

# Investigation of the Relationship between Time Management and Organizational Creativity of the Staff of Operational Units of Gachsaran Oil and Gas Operation Company

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## Abstract

*Having investigated the relationship between time management and organizational creativity of the staff of operational units of Gachsaran Oil and Gas Operation Company, this research was conducted in the year 1394. The method of the research is applied from objective viewpoint and is of descriptive-correlation type. In this research, in order to collect data, time management questionnaires and the organizational creativity questionnaire have been used, whose reliability are respectively 0.934 and 0.895 through Cronbach's alpha and generally the questionnaire reliability is equal to 0.947. The statistical society of the research includes 2295 people and the desired sample was estimated as 240 people based on Cochran formula. In order to analyze data, taking into consideration the data being normal, the single sample t test was used applying SPSS software. The results obtained from the research indicate that there is a positive and meaningful relationship between time management and organizational creativity on the one hand and between time management components and organizational creativity on the other hand.*

**Key words:** Time Management, Organizational Creativity

## Introduction

The dynamic and changing environment of current organizations necessitates managers to radically change the skills and methods of administrating affairs to survive the organization under their management and to remain in the world competition cycle (Jang, 2001). Taking into consideration the fact that nowadays enhancement of efficiency and effectiveness is regarded as one of the most important goals of every organization and capability of managers to confront with the current time pressure and the method of control and management of time and also the degree of adherence to organizational commitments implementation towards people, with respect to the presented services, is regarded as the most influential factors on the efficiency and effectiveness, importance of such changes doubles. Therefore the environmental factors affecting organizations efficiency, rapid and deep changes in the people's requests and needs on the one hand and the necessity to enhance the internal performance of organizations through enhancement of productivity, innovation and creativity on the other hand has caused managers of successful organizations to pay attention to time management more than before. Experience has shown that organizations that manage their time more effectively, reach higher levels of productivity, are quick in adoption and implementation of their decisions and inhibit affairs from being repeated. Implementation of time management in such organizations can ultimately lead to the decrease of all financial non-financial costs. Results of the conducted researches confirm that the staff efficiency in our country is low in comparison with the countries such as Japan and Korea. The average efficiency of Japanese and Korean staff is respectively 49 to 60 hours and 54 to 72 hours per week, while Iranian counterparts show an average efficiency of only 6 to 9 hours per week (Hafezi and et al, 2008). Time management or in other words effective use of time is a requirement for progress in today's world. One of the factors causing individuals to progress is the time. Correct and effective use of time causes human to accomplish tasks which result in reaching individual aims. How to use the time as a resource is an index for evaluating the effectiveness of people of a society (Cameroon, 2002). Meanwhile, managing time and the way it is allocated to various duties by organizations managers seem necessary to enhance the productivity and effectiveness of staff. In fact, the way time is used can be regarded as an important discrimination factor between successful and unsuccessful managers. Therefore the relationship

between time management and organizational creativity of Gachsaran Oil and Gas Company's staff was explored.

### **The Research Literature**

#### **Time Management**

Time management is a collection of skills which help you with the effective use of time. There are general guidelines which can be used for time management in various areas such as home, school and work. We describe some of these guidelines in this section. First we investigate why people don't use time management and the advantages obtained from it. Probably the most obvious reason why people don't use time management is their lack of awareness about what time management is. The second reason is weakness and laziness; some people lack the necessary goal and motivation to plan effectively. The third group that doesn't use time management includes those who would like to work under pressure, shortness of time (ninety minutes) and critical conditions. Although it may be possible to justify not using time management in some circumstances, advantages of successful use of time management rejects any reason or justification. Time management helps you to determine which of the tasks are the most important. In this way, you will be able to highly prioritize some activities while omitting some others. In addition, time management helps you to increase your real time of working through deleting disturbances and unnecessary activities. One of the satisfactory aspects of time management is the reduction of stress in life. Reduction of the stress level results in the improvement of mental and physical health.

#### **Time Management Organizational Skills**

##### **1- Goal Setting**

Goal is the desired result toward which the organizational behavior is directed and management is a tool for reaching it. Therefore the element of goal is important for the management of any activity and management is meaningless without goal (Alagheband, 1996).

##### **2- Prioritization of Goals and Activities**

By prioritization, we mean adjusting goals and activities in terms of the importance and preference of an activity with respect to other goals and activities to reach daily, weekly and monthly goals (Mackenzie, translated by Khaki, 1997).

##### **3- The Operational Planning**

In the operational planning, the detailed goals are transformed into an operational plan and the way of reaching goals is described in detail. The operational planning can be defined as the predicted operation to achieve definite goals, bearing in mind the facilities, restrictions and general lines drawn in the comprehensive plan (Alvani, 1996).

In this research, the operational planning is referred to preparation and adjustment of a list of feasible activities and thinking about how to execute them over the time a manager has got. In other words, it refers to timing activities in terms of their priority and implementation method to use the time as optimal as possible.

##### **4- Delegation of Authority**

Delegation of authority in an organization is transferring authority from the superior to subordinate (Deslergari, Madani, 1987).

In this research, it means transferring activities to other coworkers who are able to do them, while there is no need to the manager to cooperate.

##### **5- Communications Management**

Communication is the process of understanding and intellection of meanings between individuals and groups. Activity and cooperation in an organizational environment necessitates humane relations together with mutual trust between managers and staff. Human relationships are created as a result of communication (Alagheband, 1999).

In this research, it is defined as the skill of managing and controlling the time to create any relationship (written, speech, auditory, phone and ...) with others including staff, clients, heads and ... .

##### **6- Management of sessions**

In some circumstances, managers may decide to convene for a session in every organization. In other words, a session takes place for conversation and cooperation of a group of people with each other to accomplish a specific mission. This mission may include making a decision, solving a problem, determining a strategy or any other one of thousands of problems with which public and private organizations deal with in their

routine activities (Kazemi, 1994).Session management in this context includes skills such as planning of sessions, preparation of agenda, inviting all members to participate in discussions, determination of the beginning and end of sessions and commitment to it and dividing sessions time to deal with all the issues of agenda and participating in sessions is required.

**Creativity**

Fox (1996): "A creative process is referred to any thinking process which solves a problem helpfully and creatively". Hulark (1982): "Creativity is in fact the same form of controlled imagination that may result in a kind of invention and innovation". There are a lot of experts who are willing to describe personal characteristics of creative people. Stiner (1965), Baron (1969) and Barbarclark (1979) are among those people. In the mid 1980s, having studied writings about "creative psychology", Thomas Beckley and David Boid were finally succeeded in determining and stating the following five factors as the important and general dimensions of creative individuals' lives:

**A: Need Achievement:** Such kind of people always look for ambitious goals and success.

**B:Self-Control:** The life and destiny of such people is determined by their own will and control not luck.

**C: Tolerance of risk:** Adoption of relatively higher risks is one of the characteristics of creative people.

**D:Tolerance of ambiguity:** For creative people, there is no necessity for all things to be clear to make decisions and do things.

**E: Type A behavior:** Eagerness to achieve maximum results, even if it requires disregard to others' objections. This means having persistence and high self-confidence (Ghanizadeh, 2008).

Geij and Berlainz (1988) state the following features for the people based on their level of creativity and intelligence:

**1- High creativity, high intelligence:** Such people have enough ability to control their behavior and freedom and behave childishly or like adults depending on the situations.

**2- High creativity, low intelligence:** Such people have severe conflict with themselves as well as school. Therefore they feel incompetence and unworthiness and have ideal performance in the environment without pressure.

**3- Low creativity, high intelligence:** These students are called addicted to school and have continuous attempt to gain academic advantages.

**4- Low creativity, low intelligence:** These students don't have an opportunity to present academic capability and creative behaviors. Inevitably, they tend toward defensive activities such as high sport activity to become used to school (Hassanzadeh, 2004).

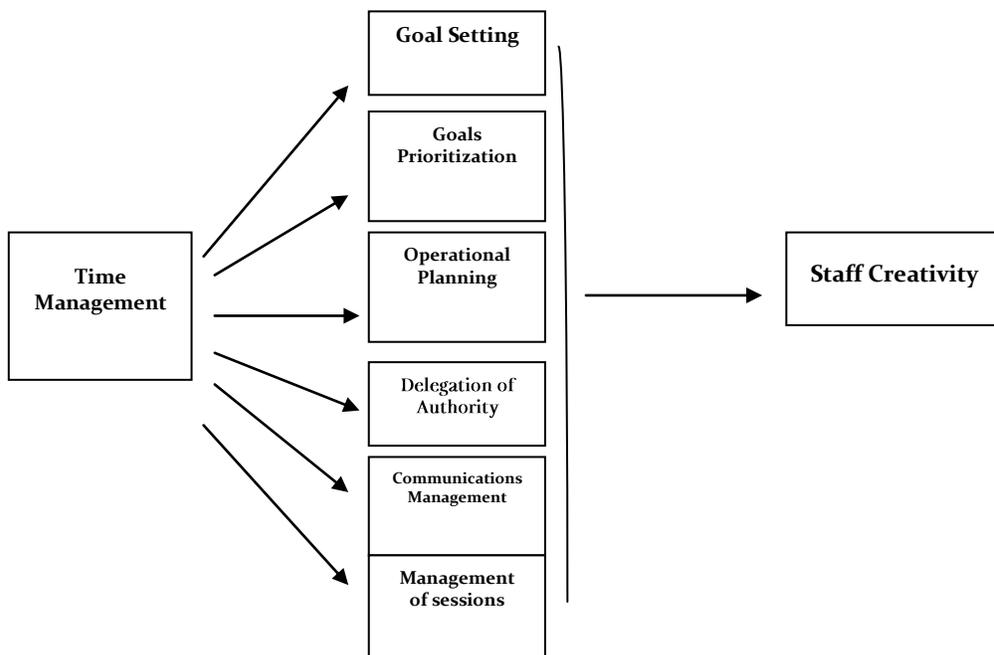


Figure 1: the conceptual model of the research

## The Research Hypotheses

### The main hypothesis

- There is a positive and meaningful relationship between time management and creativity of the staff.

### Minor hypotheses

- There is a positive and meaningful relationship between goal setting and creativity of staff.
- There is a positive and meaningful relationship between goals and activities prioritization and creativity of staff.
- There is a positive and meaningful relationship between operational planning and creativity of staff.
- There is a positive and meaningful relationship between delegation of authority and creativity of staff.
- There is a positive and meaningful relationship between communications management and creativity of staff.
- There is a positive and meaningful relationship between management of sessions and creativity of staff.

### The research method

Since results of this study are applicable for other operational sections, the research is of applied type. In this research, variables of time management and organizational creativity have been respectively stated as independent and dependent variables. The statistical society to be studied in the research includes staff of operational units of Gachsaran Oil and Gas Operation Company, which consists of departments of maintenance and repair, operation unit, gas facility, gas and LPG unit, operation services unit, communication unit and pipelines unit, the number of which being  $N=2295$  people. Using non-laboratory research sampling and Cochran formula, the number of samples was selected as 240 people. In this research, Cronbach's alpha of the time management and organizational creativity questionnaires were respectively obtained as 0.934 and 0.889. We use Pearson correlation test to obtain the relation between variables.

### Data analysis

#### Kolmogorov-Smirnov Test

Table 1: Kolmogorov-Smirnov test for variables

variable	Kolmogorov-Smirnov	meaning level
time management	1.369	0.05
organizational creativity	1.052	0.218

Based on the above table, meaning levels for time management and organizational creativity are respectively 0.05 and 0.218. Since the meaning level for all variables is more than 0.05, it is concluded that the distribution is Normal.

### The main hypothesis

There is a meaningful relationship between time management and organizational creativity.

Table 2: Pearson correlation test for variables of time management and organizational creativity

	correlation	meaning level
time management and organizational creativity	0.664	0.000

As it is seen, the correlation coefficient ( $r=0.664$ ) is meaningful at the level of ( $\text{sig}=0.000$ ) and the relationship direction is positive. Since the meaning level is lower than 0.05, there is a positive and meaningful relationship between the two variables.

### The first minor hypothesis

There is a meaningful relationship between the component of the degree of goal setting and organizational creativity.

Table 3: Pearson correlation test for variables of degree of goal setting and organizational creativity

	correlation	meaning level
degree of goal setting and organizational creativity	0.505	0.000

As it is seen, the correlation coefficient ( $r=0.505$ ) is meaningful at the level of ( $\text{sig}=0.000$ ) and the relationship direction is positive. Since the meaning level is lower than 0.05, there is a positive and meaningful relationship between the two variables.

### The second minor hypothesis

There is a meaningful relationship between goals and activities prioritization and organizational creativity.

Table 4: Pearson correlation test for the variable of goals prioritization

	correlation	meaning level
Goals and activities prioritization and organizational creativity	0.535	0.000

As it is seen, the correlation coefficient ( $r=0.535$ ) is meaningful at the level of ( $sig=0.000$ ) and the relationship direction is positive. Since the meaning level is lower than 0.05, there is a positive and meaningful relationship between the two variables.

**The third minor hypothesis**

There is a meaningful relationship between operational planning and organizational creativity.

Table 5: Pearson correlation test for the variable of operational planning

	correlation	meaning level
operational planning and organizational creativity	0.415	0.000

As it is seen, the correlation coefficient ( $r=0.415$ ) is meaningful at the level of ( $sig=0.000$ ) and the relationship direction is positive. Since the meaning level is lower than 0.05, there is a positive and meaningful relationship between the two variables.

**The fourth minor hypothesis**

There is a meaningful relationship between delegation of authority and organizational creativity.

Table 6: Pearson correlation test for the variable of delegation of authority

	correlation	meaning level
Delegation of authority and organizational creativity	0.508	0.000

As it is seen, the correlation coefficient ( $r=0.508$ ) is meaningful at the level of ( $sig=0.000$ ) and the relationship direction is positive. Since the meaning level is lower than 0.05, there is a positive and meaningful relationship between the two variables.

**The fifth minor hypothesis**

There is a meaningful relationship between communications management and organizational creativity.

Table 7: Pearson correlation test for the variable of communications management

	correlation	meaning level
Communications management and organizational creativity	0.640	0.000

As it is seen, the correlation coefficient ( $r=0.640$ ) is meaningful at the level of ( $sig=0.000$ ) and the relationship direction is positive. Since the meaning level is lower than 0.05, there is a positive and meaningful relationship between the two variables.

**The sixth minor hypothesis**

There is a meaningful relationship between management of sessions and organizational creativity.

Table 8: Pearson correlation test for the variable of management of sessions

	correlation	meaning level
Management of sessions and organizational creativity	0.540	0.000

As it is seen, the correlation coefficient ( $r=0.540$ ) is meaningful at the level of ( $sig=0.000$ ) and the relationship direction is positive. Since the meaning level is lower than 0.05, there is a positive and meaningful relationship between the two variables.

**Test of the research hypotheses using the simple linear regression analysis**

**The main hypothesis**

As it is seen in table (9), the amount of ANOVA (sig) is below 0.05, which indicates that there is a linear relationship between time management and organizational creativity. The value of R Square is equal to 0.437, which shows that 43.7% of changes in organizational creativity are affected by time management.

Table 9: Regression test between time management and organizational creativity

independent variable	dependent variable	R Square	ANOVA sig	coefficients
				B
time management	organizational creativity	0.437	0.000	constant=-2.195
				time management=0.407

**The first minor hypothesis**

As it is seen in table (10), the amount of ANOVA (sig) is below 0.05, which indicates that there is a linear relationship between the degree of goal setting and organizational creativity. The value of R Square is equal to 0.255, which shows that 25.5% of changes in organizational creativity are affected by the degree of goal setting.

Table 10: Regression test between the degree of goal setting and organizational creativity

independent variable	dependent variable	R Square	ANOVA sig	coefficients
				B
degree of goal setting	organizational creativity	0.255	0.000	constant=-9.381
				degree of goal setting=1.727

**The second minor hypothesis**

As it is seen in table (11), the amount of ANOVA (sig) is below 0.05, which indicates that there is a linear relationship between goals and activities prioritization and organizational creativity. The value of R Square is equal to 0.286, which shows that 28.6% of changes in organizational creativity are affected by the goals and activities prioritization.

Table 11: Regression test between goals and activities prioritization and organizational creativity

independent variable	dependent variable	R Square	ANOVA sig	coefficients
				B
goals and activities prioritization	organizational creativity	0.286	0.000	constant=-8.012
				goals and activities prioritization =1.839

**The third minor hypothesis**

As it is seen in table (12), the amount of ANOVA (sig) is below 0.05, which indicates that there is a linear relationship between operational planning and organizational creativity. The value of R Square is equal to 0.173, which shows that 17.3% of changes in organizational creativity are affected by operational planning.

Table 12: Regression test between operational planning and organizational creativity

independent variable	dependent variable	R Square	ANOVA sig	coefficients
				B
operational planning	organizational creativity	0.173	0.000	constant=-11.101
				operational planning=1.506

**The fourth minor hypothesis**

As it is seen in table (13), the amount of ANOVA (sig) is below 0.05, which indicates that there is a linear relationship between delegation of authority and organizational creativity. The value of R Square is equal to 0.254, which shows that 25.4% of changes in organizational creativity are affected by delegation of authority.

Table 13: Regression test between delegation of authority and organizational creativity

independent variable	dependent variable	R Square	ANOVA sig	coefficients
				B
delegation of authority	organizational creativity	0.254	0.000	constant=-7.077
				delegation of authority =1.921

**The fifth minor hypothesis**

As it is seen in table (14), the amount of ANOVA (sig) is below 0.05, which indicates that there is a linear relationship between communications management and organizational creativity. The value of R Square is equal to 0.410, which shows that 40.1% of changes in organizational creativity are affected by communications management.

Table 14: Regression test between communications management and organizational creativity

independent variable	dependent variable	R Square	ANOVA sig	coefficients
				B
communications management	organizational creativity	0.410	0.000	constant=-4.356
				communications management =2.232

**The sixth minor hypothesis**

As it is seen in table (15), the amount of ANOVA (sig) is below 0.05, which indicates that there is a linear relationship between management of sessions and organizational creativity. The value of R Square is equal to 0.287, which shows that 28.7% of changes in organizational creativity are affected by management of sessions.

Table 15: Regression test between management of sessions and organizational creativity

independent variable	dependent variable	R Square	ANOVA sig	coefficients
				B
management of sessions	organizational creativity	0.287	0.000	constant=-5.115
				management of sessions =2.081

**Results**

**Main hypothesis**

In order to evaluate this hypothesis, the single sample T test, Pearson correlation coefficient and simple linear regression was used. The results obtained from all three methods indicate that the above hypothesis is confirmed. This means that with a probability of 95%, the main hypothesis, stating that there is a meaningful relationship between time management and organizational creativity, is confirmed. Therefore it can be said that the society members agree that time management has been effective on the organizational creativity of this firm.

**The first minor hypothesis**

Goal setting is referred to a desired result toward which the organizational behavior is directed and management is a tool for reaching it. Therefore the element of goal is important for the management of any activity and management is meaningless without goal. In order to test the hypothesis, the single sample T test, Pearson correlation coefficient and simple linear regression were used and the results obtained from all three methods indicate that the above hypothesis is confirmed. This means that with a probability of 95%, the first hypothesis, stating that there is a meaningful relationship between degree of goal setting and organizational creativity, is confirmed. Therefore it can be concluded that the degree of goal setting has been effective on the organizational creativity of this firm.

**The second minor hypothesis**

By prioritization, we mean adjusting goals and activities in terms of the importance and preference of the activity with respect to other goals and activities to reach daily, weekly and monthly goals. In order to test the hypothesis, the single sample T test, Pearson correlation coefficient and simple linear regression were used and the results obtained from all three methods indicate that the above hypothesis is confirmed. This

means that with a probability of 95%, the second hypothesis, stating that there is a meaningful relationship between prioritization of goals and activities and organizational creativity, is confirmed.

#### **The third minor hypothesis**

In this research, the operational planning is referred to preparation and adjustment of a list of feasible activities and thinking about how to execute them over the time a manager has got. In other words, it refers to timing activities in terms of their priority and implementation method to use the time as optimal as possible. In order to test the hypothesis, the single sample T test, Pearson correlation coefficient and simple linear regression were used and the results obtained from all three methods indicate that the above hypothesis is confirmed. This means that with a probability of 95%, the third hypothesis, stating that there is a meaningful relationship between operational planning and organizational creativity, is confirmed. Therefore it can be concluded that operational planning has been effective on the organizational creativity of this firm.

#### **The fourth minor hypothesis**

In order to test the hypothesis, the single sample T test, Pearson correlation coefficient and simple linear regression were used and the results obtained from all three methods indicate that the above hypothesis is confirmed. This means that with a probability of 95%, the fourth hypothesis, stating that there is a meaningful relationship between delegation of authority and organizational creativity, is confirmed. Therefore it can be concluded that delegation of authority has been effective on the organizational creativity of this firm.

#### **The fifth minor hypothesis**

In this research, communications management is defined as the skill of managing and controlling the time to create any relationship (written, speech, auditory, phone and ...) with others including staff, clients, heads and ... .In order to test the hypothesis, the single sample T test, Pearson correlation coefficient and simple linear regression were used and the results obtained from all three methods indicate that the above hypothesis is confirmed. This means that with a probability of 95%, the fifth hypothesis, stating that there is a meaningful relationship between quick conveyance of information and organizational creativity, is confirmed.

#### **The sixth minor hypothesis**

In this research, management of sessions includes skills such as planning of sessions, preparation of agenda, inviting all members to participate in discussions, determination of the beginning and end of sessions and commitment to it and dividing sessions time to deal with all the issues of agenda and participating in sessions is required. In order to test the hypothesis, the single sample T test, Pearson correlation coefficient and simple linear regression were used and the results obtained from all three methods indicate that the above hypothesis is confirmed. This means that with a probability of 95%, the sixth hypothesis, stating that there is a meaningful relationship between quick management of sessions and organizational creativity, is confirmed.

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