

# An Analytical and Comparative Study of Level of Employee Motivation in The Indian Automotive Industry

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## Abstract

### Purpose

Automotive industry enjoys a distinct place in the economy of our country, its annual contribution being around 7%. However, due to severe competition and uncertainties, the automotive industry is not enjoying a good health which can be improved to a great extent, by improving the employee motivation across all levels of employees, besides taking care of some other factors. The present study mainly identifies the level of employee motivation in the automotive industry.

### Research Design

The nature of the present study is, by and large, descriptive.

### Universe

The universe of the present study constitutes the Indian automotive industry.

### Population and Selection of Sample Units

Since there are three main hubs of the automotive industry in the country and further that, of these three hubs, the Gurugram-Manesar-Bawal industrial belt is the largest – thus representing the entire automotive industry of the country – the population of the present study consists of the employees of the units located in the aforesaid industrial belt. Following the purposive convenience sampling, a total of 12 units – four units from each of the three regions viz., Gurugram, Manesar and Bawal regions, were selected ensuring that of the four units from each of the three regions constitute two units employing not less than 500 employees and the other two employing more than 500 employees.

### Sample Size

315 employees – 105 from each of the three regions – who had filled in the questionnaires properly constitute the sample size.

### Data Collection and Research Instruments

The both primary and secondary sources were used, using two numbers of structured questionnaires, for collection of data. A total of 315 respondents – 105 respondents from each of the three regions, were selected. The research instruments used for the present study comprise Mean Index Scores, oneway ANOVA, Post HOC Test, etc.

### Objectives

- (i) To compare the level of employee motivation among respondents, across various levels, in all the three sample regions viz., Gurugram, Manesar and Bawal regions, individually i.e., region-wise, and
- (ii) To compare the respondents, across various levels, on six motives of perceived organization climate in all the regions of the Gurugram-Manesar-Bawal industrial belt, aggregated as a whole i.e., collectively or as one entity.

### Findings

There is a significant difference in the values of MM, LM, and NM, in respect of level of employee motivation at various levels of respondents in the sample units. While the level of employee motivation in the Gurugram and the Manesar sample units is in the order of MM, LM and NM i.e., in the decreasing mode, the same in the case of Bawal region sample units is slightly different i.e., in the order of MM, NM and LM, again in the decreasing mode. Besides there are significant differences in the perception of Organisational Climate in the case of Achievement, Extension and Control motives at various levels of respondents in the sample units of Gurugram-Manesar-Bawal industrial belt of the automotive industry, as a whole, or as one entity. Both Hypotheses, i.e., Ho1 and Ho2, stand rejected.

**Keywords:** Employee motivation, Organisation climate, Respondents, Hypothesis, ANOVA, Mean scores

## Introduction

The automotive industry plays a vital role in the economy of our country as its annual contribution to the GDP of the country revolves around 7%. The Indian automotive industry is the second largest world producer of two-wheelers and fifth largest producer of commercial vehicles. However, because of a lot of current and future uncertainties and also because of a severe domestic and global competition, the health of automotive industry needs a boost. In this direction, in addition to improvement in some other factors, the requirement of highly motivated employees working at different levels in the automotive industry, both regionally as well as nationally, is necessary, wherever required, which to a great extent depends on the organizational climate as perceived by the employees concerned. It is therefore, desirable to analyse and compare the employees, across various levels, on the six motives of perceived organization climate in the Indian automotive industry. While for the purpose of the present study, the employees have been divided into three levels (or categories) viz., non-managerial (NM) level, middle managerial (MM) level and lower managerial (LM) level, the various motives which can be measured as perception of organizational climate (MAO-C), consist of six motives viz., (i) Achievement, (ii) Expert Influence, (iii) Extension, (iv) Control, (v) Dependence, and (vi) Affiliation (the first three of these motives are functional and the last three are dysfunctional) (Pareek, U.,1989). Having made comparison of the level of employee motivation among respondents across various levels, in the sample regions, necessary steps can be taken wherever required, to boost the employee motivation. This is what the purpose of the present paper is.

### 1.1 Research Design

The present paper is, by and large, descriptive in nature as it attempts, using different statistical tools, to make a comparative study of respondents, across various levels on six motives of perceived organizational climate in the sample units, at the time of conducting survey.

### 1.2 Universe

The universe of the present study comprises the Indian automotive industry.

### 1.3 Population and Selection of the Sample Units

Since the Indian automotive industry is too large, the choice fell on the Gurugram-Manesar-Bawal industrial belt (Northern India) because it is one of the three main automotive hubs of the country, which produces two-thirds of the passenger cars and sixty percent of the motorcycles manufactured in India in addition to production of a huge quantity of components required for the industry. Pune and Ahemadnagar (Western India) and Chennai (Southern India) are the two other industrial hubs of automotive industry of India. In view of the fact that Gurugram-Manesar-Bawal industrial belt is the biggest automotive hub of the country, the population of the present study consists of the employees of the units located in the said industrial belt. Following the purposive convenience sampling, a total of 12 units i.e, four units from each of the three regions (Gurugram, Manesar and Bawal regions), were selected as the sample units for the present study, ensuring that four units from each of the aforesaid three regions – two units employing less than 500 employees and two units employing more than 500 employees.

### 1.4 Sample Size

Three percent of the total employees from the middle, lower and non-managerial levels, from each of the sample units, were chosen as sample. The top level employees who are too less in number and further that due to paucity of time they do not fill questionnaires and interact with the researchers.

### 1.5 Data Collection and Research Instruments

Both primary and secondary sources were used, using two numbers of structured questionnaires, for collection of data. A total of 315 respondents – 105 respondents from each of the three regions were -selected. The research instruments used for the present study comprise Mean Index Scores, oneway ANOVA, Post HOC Test, etc.

### 1.6 Research Objectives

There are the following two research objectives :

- (i) To compare the level of employee motivation among respondents, **across various levels**, in all the three sample regions viz., Gurugram, Manesar and Bawal regions, **individually** i.e, **region-wise**, and
- (ii) To compare the respondents, **across various levels**, on **six motives** of perceived organization climate, in all the regions of the Gurugram-Manesar-Bawal industrial belt, **aggregated as a whole** i.e, **Collectively** or **as one entity**.

### 1.7 Hypotheses

Following are the two hypotheses to be accepted or rejected :

1. Ho1: There is no statistically significant difference in the Level of Employee Motivation of the respondents in sample units of the Gurugram, Manesar and Bawal regions individually i.e. region-wise. This has been divided into three sub categories as follows:

- Ho1<sub>a</sub>: There is no statistically significant difference in the Level of Employee Motivation at various levels of respondents in the sample units of the Gurugram region.
- Ho1<sub>b</sub>: There is no statistically significant difference in the Level of Employee Motivation at various levels of respondents in the sample units of the Manesar region.
- Ho1<sub>c</sub>: There is no statistically significant difference in the Level of Employee Motivation at various levels of respondents in the sample units of the Bawal region.

2. Ho2: There is no statistically significant difference in the perception of Organisational Climate for all the six motives at various Levels of the respondents in the sample units of the Gurugram-Manesar-Bawal industrial belt, aggregated as a whole i.e. as one entity.

## 1.8 Analysis and Findings

Based on data, the analysis and findings are as follows :

Based on the data received from the respondents, the Mean Index Scores for perceived organizational climate among respondents aggregated as a whole or as one entity, in the sample units are reflected in Table 1 which represents mean scores of six motives of perceived organizational climate. Further, based upon mean scores, higher scoring 'motives' i.e. 'Control' and 'Dependency' motives, have been identified as dominant and backup motives respectively in the sample units of the Gurugram-Manesar-Bawal industrial belt, as a whole. Both Hypotheses, i.e. Ho1 and Ho2, stand rejected.

### 1.8.1 Comparison of the Level of Employee Motivation among respondents, across various levels, in all the three sample regions viz., Gurugram, Manesar and Bawal, individually i.e. region-wise (i.e. First Objective), (and testing of first Hypothesis i.e. Ho1 which has been sub divided into Ho1<sub>a</sub>,

Ho1<sub>b</sub>, and Ho1<sub>c</sub>)

Individual region-wise analysis and findings are as follows :

#### 1.8.1.1 Gurugram Region

**Comparison of Level of Employee Motivation among respondents, across various levels of respondents, in the sample units of Gurugram region (and also testing of the Ho1<sub>a</sub> Hypothesis of the present study, which reads as: "There is no statistically significant difference in the level of Employee Motivation at various levels of respondents in the sample units of the Gurugram region")**

In order to compare the Level of Employee Motivation among different categories of respondents, the tests were conducted as per Table 2 and Table 3.

Table 2 gives clear picture about the difference in the means of Employee Motivation in Gurugram region. If we see the value of ANOVA, we will find that the same is highly significant at 0.05 level of significance. There stands significant difference in comparison.  $F=(2,102)=230.810$   $p<0.05$ . This shows that the findings of ANOVA are highly significant in Gurugram region.

This leads to the result that, across various levels of respondents, there is a significant difference in the Level of motivation of respondents in the Gurugram region.

Employees of Gurugram region at all three levels (NM, LM, MM) on Employee Motivation were compared. The results show that the mean value for NM is 148.40, for LM is 195.46 and for MM is 233.51. Thus, these scores show that the mean value of MM level is significantly higher in comparison to other two levels.

The findings of Table 3 lead to the result that the Level of Employee Motivation is significantly higher in the case of Middle Management respondents, followed by Lower Management and Non-Managerial respondents respectively in the sample units of Gurugram region.

[Since, there is statistically significant difference in the values of MM, LM and NM, in respect of Level of Employee Motivation in Gurugram region, the null hypothesis Ho1<sub>a</sub> stands rejected].

#### 1.8.1.2 Manesar Region

**Comparison of Level of Employee Motivation among respondents, across various levels of respondents, in the sample units of Manesar region (and also testing of the Ho1<sub>b</sub> Hypothesis of the present study, which reads as: "There is no statistically significant difference in the level of Employee Motivation at various levels of respondents in the sample units of the Manesar region")**

In order to compare the Level of Employee Motivation among different categories of respondents, the tests were conducted as per Table 4 and table 5.

Table 4 gives clear picture of difference of Employee Motivation. If we see the value of ANOVA, we will find that the same is highly significant at .05 level of significance. There stands significant difference in comparison.  $F = (2,102) = 338.30$   $P < .05$ . This indicates that the findings of ANOVA are highly significant in Manesar region.

This leads to the result that, across various levels of respondents, there is a significant difference in the Level of Motivation of respondents, in the Manesar region.

Just like Gurugram region, all employees at all three categories (levels) are compared on Employee Motivation measure in Manesar region. Thus, if we see the analysis, we will find that mean value for first group, that is, NM is  $M = 135.46$ , while for LM mean is  $M = 190.90$ , and for MM the mean is  $M = 240.00$ . Hence, these scores show that Middle Management is significantly higher in comparison to other two levels in the Level of Employee Motivation.

The findings of Table 5 lead to the result that the Level of Employee Motivation is significantly higher in the case of Middle Management Respondents, followed by Lower Management and Non-Managerial Respondents respectively, in the same units of Manesar region.

[Since there is statistically significant difference in the values of MM, LM and NM, the null hypothesis ( $H_{01b}$ ) stands rejected].

### 1.8.1.3 Bawal Region

**Comparison of Level of Employee Motivation among respondents, across various levels of respondents, in the sample units of Bawal region (and also testing of the  $H_{01c}$  Hypothesis of the present study, which reads as: “There is no statistically significant difference in the level of Employee Motivation at various levels of respondents in the sample units of the Bawal region”)**

In order to compare the Level of Employee Motivation among different categories of respondents, the tests were conducted as per Table 6 and table 7.

Table 6 gives clear picture of difference of Employee Motivation at different levels (categories). If we see the value of ANOVA, we will find the same is highly significant at 0.05 level of significance. There stands significant difference in comparison  $F = (2,100) = 256.003$   $P > .05$ . This shows that the findings of ANOVA are highly significant in Bawal region.

This leads to the result that, across various levels of respondents, there is a significant difference in the Level of Motivation of respondents, in the Bawal region.

Through Table 7, the employees of the Bawal region at all three levels (NM, LM, MM) on Employee Motivation were compared. The results show that the mean value for NM is  $M = 135.49$ , for LM is  $M = 199.04$  and for MM is  $M = 238.10$ . Thus, these scores show that the mean value for MM level is significantly higher as compared to other two levels.

The findings of Table 7 lead to the result that the Level of Employee Motivation is significantly higher in the case of Middle Management respondents, followed by Lower Management respondents and Non-Managerial respondents respectively in the sample units of Bawal region.

[Since there is statistically significant difference in the values of MM, LM and NM, the null hypothesis ( $H_{01c}$ ) stands rejected].

The above analysis and findings in respect of the three regions (i.e. Gurugram, Manesar and Bawal), individually, lead to the result that if we make an overall comparison of all the three regions, i.e. Gurugram, Manesar and Bawal, we find that there are significant differences in the level of employee motivation, i.e. the mean value is significantly higher at the MM level as compared to the other two levels.

The findings of the study with regard to Objective 1 are supported to a great extent by Payne & Mansfield (1986), Gottfried (1990), Sharma (2015) and Singh (2015).

[Based on the above analysis and findings it can be concluded that the first hypothesis ( $H_{01}$ ) (i.e.  $H_{01a}$ ,  $H_{01b}$ ,  $H_{01c}$ ) also stands rejected as there are significant differences in the Level of Employee Motivation in all three regions– Middle Management is the highest on the Level of Employee Motivation, followed by Lower Management and Non-Managerial respondents respectively].

The above-mentioned findings and results obtained thereof, have been presented in a summarized form in Table 7(A), which is self-explanatory.

**1.8.2 Comparison of respondents, across various levels, on six motives of perceived Organisational Climate in the sample units of all the three regions of the Gurugram-Manesar-Bawal industrial belt, aggregated as a whole, or as one entity (i.e. Second Objective), (and also the testing of the First Hypothesis (i.e.  $H_{01}$ ) of the present study, which reads as: “There is no**

**statistically significant difference in the perception of Organisational Climate for all the six motives at various levels of the respondents in the sample units of the Gurugram-Manesar-Bawal industrial belt, aggregated as a whole i.e. as one entity”).**

As the ‘p’ value for Homogeneity of Variance test was less than 0.05 ( $p < 0.05$ ) making it significant, the researcher has used Welch Anova. Table 8 shows the results of the ANOVA test performed on employees in all the three regions as a whole. As per the result of Achievement motive, statistical significance value is less than 0.05 ( $p < 0.05$ ) making it statistically significant, Welch’s  $F(2, 312) = 19.822$ ,  $p < 0.05$ . Thus, it is evident from the above statistics that there is a significant difference for the motives Achievement among all the total employees of all the 3 regions taken together.

Similarly, for Extension value of ANOVA is  $F(2, 312) = 26.83$ ,  $p < 0.05$  and for Control motive, ANOVA value is  $F(2, 312) = 35.18$ ,  $p < 0.05$  which show that motive of Extension as well Control are highly significant.

However, the three other motives, Expert Influence, Dependence and Affiliation are found to be insignificant (refer Table 8).

The above analysis leads to the result that there is significant difference in the perception of three levels of respondents with regard to Achievement, Extension and Control motive but not in the case of remaining three motives.

### **1.8.2.1 POST HOC test for mean comparison of respondents on various motives of Organisational Climate measure in sample units of Gurugram-Manesar-Bawal industrial belt, as a whole, or as one entity**

Table 9 gives POST HOC test for group comparison. It is seen from Table of ANOVA, that following motives came out to be significant, ACHIEVEMENT, EXTENSION, CONTROL. These three motives are found to be significantly different in comparison while post hoc test allow to conclude which level group is significant.

For Achievement, result of Table 9 implies that the mean of MM (i.e., 47.1435) is significantly different from the means of LM (i.e., 39.9886) and NM (i.e., 39) whereas the difference between the LM and NM are found to be insignificant. For the mean difference between NM and MM i.e. 8.1435, standard error 1.2939,  $p < 0.05$ , implying the significant difference between two levels. Similarly, for the mean difference between MM and LM i.e. 7.1549, standard error 1.4632,  $p < 0.05$ , implying the significant difference between two levels.

Hence, it may be concluded that the mean value of MM is significantly higher than the means of NM and LM. Based upon it may be implied that variation for ‘Achievement’ among all three levels is caused by MM.

For Extension, result of Table 9 implies that the means of MM (i.e., 33.40), LM (i.e., 27.08) and NM (i.e., 21.87) are significantly different from the means of each other. For the mean difference between MM and NM i.e. 11.5361, standard error 1.7065,  $p < 0.05$ , implying the significant difference between two levels. Similarly, for the mean difference between LM and NM i.e. 5.2130, standard error 1.2835,  $p < 0.05$ , implying the significant difference between two levels. Finally, the mean difference between LM and MM i.e. 6.3231, standard error 1.9298,  $p < 0.05$ , implying the significant difference between two levels.

Hence, it may be concluded that the mean value of all the three levels are significantly different with each other for the motive Extension.

For Control, result of Table 9 implies that the means of MM (i.e., 35.31), NM (i.e., 49.39) and LM (i.e., 43.34) are significantly different from the means of each other. For the mean difference between NM and MM i.e. 14.0876, standard error 1.8008,  $p < 0.05$ , implying the significant difference between two levels. Similarly, for the mean difference between NM and LM i.e. 6.0498, standard error 1.3544,  $p < 0.05$ , implying the significant difference between two levels. Finally, the mean difference between LM and MM i.e. 8.0378, standard error 2.0364,  $p < 0.05$ , implying the significant difference between two levels.

Hence, it may be concluded that the mean value of all the three levels are significantly different with each other for the motive ‘Control’. The variation was found to be maximum at NM level followed by LM and MM respectively.

The remaining three motives namely i.e. ‘Expert Influence’, ‘Affiliation’ and ‘Dependency’ have not been taken here as they were found to be insignificant (refer Table 8).

The analysis leads to the result that so far as Achievement motive is concerned, the order of perception was found to be MM (highest), LM (moderate) and NM (lowest). With regard to Extension motive also, the order of perception was the same. However, in the case of Control, the order of perception was found to be NM, LM and MM i.e. just reverse of the perception found regarding Achievement and Extension. The findings of this study are supported to a great extent by Payne & Mansfield (1986), Gottfried (1990), Purohit & Wadhwa (2012), Singh (2015) and Sharma (2015) etc. where Control or Dependency motive was found to be either dominant or backup motive.

[Based on the above analysis and findings, it can be concluded that null hypothesis ( $H_0$ ) stands rejected as there are significant differences in the perception of Organisational Climate in the case of Achievement, Extension and Control motives at various levels of respondents in the sample units of Gurugram-Manesar-Bawal industrial belt of the automotive industry, as a whole, or as one entity].

The above – mentioned findings and results obtained thereof, have been presented in a summarised form in Table 9(A) below, which is self-explanatory.

## CONCLUSION

There is a significant difference in the values of MM, LM, and NM, in respect of level of employee motivation at various levels of respondents in the sample units. While the level of employee motivation in the Gurugram and the Manesar sample units is in the order of MM, LM and NM i.e, in the decreasing mode, the same in the case of Bawal region sample units is slightly different i.e, in the order of MM, NM and LM, again in the decreasing mode. Besides, there are significant differences in the perception of Organisational Climate in the case of Achievement, Extension and Control motives at various levels of respondents in the sample units of Gurugram-Manesar-Bawal industrial belt of the automotive industry, as a whole, or as one entity. Both Hypotheses, i.e, Ho1 and Ho2, stand rejected.

### (TABLES)

**Table 1 Mean Index scores for perceived Organisational Climate among respondents, aggregated as a whole, or as one entity, in the sample units**

Motives	N	Computed Mean Index	Ranking
Achievement	315	45	IV
Expert Influence	315	42	V
Extension	315	38	VI
Control	315	57	I
Dependency	315	55	II
Affiliation	315	48	III

Source: Primary Data

**Table 2 Mean Comparison of Level of Employee Motivation in the Gurugram Region**

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	113185.741	2	56592.870	230.810	.000
Within Groups	25009.593	102	245.192		
Total	138195.333	104			

Source: Primary Data

**Table 3 Post Hoc test to check the difference among the groups in the Gurugram region**

Multiple Comparisons						
Scheffe						
(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
NM	MM	-85.19574*	4.18049	.000	-95.5806	-74.8109
	LM	-47.06943*	3.41603	.000	-55.5553	-38.5835
MM	NM	85.19574*	4.18049	.000	74.8109	95.5806
	LM	38.12632*	4.32574	.000	27.3806	48.8720
LM	NM	47.06943*	3.41603	.000	38.5835	55.5553
	MM	-38.12632*	4.32574	.000	-48.8720	-27.3806

\*. The mean difference is significant at the 0.05 level.

Source: Primary Data

Note: NM=Non Managerial Employees, MM=Middle Management, LM=Lower Management

**Table 4. Mean Comparison of employees on Level of Employee Motivation in the Manesar region**

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	67456.748	2	33728.374	338.302	.000
Within Groups	10169.309	102	99.699		
Total	77626.057	104			

Source: Primary Data

**Table 5 Post Hoc test to check the difference among the groups in the Manesar region**

Multiple Comparisons						
Scheffe						
(I) Designation	(J) Designation	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
NM	MM	-104.53333*	5.10221	.000	-117.2079	-91.8588
	LM	-55.44242*	3.18925	.000	-63.3650	-47.5199
MM	NM	104.53333*	5.10221	.000	91.8588	117.2079
	LM	49.09091*	5.82995	.000	34.6085	63.5733
LM	NM	55.44242*	3.18925	.000	47.5199	63.3650
	MM	-49.09091*	5.82995	.000	-63.5733	-34.6085

\*. The mean difference is significant at the 0.05 level.

Source: Primary Data

Note: NM=NonManagerial Level Employees, MM=Middle Management level employees, LM=Lower Managerial Level Employees.

**Table 6 Mean Comparison of employees on Level of Employee Motivation in the Bawal Region**

ANOVA					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	137202.793	2	68601.396	256.003	.000
Within Groups	26797.130	100	267.971		
Total	163999.922	102			

Source: Primary Data

**Table 7 Post Hoc Test to check the difference among the groups in the Bawal region**

Multiple Comparisons						
Scheffe						
(I) Levels	(J) Levels	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
NM	MM	-102.68169*	5.52914	.000	-116.4209	-88.9425
	LM	-63.55442*	3.99434	.000	-73.4798	-53.6290
MM	NM	102.68169*	5.52914	.000	88.9425	116.4209
	LM	39.12727*	6.24321	.000	23.6137	54.6408
LM	NM	63.55442*	3.99434	.000	53.6290	73.4798
	MM	-39.12727*	6.24321	.000	-54.6408	-23.6137

Source: Primary Data

**Table 7(A) Findings in respect of First Objective, and Acceptance/Rejection of Hypotheses Ho1a, Ho1b and Ho1c (Refer Table 2 to Table 7)**

Based on ANOVA, whether Mean Comparison of level of Employee Motivation is Significant/Insignificant (at 0.5 level of significance)	(Based on Post Hoc Test) (Table 4.12), What is the significant Mean Difference, at different levels (categories of respondents)	Null - Hypothesis No. Rejected or Accepted	Findings supported by
<b>Gurugram Region</b> Significant (Table 2)	<u>Mean Values</u> MM (47.1435) LM (39.9886) NM (39.0) <u>Mean Value Diff.</u> NM – MM = -85.11 MM – LM = 38.05 LM – NM = 47.06	Ho2a Rejected (because of significant difference in mean comparison)	Payne and Mansfield (1986), Gottfried(1990), Sharma (2015)& Singh (2015)
<b>Manesar Region</b> Significant (Table 4)	<u>Mean Values</u> MM (33.40) LM (27.08) NM (21.87) <u>Mean Value Diff.</u> NM – MM = 104.53 MM – LM = 49.09 LM – NM = 55.44	Ho2b Rejected (because of significant difference in mean comparison)	
<b>Bawal Region</b> Significant (Table 6)	<u>Mean Values</u> MM (35.31) NM (49.39) LM (43.34) <u>Mean Value Diff.</u> NM – MM = 102.68 MM – LM = 39.06 LM – NM = 63.55	Ho2c Rejected (because of significant difference in mean comparison)	

Source: Based on Table 2 to Table 7

**Table 8 Comparison of various motives of perceived Organisational Climate, across various levels, in the sample units of the Gurugram-Manesar-Bawal industrial belt, aggregated as a whole, or as one entity**

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
<b>ACHIEVEMENT</b>	Between Groups	1989.931	2	994.966	19.822	.000
	Within Groups	15660.990	312	50.195		
	Total	17650.921	314			
<b>EXPERT INFLUENCE</b>	Between Groups	88.917	2	44.459	1.352	.260
	Within Groups	10259.794	312	32.884		
	Total	10348.711	314			
<b>EXTENSION</b>	Between Groups	4686.081	2	2343.041	26.836	.000
	Within Groups	27241.049	312	87.311		
	Total	31927.130	314			
<b>CONTROL</b>	Between Groups	6842.541	2	3421.271	35.189	.000

	Within Groups	30333.979	312	97.224		
	Total	37176.521	314			
<b>DEPENDENCE</b>	Between Groups	34.461	2	17.230	.561	.571
	Within Groups	9580.282	312	30.706		
	Total	9614.743	314			
<b>AFFILIATION</b>	Between Groups	285.556	2	142.778	3.941	.020
	Within Groups	11303.765	312	36.230		
	Total	11589.321	314			

Source: Primary Data

**Table 9 Games-Howel : Post HOC test used to find significant group**

Multiple Comparisons							
Dependent Variable	(I) Level	(J) Level	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
<b>ACHIEVEMENT</b>	NM	MM	-8.1435*	1.29396	.000	-11.3261	-4.9610
		LM	-.98861	.97322	.597	-3.3823	1.4051
	MM	NM	8.14354*	1.29396	.000	4.9610	11.3261
		LM	7.15493*	1.46326	.000	3.5560	10.7539
	LM	NM	.98861	.97322	.597	-1.4051	3.3823
		MM	-7.15493*	1.46326	.000	-10.7539	-3.5560
<b>EXTENSION</b>	NM	MM	-11.53616*	1.70656	.000	-15.7335	-7.3388
		LM	-5.21302*	1.28355	.000	-8.3700	-2.0561
	MM	NM	11.53616*	1.70656	.000	7.3388	15.7335
		LM	6.32314*	1.92985	.005	1.5766	11.0697
	LM	NM	5.21302*	1.28355	.000	2.0561	8.3700
		MM	-6.32314*	1.92985	.005	-11.0697	-1.5766
<b>CONTROL</b>	NM	MM	14.08763*	1.80084	.000	9.6584	18.5169
		LM	6.04980*	1.35445	.000	2.7185	9.3811
	MM	NM	-14.08763*	1.80084	.000	-18.5169	-9.6584
		LM	-8.03783*	2.03647	.000	-13.0466	-3.0290
	LM	NM	-6.04980*	1.35445	.000	-9.3811	-2.7185
		MM	8.03783*	2.03647	.000	3.0290	13.0466

\*. The mean difference is significant at the 0.05 level.

MM=Middle management employees.  
LM=Lower Management employees.  
NM=Non-Managerial Level.

Source: Primary Data

**Table 9(A) Findings in respect of Third Objective and acceptance/rejection of relevant hypothesis (i.e. Ho1) (Refer Tables 8 & 9)**

Based on ANOVA, which Motives were found to be Statistically Significant (comparatively)	Motives found to be Statistically Insignificant comparatively	(Based on Post Hoc Test) (Table 4.10), What is the significant Mean Difference, at different levels (categories of respondents)	Null - Hypothesis No. Rejected or Accepted	Findings Supported by																								
Achievement, Extension & Control (Table 8)	Expert Influence, Dependency & Affiliation (Table 8)	<p>Level of perception in respect of Achievement Motive:</p> <table border="0"> <tr> <td><u>Mean Values</u></td> <td><u>Mean Value Difference</u></td> </tr> <tr> <td>MM (47.1435)</td> <td>NM – MM = -8.1435</td> </tr> <tr> <td>LM (39.9886)</td> <td>MM – LM = 7.1549</td> </tr> <tr> <td>NM (39.0)</td> <td>LM – NM = -0.9886</td> </tr> </table> <p>Level of perception in respect of Extension Motive:</p> <table border="0"> <tr> <td><u>Mean Values</u></td> <td><u>Mean Value Difference</u></td> </tr> <tr> <td>MM (33.40)</td> <td>NM – MM = 11.53</td> </tr> <tr> <td>LM (27.08)</td> <td>MM – LM = 6.32</td> </tr> <tr> <td>NM (21.87)</td> <td>LM – NM = 5.21</td> </tr> </table> <p>Level of perception in respect of Control Motive:</p> <table border="0"> <tr> <td><u>Mean Values</u></td> <td><u>Mean Value Difference</u></td> </tr> <tr> <td>MM (35.31)</td> <td>NM – MM = 14.08</td> </tr> <tr> <td>NM (49.39)</td> <td>MM – LM = -8.03</td> </tr> <tr> <td>LM (43.34)</td> <td>LM – NM = 6.05</td> </tr> </table>	<u>Mean Values</u>	<u>Mean Value Difference</u>	MM (47.1435)	NM – MM = -8.1435	LM (39.9886)	MM – LM = 7.1549	NM (39.0)	LM – NM = -0.9886	<u>Mean Values</u>	<u>Mean Value Difference</u>	MM (33.40)	NM – MM = 11.53	LM (27.08)	MM – LM = 6.32	NM (21.87)	LM – NM = 5.21	<u>Mean Values</u>	<u>Mean Value Difference</u>	MM (35.31)	NM – MM = 14.08	NM (49.39)	MM – LM = -8.03	LM (43.34)	LM – NM = 6.05	Ho1 Rejected (due to significant difference in the perception of respondents about Achievement, Extension & Control motives) Note: - There three groups: NM & MM, MM & NM, and LM & NM. (Confidence Interval = 98% i.e. 100 – 95% = 5 = 5/100 = .005)	Payne and Mansfield (1986), Gottfried (1990), Purohit and Wadhwa (2012), Sharma ((2015) & Singh (2015).
<u>Mean Values</u>	<u>Mean Value Difference</u>																											
MM (47.1435)	NM – MM = -8.1435																											
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Source: Based on Table 8 and Table 9

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