3. Help: is the organizational assistance or support that the personnel need for effective completion of a job.
4. Incentive: is the motivation of individuals for complete achievement of a job along with the organizational goal.
5. Valuation (Training and performance feedback): is the daily feedback of the performance and casual reviews which helps individuals to be informed of the ways of doing the job and overcome their weaknesses.
6. Validity (valid actions and personnel rights): is the suitability and legality of a manager's decision concerning human resources along with clarity and confidence in the decision that are made for individuals.
7. Environmental (environmental suitability): refers to external factors which even with the presence of the above-mentioned six factors affect individual and consequently, organizational productivity and include market conditions, governmental by-low etc. (Hersy and Blanchard, 1999, pp. 424-426).
Also, Japan’s productivity center summarizes the effective factors of productivity increase in individuals as follows:
- Personnel (training and empowerment),
- Participative management,
- Justice and fair distribution (individuals’ realization of fair distribution of productivity growth)

They also recognize operation speed and quality, unit cost, work flexibility, proper communications, realization of productivity necessity, satisfaction and the quality of worklife in additional to cordial participation of individuals as their productivity indexes (Stainer, 1995, p8-9). Wysocki and Kepner suggest the influence of HRs. productivity in the modern world as a reality and state that factors which can affect this reality include the nature of work and individual personality (suitability of employed and employment), incentive (financial and spiritual), knowledge about the job and its recognition, job satisfaction, the quality of worklife and individual participation in organizational activities, individual’s share in gained benefits, personnel’s importance of senior manager instead of just the work and finally, fair treatment of individuals (Wysocki & Kepner, 2006, p1-2). Lastly, it is worth mentioning that productivity management and having suitable productivity is usually based on the leadership philosophy. Therefore, to increase individual and organizational productivity management should use strategies which are the most suitable in accordance with personnel’s special situation. So effective factors of human productivity must be account for as the most significant organizational key factors.

Generally, the desirable thought in planning HRs. is that all organizations use this technique to determine their short-term, mid-term and long-term personnel needs and pave the way for taking required measures concerning their recruitment, selection and education. By using this method, organizations make sure that they have the type and level of HRs. they need now and in the future (Abtahi, 2002, pp. 303-308) and can focus on:
1. Predicting the level of demand and supply of HRs. and ,

Here, in case the personnel management feels any shortage of HRs. he or she uses two methods to solve the problem which are either:
- Staffing from the inside or
- Employing them from outside of the organization.

Ryne defines employment as: "A set of decisions and activities which affect the number and types of accepted or recruited individuals in an organization.” From an economic point of view, employment is known as the purchase of production factors. In addition, the economic theory of employment refers to decisions on how to employ and the working hours of the personnel (Ibid, p.8). In western industrial countries, it is divided into full-time and part-time employment. As a whole, in Europe and the US it exists in two forms of official (normal-standard) and unofficial (abnormal). Normal employment includes full-time and fixed employments while abnormal employment consists of temporary, part-time, representative, home-based, seasonal, night-shift, weekend employment and the like (Mihail, 2003, pp.471-472). Although in Japan and other East Asian countries this type of employment exists. Yet it is less frequent compared with Europe and the US and they are mostly concerned with permanent and temporary (part-time) employment (Barber & Pittaway, 200, p353-355). In all, types of employment can be studied from two points of view; 1) universal approach: in which employment is divided into employment with flexible working hours and full-time employment; 2) native approach: according to which employment in a country is either permanent or temporary ( Özbilgin, 2005, p10-86) and Iran follows the latter theory. Permanent employment includes official and test official employment while temporary employment consists of labor-only subcontracting, contractual and company employment of which have their own advantages and disadvantages (Ronagh, 2005, p57). Apparently, the later type has lower costs and less problems (Allam, 2000, p19), but policy making and planning costs for long-term staffing (Thrrall et al., 2005, p338), individual adaptability (Allam, 2000, p19), costs of employment plans and long-term training are quite higher than tangible and intangible costs of long-term employment. As a result, it is not suitable for all jobs, particularly those that have higher training costs at the beginning (Burgess & Connell, 2006, p129).

Although in many studies a positive relationships is observed between productivity increase and temporary employment (Dickens et al., 1994; Burgess, 1997; Allam, 2000; Spithoven, 2001; Auer et al., 2004; Landman, 2004; Pardasi & Francesconi, 2004; Burgess & Connell, 2006), Kramarz & Roux in 1997 showed that in the long run, organization productivity and consequently, the society’s productivity decreases (Auer et al., 2004, p7-8). This is because this type of employment decreases individual commitment (Spithoven, 2001, p727) and
that permanent changes of an organization are followed by incentive and communication problems (Burgess & Connell, 2000, p190).

Usually, temporary employment increases personal accountability (Connell & Burgess, 2006, p500; Harris, 2002, p230) and due to frequent job rotation and movement in different organizations in the long run, it increases individual skills and experiences (Barnes et al., 1999, p74; Connell & Burgess, 2006, p500). However, it should be noticed that too much job rotation has a negative effect on individual productivity (Gercheh & Golany, 2000, p195). In other words, if individuals do not enjoy a high life quality and income and are not (clearly) supported by the low with regards to their employment, these movements would lead to less job security or even job insecurity (Connell & Burgess, 2006, p500; Ruyter & Burgess, 2000, p554).

Usually, temporary employment, affects and decreases job satisfaction, incentive, the quality of worklife and mental health of an individual (Pardasi & Francesconi, 2004, p1671) and in many organizations deprives him of promotion and fringe benefits. Yet, he can choose his promotion through moving in different organization and positions (Pardasi & Francesconi, 2004, p1672; Connell & Burgess, 2006, p500). Generally, for an individual with such employment to be successful, one has to have a set of personality characteristics including unlimited energy, self-management, communication skills, strong marketing, ability of to make proper of opportunities, continuous learning, setting goals, planning, creativity, innovation and finally, great, unlimited motivation (Connell & Burgess, 2006, p497).

Temporary employment in an organization requires a flexible organizational structure so that by using this structure improving comparative and competitive power environment may be possible (Kramar, 1998, p440). With consideration of what has been discussed above, whatever on organization prefers to recruit its needed HRs. temporary or permanently or HRs. prefer being employed temporarily and permanently depends on their conditions, goals, capacities and capabilities.

Since twenty years ago, many countries including USA and Australia have had numerous experiences concerning the renewal of the structure of subsets such as the renewal of law, privatization, job markets, political, legal, economic and financial reasons, globalization, international workforce, new technologies and structures, geographical changes, evasion of unemployment and international employments which affect the economy. As one of these structural strategies, structural changes of workforce either based on its type or use can be mentioned which helps moving towards a dynamic economy (Connell & Burgess, 2006, p493-494). Moving from permanent to temporary employment is another method in this regard and Iran has not been away from it. The present paper reviews the change of employment trend and its effect on MOP. and MSRT.

Research Main Question:

Does the type of employment have any effects on individual (governmental personnel) productivity? How?

Hypotheses:

Major Hypothesis:
The type of employment affects the productivity of governmental personnel (staff members of the MOP. and MSRT.).

Minor Hypotheses:
1. Final official (or test official) employment affects the productivity of governmental personnel (staff members of the MOP. and MSRT.).
2. Contractual employment affects the productivity of governmental personnel (staff members of the MOP. and MSRT.).
3. Labor-only subcontracting (or company) employment affects the productivity of governmental personnel (staff members of the MOP. and MSRT.).

Theoretical Pattern:

In this research, on one hand, by studying various type of employment in different countries and Iran as well, researches state the behavioral variables that are affected and by analyzing them as medium factors they explain the relationship between employment and the variable of HRs. productivity. On the other hand, by reviewing productivity and HRs. productivity theories, they determine variables other than the medium accepted ones which can directly or indirectly affect HRs. productivity.

Therefore, it has been tired here to neutralize other factors and only the medium variable given in figure 1 to be used. However, due to the large number of variable and the work being extended to the period of more than a year, some behavioral and structural variables were omitted. As a result, 11 factors remained to work on (figure2). Some of the behavioral and structural variables that have been omitted along with their reasons are as follows:
1. International policies and global-regional markets: are foreign effective policies for the organization or country itself has prevision strategies so that their effective could be reduced and their analysis is considered for above a behavioral, managerial or legal analysis.

2. Legal variables and policies: Due to the fact that organizations do not take part in compiling them and because of the minor role organizations have in drawing up employment rules and policies, this group of variables were omitted; however, since the organizations were private and the adopted employment policies for each of them were based on conditions, needs and conducted researches, this factor proves right in fundamental researches.

**Fig. 1:** Relationship between HRs. Productivity and Types of Employment
Table 1: Advantages and disadvantages of temporary employment

<table>
<thead>
<tr>
<th>Individuals losses</th>
<th>Individuals benefit</th>
<th>Organizational losses</th>
<th>Organizational benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease in job security</td>
<td>Choosing a temporary job</td>
<td>Hidden costs of temporary HRs.</td>
<td>Lower costs (in short-term)</td>
</tr>
<tr>
<td>Negative effects on individual moral and health</td>
<td>Changing jobs</td>
<td>and the possibility of</td>
<td>(cost of changing and shifting)</td>
</tr>
<tr>
<td>Poor working relationship</td>
<td>Choosing the type of a job and working hours</td>
<td>Lack of organizational commitment</td>
<td>Flexible and changeable workforce</td>
</tr>
<tr>
<td>Lock of payment security</td>
<td>Moving in various organizations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not enjoying the benefits and welfare facilities of the organization</td>
<td>Gaining many experience and skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not using training benefits of organization and being promoted</td>
<td>Strengthening creativity and innovation</td>
<td>Less security and proper functioning of organizational system</td>
<td>Accountability and great professional commitment of the workforce</td>
</tr>
</tbody>
</table>

3. Technology: Although the type of employment in many organizations of other countries many require different technologies and systems, due to various definitions of the same type of employment in Iran such a thing is almost meaningless. For example, when in Australia, Indonesia and Switzerland temporary, contractual and unofficial work of staff units is case, using IT technologies, telecommunications and minor repairs technologies would be quite different from official and permanent personnel while such a difference does not exist in Iranian organizations.

4. Flexibility of working hours: In organizations of other studied countries, working hours of various employment are almost different (Connell & Burgess, 2006, P479; Chen et al., 2003, p304; Ruter & Burgess, 2000, p454; Allam, 2000, p189; Schwardtz et al., 1999, p108; Kramar, 1998, p455; Burgess, 1997, p832; Doyle, 1997, p65 &…) while such a thing is not the case in Iran.

5. Effective management: Management in Iran is more based on apparent evidence, public thoughts and political factors than scientific decisions and system consultations, especially, HRs. (75% of the expert who participated in Delphi plan and 82% of personnel willingly took part in the interview).

6. Management-personnel relationship: In Iran, these relationships are more friendly and based on group membership and political consultation than being specialized, structural and competence-based (71% of the expert who participated in Delphi plan and 80% of personnel willingly took part in the interview).

7. HRs. management system: Such systems in the Iranian HRs. management are almost limited to salaries, wages, employment process and training and with the exception of the training system mentioned in this research, there are no fundamental differences regarding employment types (69% of the expert who participated in Delphi plan and 76% of personnel willingly took part in the interview) but in other studied countries, these processes along with behavioral (behavioral strategies), decision-making and training systems are indeed different for employment types.

8. Professional commitment: Although at sometimes Professional commitment is influenced by job satisfaction and the quality of individuals, personal and work-life quality, but might say that is mostly due to human beings, points of view, personalizations and trainings than being dependent on their employment type.
9. Job security (legal dimension): More than being controlled by the organization management, it has a legal aspect at the society level and is related to macro employment rules which affect individual behaviors and values. Of course, in has been tried in this paper to discuss the perceptive effect of job security on individual job and productivity.

Methodology:
In fact, research methodology is considered to be a tool for having access to reality and discovering the truth. Thus, the goal of every kind of study and scientific research is finding about the truth. In this regard, Kitaberg classifies researches into two groups: behavioral and structural. Based on his definition, the present research is a behavioral one (Kitayberg, A., 2006, p.600). One the other hand, Helm Starter, divided researches into three dimensions including the extent of application, control level and research objective (output level). Therefore, based on output level, the present research is classified as descriptive-diagnostic and from the extension view, since it was done in only two organizations in Iran, it is considered a regional one with regards to control level, due to being conducted at the two said organizations, it is a field study and according to the way the theoretical literature were collected, it can be a library research. Based on the other dimension and the objective in mind, this research is an applied research and according to its nature, it is considered a descriptive-measurement one.

METHOD AND MATERIALS
To facilitate designing the model and the research as a whole, the library method was used to study the research background, relevant subjects, suggested model and also specific research processes. To determine the limitation of the studied variables, Delphi method (polling the experts) and interviewing authors and theoreticians (via e-mail and voice-mail) were used which all together led to the formation of theoretical principles and hypotheses. Then, in order to collect the information needed for testing hypotheses, the field study method and questionnaires which are essential in descriptive-measurement researches were taken advantage of.

Based on the existing questionnaires in the works of Connell-Burgess and Chen et.al., two main questionnaires were used each arranged in two parts of demography and specialized questions.

A-Demography questions: Here, it was tried to collect general and demographical information about respondents through 8 questions.

B-Specialized questions: These questions differed depending on questionnaires. The first questionnaire consisted of 70 questions including 11 factors mentioned in the model and was handed out among permanent and temporary personnel. The second questionnaire had 32 questions related to human resources productivity before and after permanent employment and was prepared based on the questionnaire used by Dr. Connell in his latest research in Australia in 2007. It was only distributed among permanently employed personnel in two groups with few years of service records (5 years or less) and 15 years of official employment.

To measure the internal validity of the questionnaires, Cronbach’s Alpha method was used which is based on the variance of scores in every subset (each one of the dimensions) of the questions and the total variance. By using the Cronbach formula, Cronbach’s Alpha’s coefficient could be calculated (Sarmad et.al., 2000, p.169)

$$\alpha = \frac{J}{J-1} \left( 1 - \frac{\sum_s s^2}{S^2} \right)$$

Where,
J= The number question subsets in a questionnaire or test
S_i^2= Variance of the i-th subtest
S^2= Variance of th below test

Cronbach’s Alpha coefficient obtained from the data of 15 questionnaires was analyzed by the SPSS software in each questionnaire and thus, confirmed their internal validity.

Also, to measure the external validity (stability) of the questionnaires, the test-retest method was used. To do so, 15 questionnaires were given to the two studied groups in the organizations within 10 days. The average correlation coefficient of the obtained scores was 0.845 and so the stability of the questionnaires was confirmed.

The statistical population of this research was determined in two groups:
1. All the staff of the headquarters of the MSRT.
2. All staff of the MOP.

For sampling, at first two organizations were randomly selected from two statistical clusters as specialized and public ministries. Since the research hypothesis was based on the effect of one factor i.e. types of employment another i.e. HRs. productivity, which by itself could be influenced by several factors such as management, service record and organization position, with regards to the proportion of employment types three similar sample groups were selected in each organization. It is evident that individuals with official employment have more years of service records.

Therefore, for sample selection in this research, the criteria which were taken into account included the year of official and contractual employment and the item of these employments; however in statistics, the same records given in questionnaires were used. To determine the sample size in this research the below formula was used:

$$n = \frac{z^2(1-r^2)}{d^2}$$

Where $n$ is the number of samples, $z_{a/2} = (1.96)^2$, $r=0.595$ and $d=0.2$.

Based on the formula, the sample size obtained was 175. The sample was drawn using stratified sampling method in terms of the type of employment and the level of education in the two organizations, as given in table 2 and 3.

<table>
<thead>
<tr>
<th>Table 2: The selected sample from the MSRT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Employment</td>
</tr>
<tr>
<td>--------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>level of Education</td>
</tr>
<tr>
<td>Not having high school diploma</td>
</tr>
<tr>
<td>High school diploma</td>
</tr>
<tr>
<td>AA.</td>
</tr>
<tr>
<td>BA.</td>
</tr>
<tr>
<td>MA.</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 3: The selected sample from the MOP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type of Employment</td>
</tr>
<tr>
<td>--------------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>level of Education</td>
</tr>
<tr>
<td>Not having high school diploma</td>
</tr>
<tr>
<td>High school diploma</td>
</tr>
<tr>
<td>AA.</td>
</tr>
<tr>
<td>BA.</td>
</tr>
<tr>
<td>MA.</td>
</tr>
<tr>
<td>PhD.</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

**Data Analysis, Method:**

In order to analyze the obtained data both descriptive and inferential statistics methods were used. To do so, first the data were classified through descriptive statistics method and then, by the use of inferential statistics they were tested.

**8-1-Inferential Statistics:**

Inferential statistical tests used in this research were divided in two groups. To analyze the first main question, the analysis of variance was used to compare the difference between average HRs. productivities in three employment groups (three independent groups) and in order to analyze the second main question, the pair comparison test was used (Azar, 2005, pp.118-119).
RESULTS AND DISCUSSION

Results:
The research objective was to study the relationship between types of employment and productivity so that a way could be found for increasing productivity through employment strategies. With this objective in mind, required measurement were done in statistical population the results of which are presented below.

9-1-Descriptive Statistic Result:
The respondents of the first questionnaire along with 6 out of the 7 minor questionnaires were to sample groups of 175 individuals each from the MOP, and MSRT. However, to analyze the second main questionnaire and the one concerning training courses, two sample groups of 80 and 112 individual were selected from all the personnel of both ministries. These samples were classified based on parameters such as sex, age, type of employment, marital status and service record. The average age of the respondent was 39, while 30 years personnel are in the majority. Also, 72% of the respondents were married among which 44% were female. 12% did not have high school diploma, 16% were high school graduates, 12.5% held AA degrees, 31% had BA degrees, 22.5% held MA degrees and finally, 7% had a doctorate degrees. The average, minimum and maximum HRs productivity levels of the staff of the MSRT were 3.7, 2.57 and 4.52, respectively while these values for MOP were found to be 4.06, 2.14 and 4.98, respectively.

9-2-Hypothesis Test Results:
The results of each hypothesis are given in four parts: 1) Relationship, 2) Effect, 3) Minor questions and 4) Interview result.

9-2-1- Major Hypothesis Conclusion:
This hypothesis dealt with the study of effect of the types of employment on the personnel productivity of the said ministries. Based on the hypothesis $H_0$, the type of employment does not have any effect on the productivity of personnel in the two ministries while in hypothesis $H_1$ the type of employment does affect the productivity of personnel in the two ministries.

With this point in mind and in order to confirm the relationship of the two variables in the above mentioned ministries, first, this relationship was measured by the correlation test. Result showed that there was a relationship between the productivity of the ministry staff and their type of employment. Also, results from the ANOVA test indicated that that the type of employment does affected the productivity of the public servants, yet how and at what level this effect is would be specifically determined in the minor hypothesis conclusion through LSD and HSD tests. As a whole, it can be said that the type of employment is influenced by many minor factors which can show the following consequences of the type of employment in Iran quite different from those of other countries, particularly the developed ones. Results showed that in both ministries, the type of employment did not affect the training courses, but it directly influenced their numbers and types which in turn could affect the personnel's productivity.

In the MSRT, the type of employment except for the organizational structure, this in Iran is a traditional bureaucracy one, had a positive effect on other HRs productivity items including the middle items of the research model. However, in the MOP, the type of employment did not affect organizational commitment. According to questionnaire results, the organizational commitment of the personnel in the latter ministry was higher than that of the former. Regarding the creativity item, one may say this relationship in the MSRT, was quite weaker than in the MOP which could be due to their job content or it is possible that promotional incentives of the latter ministry would have affected this item.

9-2-2- Minor Hypotheses 1 and 2 conclusions:
Due to the similarity of results and also the possibility of easier comparison, these two hypotheses were studied and analyzed under one topic. The objective of this study was to show the relationship among and the effect of two official employment types' i.e. permanent employment and contractual employment as a type of temporary employment on personnel productivity of the two ministries.

Minor Hypothesis 1:
- $H_0$: Official employment dose not have any effect on the productivity of the staff in the MOP and MSRT.
- $H_1$: Official employment dose affect on the productivity of the staff in the MOP and MSRT.
Table 4: Comparison of the 11 factors among the three employment groups in the MOP and MSRT

<table>
<thead>
<tr>
<th>Organization Factor</th>
<th>The minister of Science, Research and Technology</th>
<th>The Minister Of Petroleum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>The productivity of the officially employed personnel, with less than 10 years of official service records and contractual employees was quite more than the official employment groups. However, as the years of service of officially employed personnel or those with temporary employment grow more, their productivity decreased.</td>
<td>The productivity of the officially and contractually employed personnel was quite more than other employed groups. However, as the years of service of those with temporary employment grew more, their productivity decreased.</td>
</tr>
<tr>
<td>Organizational Commitment</td>
<td>The organizational commitment of the officially employed personnel was more than the contractual employed and they in turn, had more organizational commitment compared with personnel with other types of temporary employment.</td>
<td>There was no difference in the organizational commitment, especially the continuous mental commitment among the three employment groups.</td>
</tr>
<tr>
<td>Motivation</td>
<td>The motivation among contractual employed personnel was stronger than other employment groups.</td>
<td>The motivation in the contractually employed personnel and those officially employed who had less than 15 years of service records was stronger than other employment groups.</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>Job satisfaction in the official personnel was found to be more than other employment groups.</td>
<td>Job satisfaction in the official personnel was more than other employment groups.</td>
</tr>
<tr>
<td>Worklife Quality</td>
<td>Worklife quality of the official employed personnel, especially, those with more than 10 years of service records was higher than other groups.</td>
<td>There was no significant difference between the worklife quality of the official and contractual personnel, but it was higher than that of other temporary employees.</td>
</tr>
<tr>
<td>Creativity</td>
<td>With more years of service records, particularly in the official employment group, individually creativity decreased.</td>
<td>Almost all organization personnel had an average to high level creativity. Of course, organizational conditions were also of great help in this regard.</td>
</tr>
<tr>
<td>Work Conscience</td>
<td>All there employment groups showed an average to high level of work conscience.</td>
<td>All there employment groups showed an average to high level of work conscience.</td>
</tr>
<tr>
<td>Organizational Justice</td>
<td>Personnel of temporary employment groups, other than contractual employment, enjoyed less organizational justice.</td>
<td>All the personnel had the same understanding with regards to organizational justice. Yet those of temporary employment, enjoyed less structural and legal organizational justice.</td>
</tr>
<tr>
<td>Organizational Participation</td>
<td>Permanently employed personnel had the highest level of organizational participation.</td>
<td>All organization personnel participated in their related activities or at least had such a scene of participation.</td>
</tr>
<tr>
<td>Training</td>
<td>The difference between the numbers of training courses in the three employment groups was seen at least in one position.</td>
<td>The difference between the numbers of training courses in the three employment groups was seen at least in one position.</td>
</tr>
<tr>
<td>Job Security</td>
<td>Job security in official employment group was more than the other two groups.</td>
<td>Job security in official employment group was more than the other two groups.</td>
</tr>
<tr>
<td>Communications</td>
<td>Official communications existed at the organizational structure level.</td>
<td>Comprehensive communications were equal for all members of the organization.</td>
</tr>
</tbody>
</table>

Minor Hypothesis 2:
- $H_0$: Contractual employment dose not have any effect on the productivity of the staff in the MOP and MSRT.
- $H_1$: Contractual employment affect on the productivity of the staff in the MOP and MSRT.

In all, correlation and ANOVA tests showed that there was a relationship between these two employments and the productivity of the two ministries, yet they had equal effects on the staff and there was no difference between their productivities. However, with a deeper insight, it was observed that in the MSRT, as the years of service of the official personnel increased, their creativity had a sharp decrease while in the MOP such as a phenomenon was rare because in this ministry individuals were more trained with regards to their job, but it was not the case in the other ministry. Although in both ministries it was observed that senior managers of staff were technical personnel themselves with many years of service which by it self had a negative effect on individual and organizational communications. It was observed that in the MSRT with more specialties were inclined to be contractually employed and in some cases, preferred leaving the organization, but in the MOP the level of organizational commitment was quite high and highly professional experts seemed more inclined to creativity and creating more income and useful jobs for the ministry while not showing much desire to leave the organization. The study of second questionnaire revealed that the productivity of officially employed personnel...
individuals with more than 15 years of service gradually decreased. On average, such a case was more common in the former ministry than in the latter. As a whole, there were no significant differences between the productivity of the staff with official or contractual employment in the said ministries.

9-2-3- Minor Hypothesis 3 Conclusion:

The objective of studying this was the effect of temporary employments, other than contractual, on the productivity of the staff of the MOP and MSRT. Here, the H₃ was: other types of temporary employment had no effect on the productivity of the staff of MOP and MSRT, while according to hypothesis 1: Other types of temporary employment did affect the productivity of the said ministries. Result obtained from the SPSS (software) showed that in both ministries, there was a relationship between other types of temporary employment and staff productivity besides the fact that such employments and significant effect on personnel productivity. In other words, there was a noticeable difference between the productivity of this group of personnel and that of others. Also, some detailed studies revealed that such employment influenced the quality of life, individuals organizational communication and their job satisfaction and incentive, especially in the MSRT. More detailed results of these studies are presented in table 3. Of course, interviewees mentioned the significant effect of this type of employment on job security, lack of frankness and legal supports, being uninformed about their rights, unequal treatment among the personnel or other low-level employees even with equal conditions and positions, organizational injustice an discrimination as the main causes of difference in the productivity level of this group of the employees in the organization.

Conclusions:

Since the trend of employment change in Iran, as I other parts of the world, is inclined to temporary employment, with consideration of the high costs of this type of employment in addition to the change of definition and the vertical-flat and flexible organizational structure approaches, some suggestions for improving the employment trend and temporary HRs. productivity were put forward in four groups.

10-1- Macro Suggestion:

1. Although the productivity of the permanent and contractual HRs. was found to be more than temporary work force, one has to admit that type of employment affects organizational structure and communication, individual’s quality of life and work and other similar variables, they in turn affect the type of employment as well. Thus, to have a proper understanding of the change trend, a fundamental and comprehensive action is required. Based on interview and Delphi plan results one may say that the better the level of quality of life, mental security and economic structure of a society, the more comprehensive the relationships. As a result, the desired type of employment is suggested to be the flexible, temporary employment. Moreover, it is noteworthy that in each organization, a set of job must be permanent and temporary.

2. General familiarity of people, especially the specialized with work regulations.

3. Improving people’s quality of life – because when this happens, providing the primary needs could be easier, mental security would be created in the society and individuals would not look for a stable job for providing for their future. Consequently, the demand for permanent employment in many specialized and other positions in addition to organizational costs could be reduced. Also, by improving the quality of life and mental security of individuals, job satisfaction and therefore, HRs. productivity would increase.

4. Changing the employment structure and making it reflexible as it is in the developed countries which of course require its own structural and fundamental changes.

10-2- Behavioral Suggestion:

1. Incentive is one of the most important behavioral factors which affects HRs. productivity and is in turn influenced by the type of employment. However, employment-related incentive can be said to be the result of middle factors such as salary and wage, work and personal life quality, organizational incentive and individuals, job content. Thus, senior management in both ministries may increase their temporary employees, productivity by lowering the difference level of said factors.

2. To prevent productivity decrease in official personnel who have many years of service records, just like the advantages which contractual personnel have or something even more observable such as the organizational grades which exist in the MOP, these organizations can create motivation and competitive grounds.
3. These organizations would be able to increase the productivity of their temporary work force by creating desirable conditions and improving the personnel’s worklife quality.

4. By setting visual and measurable criteria for individuals and by taking competence in to account as a standard, the organizations can facilitate the promotion procedures of their personnel. Therefore, since there would be no difference between the promotions of individuals with various types of employment, individual’s motivation to progress and as a result, personnel productivity could increase.

5. In the MSRT, by improving mental organizational commitment and their understanding of the organizational support, it is possible to increase the organizational commitment of the temporary specialized work force which would result in productivity increase.

6. To improve the productivity level, not only the type of employment, but also its emerging factors should also change and this could be achieved by correcting and improving the HRs. management system in organizations.

10-3- Structural Suggestion:

1. In both ministries, by simplifying the organizational structure and moving toward a temporary and more flexible one, it is possible to follow an easier temporary employment trend because by simplifying the structure, communication-related problems would be solved to a great extent which in turn would help increasing the productivity of the temporary work force.

2. In both ministries, by familiarizing individuals with temporary employment rules and providing their mental security, increasing their efficiency could be achieved and through decreasing the productivity difference of this group of personnel and that of other employments, organizational costs may be reduce.


4. Providing an exact and proper definition of the types of employment in the law and precisely defining their related rules.

Studying the relationship between the level of education and the type of employment in society.

REFERENCES


Auer, Peter, et al., 2004. Is a Stable Workforce Good For the economy Insights in to the Tenure-Productivity Employment Relationship, Employment Analysis And Research Unit- Employment strategy Department, pp: 28.


