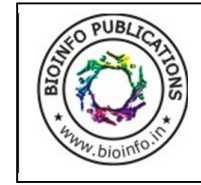


Intervening factors affecting the relationship between incentives and employee motivation: a case study of pharmaceutical manufacturing organisation in Navi Mumbai



Nandanwar M.V.^{*1}, Surnis S.V.², Nandanwar L.M.¹

^{*1}Department of Business Management, Padmashree Dr. D. Y. Patil University, CBD Belapur, Navi Mumbai, India, nandanwarmv@bharatpetroleum.in

²Principal, Chetna's Hazarimal Somani College of Commerce and Economics, Bandra(E), Mumbai, India.

Abstract- Traditionally in an organization incentive packages are designed according to the designations of the employees. The main objective of any incentive package is to motivate or to create compelling urge in the employees to achieve predefined stretched targets. Monetary and non-monetary incentives schemes had a great impact on employee motivation. But it was also observed that but the similar incentives in an organization can motivate some section of employees while some other employees get deeply de-motivated. This study was an attempt to understand which the factors that are intervening the success of incentives towards positive employee motivation. This study revealed that the types of incentives, employee's age and gender are important intervening variables. Designation and background of employee did not have significant impact on employees' motivation.

This study was conducted in a three units of pharmaceutical organisation located in Thane and Talaja industrial area, Navi Mumbai, India. The study also evaluates relationship between attitudes towards monetary and non – monetary incentives with employee motivation at individual level. This study suggests the alternate methods to enhance the effectiveness of traditional incentive schemes.

Key Words: Motivation, Monetary and non monetary Incentives.

Introduction

Incentives are gaining very high importance in today's fast growing organizations. Salaries may retain the good employee in the organizations but incentives encourage employees to outperform. In many cases incentives produce exactly opposite results for what they are meant for. It is very pertinent to understand the reasons for incentives performing differently in similar situations. The study of previous researches in the related field was carried out.

Literature review

Gupta (1975) [1] in his study of labour incentive in Indian Iron and Steel Industry, found that monetary incentives are best motivators which lead to better motivation and a higher labour productivity. Nair and Rao (1991)[2] in his study revealed that group incentives best to develop the feeling of team-work and co-ordination. Matthew (1983)[3] stated that, direct monetary benefits coupled with greater responsibility and autonomy in decision making were good motivators than other perks. However, the non-monetary incentives are perhaps more important in the case of executives, particularly those in higher position. Sharma (1991)[4] referring to the report of the National Commission of Labour, found out that under Indian conditions incentives were concerned with effective utilization of manpower which is quickest, cheapest and surest means of increasing productivity and stimulate human efforts to provide positive motivation to greater output. Andrew Ballentine Nora McKenzie Allen Wysocki, Karl Kepner (2003)[5] In their research paper said that at different carrier stages, the individual have different needs.

Monetary and non- monetary incentives can influence employees differently in their different carrier stages. According to Kepner (2003)[5] monetary incentives are the reward for excellent job performance in the form of money; traditionally these incentives have helped to maintain positive motivational environment. The non – monetary Incentives on other hand are the rewards in the form of opportunities like sabbaticals, training, flexible working hours etc. which helps in sustaining the employee motivation in the long run. Arfic Kohn (1993)[6] stated that the monetary and non monetary incentive varies in their role, appropriateness depending upon their types and carrier stages of the employees. View above it should be tailor made rather than "One Size Fit All" approach. Scott Jeffrey (2003)[7] in his research study stated several principles in social and cognitive psychology. According to his study an employee may perceive non monetary incentives as more valuable than the retail value of the award in the cash. This is frequently referred as 'Trophy Value'. According to Ballentine et. al., (2003)[5] both monetary and non-monetary incentives are considered as workplace motivators. In their research found that the cash incentives constitute primary motivators, essential to fulfil needs and wants of the workforce. But Non monetary incentives have gained more significance in the industries to enhance employee performance in present tight economic scenario and are more efficient in motivating the workforce. The major findings of the study by Jain KK, Jabeen Fauzia, Mishra Vinita and Gupta Naveen (2007) [8] were ; the attitude, feeling and emotions of the employee

towards incentives in the organization play a vital role in determining their performance and behaviours. These in turn determine the success and growth of the organization. Dale S. Rose, Stuart D. Sidle and Kristin H. Griffith (2007)[9] in their study of monetary incentives found out that there was significant improvement in employees response rate with increased monetary incentives. Gupta. (1975)[1] In his overview of incentive studied stated that though the incentive schemes in general and monetary incentive schemes in particular have a lot of potentiality in improving productivity and other aspects of the organizational effectiveness, to the best our knowledge not much empirical work has been done in India in this area. The limited studies which have been carried out so far are in most cases purely behavioural in nature. The above study of literature formed the basis of the present study. This study was carried out in the three pharmaceutical units of an organization situated in Navi Mumbai. Indian Pharmaceutical industry is one of the fastest growing sectors of the economy. There is a tremendous competition from world's best manufacturing industries operating in India. There are more than 20,000 registered units operating in Indian pharmaceutical manufacturing sector. The reason for selecting the pharmaceutical sector was that, this sector was not greatly affected by global economic slump and registered steady growth in the national and international market.

Research methodology

Problem Identification

The literature review undoubtedly shows that the incentives have very positive reflection on employee motivation but as stated before in many cases same incentives motivate some employees but can deeply motivate the other section of employees in the same strata and same organization. A need was felt to understand the reasons behind this problem. It is prudent to understand what are the factors that actually monitor or mediate the effect of incentives on employee motivation. To keep other things constant three units of the same organisation from Thane and Talaja industrial area of Navi Mumbai were selected. This area is India's largest special economic chemical zone situated near Mumbai, the financial capital of India. The population in this area is a good heterogeneous mix of employees representing all the demographic strata. The outcome of the study will truly represent a national picture. As this topic deals with highly sensitive and confidential information like pay and incentives the names and details of the organisation is kept confidential in this paper as per secrecy promised. In this study, monthly production bonus, medical benefits, safety and quality rewards are covered under monetary incentives, whereas non-monetary incentive includes awards and title like best performing department, best performer of the month,

opportunities for higher training, job enrichment and certification. The theoretical design of the study was based on the assumption that the monetary and non monetary incentive will have certain overall impact on employees' motivation. The micro level study of this data on different strata of demographic characterization of respondent may lead to understand the various determinants which had contributed to these results. The results will help to design more meaningful and effective incentives schemes in future. The study have following objectives.

Objectives

- To understand employees' perception of various incentives offered to them as a tool towards employee motivation.
- To evaluate and identify the relationship between monetary and non-monetary incentives offered on employee motivation.
- To identify the intervening factors determining the relationship between incentives and motivation.
- To suggest improvements in incentive schemes package for effective operations.

Hypotheses

H01 = Employees do not perceive incentive schemes as a tool to improve employee motivation.

H11 = Employees perceive incentive schemes as a tool to improve employee motivation.

H02 = The Demographic Characteristics of employees does not have affect the impact of incentives on employee motivation.

H22 = The Demographic Characteristics of employees has affect on the impact of incentives on employee motivation.

H03 = There is no co-relation between employee Motivation with their attitude towards monetary and non – monetary incentive schemes.

H33 = There is positive co-relation between employee Motivation with their attitude towards monetary and non – monetary incentive schemes.

Data Collection

In the present study, the primary data was collected on non-tangible (perceived effect) aspects i.e. motivation and employees attitude towards incentives through questionnaires, interviews and observations through 'walk-through-survey' methods. The self-reported questionnaires were distributed to shop floor employees in various departments. The secondary data required for the research study

has also been collected through office records of the HR Department of the organization.

Sample Design

The total numbers of employees working in the three units of organization under study were 756 in numbers. In primary data collection The 250 questionnaires were distributed through stratified random sampling method. The total 165 respondent gave complete replies.

Field Work

The actual data collection was done from June 2010 to October 2010

Instrument

The primary data was collected by the method of questionnaire. In the first part of the questionnaire, the nature and the purpose of the work were explained and the assurances of complete secrecy of identity and responses of the respondents were given. Also some background information such as age, gender, background (rural/urban) and designation was asked. In the second part there were 29 questions each on Likert's five-point scale distributed in two different sections. There were two additional questions, on the type of organization the employee would like to work and the other open ended question for suggestion or remarks was asked towards the end of the questionnaire with thanks note. The reliability coefficient of the questionnaire was found to be very high. There were 15 questions on motivation representing five Maslow's type need categories. In this section, the respondents were asked to indicate their level of satisfaction or dissatisfaction in respect of the above needs. The questionnaire also measures the attitude of the respondents towards the present monetary and non monetary incentive schemes by asking 13 questions in section two. These questions relate to the attitude of the respondents towards the necessity, effectiveness and gains from the present incentive schemes. There were three negative questions in this section. The reliability coefficient of this part of questionnaire was found to be very high.

Data analysis

The data analysis was done from data collected with questionnaire. SPSS software was used for data analysis. The tools used were comparison of mean scores, standard deviation, correlation analysis, multiple regression analysis and percentage analysis.

Findings

The correlation was carried out to find out the strengths of bi-variate relationship between different pairs of behavioural characteristics and attitude towards incentives. The correlation matrix in relation to the different variable has been obtained. When correlation was calculated considering the attitude towards the monetary and non monetary incentives as

independent variable and motivation as dependent variable following results were obtained. As shown in Table 1, the overall two independent variables i.e. employee's attitude towards monetary incentives and attitude towards non – monetary incentives have very good correlation which was also highly significant. The correlation between monetary incentives and motivation was negative and significant at 0.05 level. The correlation between attitude towards non monetary incentives and motivation was found to be positive and highly significant at 0.01 level. Thus the third Null hypothesis was rejected and alternate hypothesis that was H33 = There is a co-relation between motivation with attitude towards monetary and non – monetary incentive schemes was accepted. The results suggest that employee shares similar attitude towards both types of incentives. The results also indicate that more of monetary incentives can actually lead to employee de -motivation. The reasons given by the respondents were that employees turn from “co- workers” to “competitors” due to more of monetary incentives. They become more result oriented than being creative in their jobs. The compelling urge to produce predefined results leads to more stress and affects adversely on health. More money has adverse impact on employee's habits like more alcoholism and attraction towards gambling. On the contrary the non monetary incentives brings in more team work and pride to their work group.

Percentage analysis

The data in table 2 shows that at early age employees prefers non-monetary incentives same was the case with employees of higher age group. Employees of middle age group prefers monetary incentives. The study reveals that the male prefers non-monetary incentives and females prefer monetary incentives. The female employees in their interviews said that they are the secondary source of income to the family and cannot take their job as carrier out of domestic responsibilities so they prefer job with more money over carrier prospects. The respondents by designation do not differ in their choice of incentive scheme, and shows similar inclination towards both the types of incentives. Same is the case with Background but it was seen that employees with urban background prefers monetary incentives over non – monetary incentives. In response to some specific questions related to motivation through monetary and non monetary incentives following results were obtained. 91% of the respondents opined that their absenteeism has been reduce after introduction of the incentive schemes. 78% of employees felt more motivated and 69% employees felt more satisfied with their job after the introduction of incentive schemes. 83% respondent felt the team work and cooperation between employees was increased. 89% of the respondents felt that quality of product have

been improved. 33% of employee perceived that monetary incentives put pressure to perform affecting their health and increased accidents. 37% of the respondents do not perceive monetary incentives were distributed in equitable proportions. 74% of employees felt that their organization is making effort to take care of the employees by way of incentives leading to higher motivation in them. The 43% of employees have preferred the organisation giving better pay package over organisations giving better work facilities and career prospects. The above result shows that majority of the respondent are of the opinion that incentives have impact on employee motivation. Hence, the first null hypothesis gets rejected and alternate hypothesis i.e. H11 = Employees perceive incentive schemes as a tool to improve employee motivation was accepted.

Regression Analysis

In order to predict the reflection of the independent variables on motivation, the regression coefficients were calculated. The partial R² coefficient which determines the amount of variance that was contributed by each predictor variable was also compared. Also the 'F' test to test the significance of total variance in dependent variable is tested. The model summary of the multiple regression analysis is given in Table no. 3(a).

Motivational model derived from above data works out to be.

$$\text{Motivation} = 10.304 + 1.118 * \text{Non-monetary incentives} + 0.160 * \text{Age} - 2.278 \text{ (If male)}$$

* indicates multiplication

Above regression analysis clearly states that employee motivation dependent on non-monetary incentives offered age and gender of the employee. Whereas the variables like monetary incentives, designation and background got excluded in the above equation. From above results the second null hypothesis gets rejected, and alternate hypothesis that the "Demographic Characteristics" of employees affect the impact of incentives on motivation, got accepted.

Conclusion

On the basis of these findings, it can be said with reasonable degree of confidence that overall a well designed incentive schemes could be perceived positively and likely to increase employee motivation. It was revealed in this study that more monetary incentives can lead to more differences among the employees and will have negative impact on employee motivation. In Indian context and psyche as per the outcome of the study non monetary incentives were preferred over the monetary incentives; this may be due to self esteem and socio-cultural values. the relationship between incentives and motivation.

As mentioned earlier traditionally organizations design the incentive packages according to

employee designation / job group. The incentives are paid more or less equally to the employees of same job group like managers, supervisors and workmen. This study reveals that the incentives should be offered on the basis of employee's age and gender regardless of his / her designation as the age and gender of an employee mediates the impact of incentives on motivation rather than the designation. This study differentiates itself from previous studies on this important aspect, and gives new perspective in designing effective and meaningful incentive schemes in future.

Suggestions

While setting the benchmarks for targets and incentive packages representation should be given to employees of all age group of both genders.

It is recommended that an emphasis should be given in formulating and percolating good The non- monetary incentives rather than monetary incentives in case of enhancing employee motivation.

Most commonly the incentives are distributed as per the employee's designation rather more emphasis should be given on employee's age and gender profile while designing the incentive packages as these are the most important intermediating variables rather than employees designation.

References

- [1] Gupta B. (1975) *Labour Incentive in India of Iron and Steel Industry. Research Abstract Quarterly*, 171-176.
- [2] Nair M.R.R. and Rao T.V. (1991) *Excellence through HRD, New Delhi, Tata McGraw Hill.*
- [3] Mathew H.(1983) *Developing employment package attracting and retaining best employees, Management Decision*, 28, 6.
- [4] Sharma A.M. (1991) *Understanding Wage System, New Delhi, Himalaya Publications.*
- [5] AneAndrew Ballentine., Nora McKenzie., Allen Wysocki., Karl Kapner (2003) *The role of monetary and non monetary incentives in workplace as influenced by career stage 1, University of Florida, Publication of Department of Food and Resources Economics, Institute of Food and Agricultural Sciences.*
- [6] Arfic Kohn. (1993) *Why incentives plan cannot work. Ultimate rewards, A Harvard Business Review book, edited by S.Kerr. Boston, MA: Harvard Business school press.*
- [7] Scott Jeffrey (2003) *Benefits of tangible Non Monetary Incentives, Executive white paper, University of Waterloo.*
- [8] Jain K.K., Jabeen Fauzia, Mishra Vinita and Gupta Naveen (2007)

- [9] *International Review of Business Research Papers* 3(5), 193 - 208.
Dale S. Rose, Stuart D. Sidle and Kristin H. Griffith (2007) *Organisational Research Methods*, 10(2), 225-246.
- [10] Maslow A. H. (1943) *Motivation and Personality*, New York, Harper.
- [11] Porter L.W., Steers R.M., Mowday R.T. and Boulian P.V. (1979) *Journal of Applied Psychology*.
- [12] Vroom V.H. (1964) *Work and Motivation*, New York, Wiley.

Table 1-Correlations – Incentives and Motivation

		Monetary Incentives	Non-Monetary Incentives	Motivation Score
Monetary Incentives	Pearson Correlation	1	.211(*)	-.245(*)
	Sig. (1-tailed)	.	.000	.004
Non-Monetary Incentives	Pearson Correlation	.211(*)	1	.533(**)
	Sig. (1-tailed)	.000	.	.000
Motivation Score	Pearson Correlation	-.245(*)	.533(**)	1
	Sig. (1-tailed)	.004	.000	.
	N	165	165	165

** Correlation is significant at the 0.01 level (1-tailed).

Table 2- Percentage analysis

Demographic Characteristics	No. Of Respondents	Prefers Monetary Incentives	Prefers Non- Monetary Incentives
Age			
22 – 34	66	39%	61%
35 – 47	61	72%	28%
48-- 60	38	41%	59%
Gender			
Male	77	24%	76%
Female	88	69%	31%
Designation			
Manager	32	47%	53%
Supervisor	50	43%	57%
Workers	83	54%	46%
Background			
Rural	93	45%	55%
Urban	92	61%	39%

Table 3 (a)- Model Summary

R	R Square	Adjusted Square	R	Std. Error of estimation
.664	.415	.399		6.692

Dependent variable – Motivation

Independent variable – Monetary incentives, Non –monetary Incentives, Age, Gender, Designation and background (Rural / Urban)

Table 3 (b)- Annova

Model		Sum of squares	df	Mean Square	F	Sig
1	Regression	5035.785	4	1258.946	28.113	.000
	Residual	7120.239	159	44.781		
	Total	12156.024	163			

Table 3(c) -Coefficients

Model		Un standardized coefficients		standardized coefficients	t	Sig
		B	Std. error	Beta		
1	Constant	10.304	5.106		2.018	.045
	Non-Monetary Incentives	1.118	1.116	.652	9.621	.000
	Monetary Incentives	.561	1.22	.309	4.601	.000
	Age	.160	.052	.919	3.059	.003
	Gender(Male)	-2.728	1.117	-.157	-2.441	.016