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## HOW DO MOTIVATIONAL FACTORS INFLUENCE OVERALL JOB SATISFACTION? A SURVEY ON EMPLOYEES ACROSS PETROCHEMICAL COMPANIES IN SAUDI ARABIA

Sutan Emir Hidayat\*, Salah Abbas Emara\*\* and Abdulaziz Mohammed Al-Fawaz\*

\*University College of Bahrain

\*\*Bahrain Training Institute

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### Abstract

*The purpose of the study is to explore the view of employees working across petrochemical companies in Saudi Arabia on the intrinsic and extrinsic motivational factors that influence overall job satisfaction. The study uses a survey questionnaire distributed to 125 employees from different petrochemical companies in Saudi Arabia. However, only 109 respondents completely returned the questionnaire. The answers of these 109 respondents were used for data analysis. In addition, multivariate regression analysis was also applied to investigate the relationship between those motivational factors and overall job satisfaction. The findings of this study showed that intrinsic motivational factors influence overall job satisfaction more than extrinsic motivational factors. The weighted average results revealed that the intrinsic factors which influenced the overall job satisfaction of employees in petrochemical companies in Saudi Arabia are ability utilization, achievement, leadership attention, independence, and social status. Additionally, it was found that the extrinsic factor which predicted overall job satisfaction is co-workers. The results of regression analysis revealed that ability utilization, achievement, independence and social status are the intrinsic motivational factors that positively significantly influence the employees' overall job satisfaction. In addition, co-workers and compensation are the extrinsic factors that positively significantly influence the overall job satisfaction. The study provides specific inputs for petrochemical companies across Saudi Arabia with regards to which factors they should focus on to achieve the highest overall job satisfaction and preclude the resignation of their employees. In addition, this study is also expected to bridge the literature gap in motivational factors in the petrochemical industry, specifically in Saudi Arabia.*

Keywords: Motivational Factors, Job satisfaction, Petrochemical Companies, Saudi Arabia

### 1. Introduction

The fiercely competitive market coupled with the precarious economic climate has forced employers to realise how much easier it would be to retain and motivate current employees than attract new ones, especially when it comes to achieving long term goals. Wright (2003) argued that it is absolutely imperative for the managers to keep their employees motivated and focused. In addition, Nohria et al (2008) have equated greater motivation with greater performance. This implies that understanding the motivational factors that lead to overall job satisfaction of

employees is very crucial for the sustainability of the company. As a result, it has become a common practice for companies to actually go out of their ways to look after their employees and to understand both intrinsic and extrinsic motivational factors that influence their overall job satisfaction. It is also noted that both intrinsic and extrinsic motivational are equally important (Ryan and Deci, 2000).

Previous studies also have confirmed how loyalty and commitment are much higher among satisfied employees, which means that these employees are also less likely to quit their jobs (Halepota, 2005; Nohria et al, 2008). It is also mentioned in the studies that the positive relationship between motivation and job satisfaction is applicable in all industry including petrochemical companies. However, there is a need to conduct more empirical studies to confirm the above theoretical arguments. Therefore, this study is intended to explore the factors that motivate employees in petrochemical companies in Saudi Arabia. Moreover, the relationship of these factors to overall job satisfaction was investigated. In other words, the study attempts to answer the following research questions:

1. What are the intrinsic motivational factors that influence the overall job satisfaction of employees in petrochemical companies in Saudi Arabia?
2. What are the extrinsic motivational factors that influence the overall job satisfaction of employees in petrochemical companies in Saudi Arabia?

To the best knowledge of researchers, there was no prior study that investigated the relationship between motivational factors and overall job satisfaction among employees of petrochemical companies in Saudi Arabia. Thus, this study may help bridge the literature gap in motivational factors in the petrochemical industry, specifically in Saudi Arabia. From a pragmatic point of view, this study may also help determine which motivational factors are positively significantly correlated with overall job satisfaction; thus, it may help identify areas of improvement for enhancing the motivational programs utilized by these petrochemical companies. The result of the study is also expected to add value to the teaching and learning process of human resource management course.

## **2. Literature Review**

This section consists of literature related to employee motivation and job satisfaction. As it has been mentioned earlier, motivational factors are divided into extrinsic and intrinsic factor. The previous studies below describe the aspects of both extrinsic and intrinsic motivational factors and their relationship with overall job satisfaction.

Ryan and Deci (2000) argued that employees who are extrinsically motivated view their job performance as a means to an end. This is to say that they seek job satisfaction as a result of their job rather than finding job satisfaction in the work itself. When they exert effort, it is so they reap commendations and minimize criticisms. Such people tend to work hard with a material reward in mind, whether it is money or some other benefit. On the other hand, employees who are intrinsically motivated work hard not only because of the material rewards, but also because they find job satisfaction and fulfilment in their work itself.

Higgins (2002) tells us that certain aspects of extrinsic motivation beside pay check (money) are also very important. Among them are flexible working hours, healthcare and development opportunities. Employees now look to these aspects aside from their pay check to keep them happy and comfortable. Phipps, et al (2007) found that in the long run for the ability of managers

to create bond with subordinates as the best intrinsic factor that resulted in the highest possible job satisfaction. Kaplan and Norton (1996) add that employee empowerment likewise goes a long way in boosting motivation.

Erez and Isen (2002) examined through survey questionnaire the aspects of both intrinsic and extrinsic motivational factors in order to find the three most efficient motivational factors related to employee job satisfaction. The study found that three most efficient motivational factors were intrinsic namely immediate praise and acknowledgement from their superiors, leadership attention and a voice at least in decisions directly concerning them if not all major ones.

Another similar study conducted by Cudney (2009) also found that employees who were appreciated and involved in their organisation also happened to be the ones who were most satisfied with their work. In comparison, wages and benefits are not quite important and only account for 2% of job satisfaction. A stark contrast to the whopping 70% represented by appreciation and involvement. Due to the findings, it was suggested by the study that it would be much more expedient for department heads and managers do their best to treat employees with respect and appreciation. Not only is this a whole lot cheaper, it is also a whole lot more effective than having to rely on financial rewards all the time.

The previous studies highlighted the relationship between motivational factors and overall job satisfaction. However, none of those studies conducted in petrochemical industries in Saudi Arabia. Therefore, this study attempts to fill the gap. The previous studies were used as main reference for this study. The intrinsic and extrinsic variables used in the previous studies were also used in this study and incorporated in the questionnaire.

### **3. Research Methodology**

This section is divided into research approach, data collection and statistical tool.

#### *3.1 Research approach*

The study uses a quantitative research approach, specifically utilizing a Likert-scale survey questionnaire in gathering primary data for ascertaining the motivational factors of employees working in petrochemical companies in Saudi Arabia. 6 variables of intrinsic motivational factors and 5 extrinsic motivational factors adapted from the previous studies were used as items in the questionnaire (Kaplan and Norton, 1996; Ryan and Deci, 2000; Higgins, 2002; Phipps, et. al, 2007).

The 6 intrinsic motivational factors are the chance to do something that makes use of my abilities (ability utilization), the feeling of accomplishment I get from the job (achievement), the chance to work alone on the job (independence), the ability of managers to create bond with subordinates (leadership attention), the chance of being somebody in the society (social status), the praise I get for doing a good job (recognition).

The 5 extrinsic motivational factors used in this study are the way my co-workers get along with each other (co-workers, my pay and the amount of work I do (compensation), the chances for advancement on this job (development opportunities), having a comfortable work schedule (flexible working hours) and the way company policies are put into practice (policy).

### 3.1 Data collection

A 5-point Likert scale questionnaire was prepared in both Arabic and English languages for better understanding by the respondents. Content validity was ascertained by asking researchers to review the questionnaire. Letters of permission were sent to a total of 10 petrochemical companies in Saudi Arabia. Out of these, only 5 agreed to participate. 25 employees from each of these organisations were selected to participate in the study. A list of regular employees was asked from the HR department, and those which fell within the first 25 odd numbers were included in the sample. Those who declined to participate were replaced with other employees through the same selection procedure. Incomplete or duplicate data were discarded. Finally, a total of 109 respondents completely filled up the questionnaire. The answers of 109 respondents were used for data analysis.

### 3.3 Statistical treatment

The collected data are then analyzed using the following statistical tools:

1. Weighted Mean - The arithmetical average when all the scores are added and divided by number of items obtained using the following formula:

$$M = \Sigma X / N$$

where:

M = mean

$\Sigma X$  = sum of the scores / measures in the series

N = number of cases

2. Multivariate regression analysis was applied to predict the relationship between motivational factors and overall job satisfaction.

The 5-point Likert scale has the following scale values:

4.50 – 5.00	Strongly Agree (SA)
3.50 – 4.49	Agree (A)
2.50 – 3.49	Not Sure (NS)
1.50 – 2.49	Disagree (D)
1.0 – 1.49	Strongly Disagree (SD)

## 4. Analyses and Findings

This section is divided into weighted average results and regression analysis results.

### 4.1 Weighted average results

Table 1 below summarizes the weighted average results of the responses of the respondents towards intrinsic and extrinsic motivational factors that influence overall job satisfaction.

Table 1 below reveals that in general respondents agree that both intrinsic and extrinsic motivational factors listed in the questionnaire influence the overall job satisfaction among employees of petrochemical companies in Saudi Arabia as shown by the weighted average of (M=3.53) with verbal interpretation of 'agree'. Comparing intrinsic and extrinsic motivational factors, it is found that employees of petrochemical companies in Saudi Arabia believe that

intrinsic factors as more influential than extrinsic factors on overall job satisfaction as shown by their respective weighted means ( $M = 3.61$  and  $M = 3.46$ ). This finding is in line with the findings of Erez and Isen (2002).

Among the 6 intrinsic motivational factors in the questionnaire, the respondents agree that 5 of them influence overall job satisfaction. The only intrinsic factor where the respondents are not sure on its influence on overall job satisfaction is recognition or 'the praise I get for doing a good job' ( $M = 3.17$ ). The most influential intrinsic factor to overall job satisfaction is achievement or 'the feeling of accomplishment I get from the job' as shown by the highest weighted mean ( $M = 3.98$ ). It is followed by the social status or 'the chance of being somebody in the society' ( $M = 3.72$ ). The ability utilization or 'the chance to do something that makes use of my abilities' comes in the third place with weighted mean of ( $M = 3.68$ ). In the fourth place, independence or 'the chance to work alone on the job' with weighted mean of ( $M = 3.59$ ) and followed by leadership attention or 'the ability of managers to create bond with subordinates' ( $M = 3.52$ ) in the fifth place.

From 5 extrinsic motivational factors that influence overall job satisfaction listed in the questionnaire, the respondents only agree in 1 factor namely co-workers or 'the way my co-workers get along with each other' ( $M = 3.96$ ). The respondents are not sure whether the other 4 factors namely 'compensation, development opportunities, flexible working hours and policy' influence the overall job satisfaction of employees of petrochemical companies in Saudi Arabia.

**Table 1**  
**The Respondents' Responses towards Intrinsic and Extrinsic Motivational Factors that Influence Overall Job satisfaction**  
**n =109**

Item	1	2	3	4	5	M	I
<b>Intrinsic Motivational Factors</b>							
Ability utilization	6	14	11	56	22	3.68	A
Achievement	5	9	7	50	38	3.98	A
Independence	5	17	8	67	12	3.59	A
Leadership attention	6	17	22	42	22	3.52	A
Recognition	13	24	14	47	11	3.17	NS
Social status	3	11	18	59	18	3.72	A
Weighted Average: 3.61							
<b>Extrinsic Motivational Factors</b>							
Co-workers	6	23	18	51	11	3.96	A
Compensation	11	27	13	42	16	3.23	NS
Development opportunities	5	21	22	51	10	3.37	NS
Flexible working hours	5	20	17	53	14	3.47	NS
Policy	7	26	17	51	8	3.25	NS
Weighted Average: 3.46							
Overall Weighted Average: 3.53							

\*The above figure is rounded

#### 4.2 Regression analysis results

In order to compliment the results of weighted average, multivariate regression analysis was applied into two regression models.

$$\text{Model 1} \rightarrow Y_1 = V_{x1} + V_{x2} + V_{x3} + V_{x4} + V_{x5} + V_{x6}$$

$Y_1$  = Overall satisfaction (Dependent variable)

$V_{x1}$  = Ability utilization (Independent variable)

$V_{x2}$  = Achievement (Independent variable)

$V_{x3}$  = Independence (Independent variable)

$V_{x4}$  = Leadership attention (Independent variable)

$V_{x5}$  = Recognition (Independent variable)

$V_{x6}$  = Social status (Independent variable)

$$\text{Model 2} \rightarrow Y_2 = V_{x1} + V_{x2} + V_{x3} + V_{x4} + V_{x5}$$

$Y_2$  = Overall satisfaction (Dependent variable)

$V_{x1}$  = Co-workers (Independent variable)

$V_{x2}$  = Compensation (Independent variable)

$V_{x3}$  = Development opportunities (Independent variable)

Vx4 = Flexible working hours (Independent variable)

Vx5 = Policy (Independent variable)

Table 2 and Table 3 below present the summary of the multivariate regression analysis results.

**Table 2**  
**Summary of the Relationship between Intrinsic Motivational Factors and the Overall Job Satisfaction**

Model		Std. Error	Beta	T	Sig.
1.00	(Constant)	1.28		2.79	0.01
	Ability Utilization	0.09	0.24	2.28	0.02*
	Achievement	0.19	0.41	2.36	0.02*
	Recognition	0.19	0.21	1.13	0.26
	Independence	0.13	0.72	5.57	0.00*
	Leadership Attention	0.11	0.10	1.12	0.26
	Social status	0.13	0.30	2.94	0.00*
	Dependent Variable: Overall Satisfaction				

\*Statistically significant

**Table 3**  
**Summary of the Relationship between Extrinsic Motivational Factors and the Overall Job Satisfaction**

Model		Std. Error	Beta	T	Sig.
2.00	(Constant)	0.51		0.70	0.49
	Co-workers	0.09	0.32	3.84	0.00*
	Compensation	0.11	0.42	4.48	0.00*
	Development opportunities	0.09	0.13	1.50	0.14
	Flexible working hours	0.09	0.07	0.78	0.44
	Policy	0.05	0.01	0.22	0.83
	Dependent Variable: Overall Satisfaction				

\*Statistically significant

Based on table 2 and table 3 above, it is found that 4 intrinsic and 2 extrinsic motivational factors have positively statistically significant relationship with overall job satisfaction. The 4 intrinsic factors are 'ability utilization, achievement, independence and social status'. On the other hand, the 2 extrinsic factors are co-workers and compensation. It also means the availability of the

above factors in a petrochemical company will result in high job satisfaction of the employees. Therefore, management of petrochemical companies in Saudi Arabia should focus on those factors in order to achieve the maximum job satisfaction of their employees.

The results of the regression analysis in general supplement the weighted average results. The 4 intrinsic motivational factors that positively significantly influence the overall job satisfaction in regression analysis also obtained the verbal interpretation of agree in weighted average results. Only 1 factor namely leadership attention that obtained the verbal interpretation of agree in weighted average but, does not have significant relationship with overall job satisfaction in regression analysis. With regards to extrinsic factor, both analyses reveal that co-worker is an extrinsic factor that influences overall job satisfaction. Additionally, regression analysis found that compensation positively significantly influences overall job satisfaction.

## 5. Conclusions

The study managed to fulfil its objective which is to explore the factors that motivate employees in petrochemical companies in Saudi Arabia and investigate the relationship between these factors and overall job satisfaction. The study found that intrinsic motivational factors influence overall job satisfaction more than extrinsic motivational factors. Therefore, the management of the companies should create work environment that supports the implementation of intrinsic motivational factors. However, there are certain extrinsic motivational factors that management of petrochemical companies in Saudi Arabia needs to pay attention such as the way the co-workers get along with each other and the compensation policy. Focusing on improving those factors will result in the maximum job satisfaction.

This study also comes out with some recommendation for petrochemical companies in Saudi Arabia. First, the companies still need to look at the 'basic principles' that encourage employee retention within this context, particularly compensation and work conditions. An extensive review of the internal equity and external competitiveness of their pay structure may be a commendable starting point. Second, some programs which may encourage employee autonomy may also be considered as well, such as job enrichment. Motivating employees cannot be achieved through mere salary increase and cash incentives alone, thus management plays an important role in keeping employees driven. Lastly, training managers on the specific behaviours that are expected of them as people stewards may be helpful.

The study's results may be a good take-off point for supplementary follow-up initiatives, such as the conduct of focus group discussions or interviews related to the motivators which significantly predict overall job satisfaction. The results of the study also might add value to the teaching and learning activities of human resource management subject. The intrinsic motivational factors described in this study should get more attention in the teaching and learning process of the course since it has empirically been proven to influence job satisfaction more than extrinsic motivational factors.

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