

**INVESTIGATING THE IMPACT OF CREATIVE CLIMATE FACTORS AND  
CREATIVE SELF-EFFICACY ON EMPLOYEE ENGAGEMENT AMONG  
THE EMPLOYEES OF AUTO COMPONENT MANUFACTURING  
ORGANIZATIONS IN COIMBATORE DISTRICT**

Thesis submitted to Bharathiar University, Coimbatore

for the award of the degree of

**DOCTOR OF PHILOSOPHY IN MANAGEMENT**

By

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**College for Excellence**

**(Autonomous Institution - Affiliated to Bharathiar University)**

**(Re-accredited with 'A' Grade by NAAC)**

**An ISO 9001:2008 Certified Institution**

**COIMBATORE - 641004**

**TAMILNADU, INDIA**

**SEPTEMBER 2016**

## *Chapter V*

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## CHAPTER V

### FINDINGS, SUGGESTIONS AND CONCLUSION

#### 5.1 FINDINGS

The purpose of the present study is to identify the factors that foster Individual Creativity, Innovative Work Behaviour and Employee Engagement among the employees in Auto component manufacturing organisations in Coimbatore district. Based on the objectives relevant hypothesis are framed. Data is collected from the employees working in Automotive component manufacturing organisations listed with ACMA in Coimbatore district. The collected data is analysed using relevant tools using the software's SPSS and SPLS. The findings of the study will help the Automotive Component Manufacturing Organisations to provide a climate that is conducive and enhances the employees' creativity. The findings of the study are discussed in line with the following six questions in tune with the objectives and hypotheses of the study:

- Mapping the demographic profile of the respondents.
- Does the level of study variables vary across respondents of varied demographic profile?
- Do the creative climate factors moderate the relationship between creative self-efficacy and individual creativity?
- Is there a relationship between the Creative Climate Factors, Creative Self-Efficacy and Individual Creativity; Individual Creativity and Innovative Work Behaviour; and Innovative Work Behaviour and Employee Engagement?
- What are the factors of Creative Climate and Creative Self-Efficacy that discriminate employees with high individual creativity from those with low individual creativity?
- Is there significant difference in the perception of respondents with regard to the study variables across employees of varied demographic profile?

##### 5.1.1 Demographic profile

Percentage analysis reveals that 86.1% of the respondents are Male. Among the 388 respondents considered for the study 195 respondents are between 25-35 years of

age, only 23 respondents are above 55 years of age. 54.6% of the respondents are married and 45.4% of the respondents are unmarried. Regarding educational background of the respondent's maximum (46.1%) of the respondents' qualification is UG-Engineering. Only 5.9% of the respondent's qualification is UG-Arts and Science. 42.5% of the respondents are in the middle level, and only 21.4% of the respondents occupy the senior level. The results reveal that 32.2% of the respondents have experience between 1-5 years and only 12.4% of the respondents have experience above 15 years.

### **5.1.2 Perception on the Study Variables**

To portray the opinion of the respondents with regard to the study variables descriptive statistics and average score analysis is performed.

- a. Results of descriptive statistics reveals that, other than the variables Risk taking (M=3.8948), Employee engagement (M=3.4596), Humour (M=3.2676) and Conflicts (M=3.2220) all other variables Involvement (M=4.2727), Supervisor support (M=4.2489), Autonomy (M=4.1718), Work group support (M=4.1435), Sufficient resources (M=4.1405), Debates (M=4.1332), Openness (M=4.0743), Idea time (M=4.0309), Individual creativity (M=4.0211), Organizational support (M=3.9981), Innovative work behaviour (M=3.9364) and Creative self-efficacy (M=3.9272) have a high mean value (equal to and above 4, on a scale of 1 to 5). Therefore, it can be concluded that respondents perceive more importance for most of the Creative Climate factors for their creative and innovative activities.
- b. The average score analysis helps to identify which group of respondents based on the demographic factors have extracted high score with regard to the study variables.
  - Male employees have extracted high score for Involvement, Autonomy, Openness, Idea Time, Debates, Sufficient Resources, Supervisor Support, Organizational Support, Individual Creativity and Innovative Work Behaviour compared with Female employees. Female employees have scored high for the variables namely Humour, Conflict, Risk Taking, Work group support, Creative Self-Efficacy and Employee Engagement.
  - 36-45 years age groups respondents have extracted high score for the factors Idea Time, Debates, Supervisor Support, Work Group Support, Creative Self-

Efficacy, Individual Creativity, Innovative Work Behaviour and Employee Engagement.

- PG-Engineering graduates' respondents have extracted high score for maximum of the study variables namely Involvement, Autonomy, Openness, Idea time, Sufficient resources, Supervisor support, Organisational support, Creative self-efficacy and Innovative work behaviour. Being a technical organization, it is likely that majority of the employees are technically qualified (ITI/Diploma and Engineering).
- Senior level employees have extracted high score for maximum variables namely Involvement, Autonomy, Idea time, Sufficient resources, Supervisor support, Organizational support, Work group support, Individual creativity, Creative self-efficacy, Innovative work behaviour and Employee engagement.
- Respondents with 11-15 years' experience have extracted high score for maximum of the study variables namely Involvement, Autonomy, Idea time, Humour, Debates, Sufficient resources, Work group support, Creative self-efficacy, Innovative work behaviour and Employee engagement.
- Results of average score analysis reveals that respondents of the age groups 25-35 years; 36-45 years and 46-55 years have extracted maximum score with regard to the study variables. Respondents with technical background of education, having over 11 years of experience and middle and senior level executives have extracted maximum score with regard to the most of study variables namely Involvement, Autonomy, Idea Time, Sufficient Resources, Supervisor Support, Organization Support, Work Group Support, Individual Creativity, Creative Self-Efficacy, Innovative Work Behaviour and Employee Engagement, which is a positive indication that employees perceive a conducive climate that fosters creativity and innovation thereby leading to enhanced creative outcomes.

### **5.1.3 Moderating effect of Creative Climate Factors**

Moderated Multiple Regression analysis is used to find the moderating effect of Creative Climate Factors on the relationship between Creative Self-Efficacy and Individual Creativity. Results reveal that a few of the Creative Climate factors has positive/negative; significant/not significant moderation effect.

- Risk Taking has a positive significant moderation effect
- Involvement, Autonomy, Openness, Sufficient Resources, Supervisor Support, Work Group Support and Organizational support have a negative significant moderation effect
- Idea Time, Conflicts and Debates have a negative and not significant moderation effect
- Humour has a positive and not significant moderation effect in the relationship between Creative Self-Efficacy and Individual Creativity.

The findings reveal that Creative Climate Factors on the whole has a negative significant moderating effect on the relationship between Creative Self-Efficacy and Individual Creativity, which is contrary to the hypothesis 3 (H<sub>3</sub>: "Creative climate factors positively moderates the relationship between Creative Self-Efficacy and Individual Creativity).

#### **5.1.4 Relationship between Individual Creativity, Innovative Work Behaviour and Employee Engagement**

To examine the relationship between Individual Creativity, Innovative Work Behaviour and Employee Engagement Correlation analysis and Regression analysis is performed.

- a) Correlation analysis is performed between Individual Creativity, Innovative Work Behaviour and Employee Engagement. Results reveals that Individual creativity ( $r=0.677$ ) has a high positive significant correlation with Innovative work behaviour. Further, Individual creativity ( $r=0.403$ ) has a moderate positive significant correlation with Employee engagement. Likewise, Innovative work behaviour ( $r=0.447$ ) also has a moderate positive significant correlation with Employee engagement.
- b) Regression analysis is performed to examine the impact of Individual Creativity on Innovative work Behaviour and Innovative Work Behaviour on Employee Engagement.
  - Results of regression analysis with Individual Creativity as independent variable and Innovative work behaviour as dependent variable reveals that, 45.7% variability in Innovative work behaviour is being predicted by Individual

creativity and Individual Creativity has a positive significant influence to the extent of 0.677 ( $\beta$ ) on Innovative work behaviour.

- Results of regression analysis with Innovative work behaviour as independent variable and Employee Engagement as dependent variable reveals that 19.7% variability in Employee Engagement is being predicted by Innovative Work Behaviour and Innovative Work Behaviour has a positive significant influence on Employee Engagement ( $\beta=0.447$ ).

### **5.1.5 Influence of Creative Self-Efficacy and Creative Climate Factors on Individual Creativity and its sequential effect on Innovative Work Behaviour and Employee Engagement**

In this section Correlation analysis, Regression analysis, Regression for sub groups and PLS-SEM analysis is performed.

- a) Correlation analysis is performed to examine the relationship between Creative Climate Factors, Creative Self-Efficacy, Individual Creativity, Innovative Work Behaviour and Employee Engagement.

The results reveal that from among the 12 factors of Creative Climate, significant positive correlation with Individual Creativity exist for eight factors namely Involvement, Autonomy, Openness, Idea time, Sufficient resources, Supervisor support, Organizational support and Work group support. High positive correlation exist for Involvement ( $r=0.605$ ), Autonomy ( $r=0.691$ ), Openness ( $r=0.506$ ), Sufficient resources ( $r=0.559$ ), Organizational support ( $r=0.579$ ) and Work group support ( $r=0.650$ ). Moderate positive correlation exist for Supervisor support ( $r=0.474$ ) and weak correlation exist for Idea time ( $r=0.274$ ) with Individual creativity. Creative self-efficacy ( $r=0.678$ ) also has a high significant positive correlation with Individual Creativity. Significant negative correlation exist between Individual creativity and three Creative Climate factors namely Humour ( $r=-0.160$ ), Risk taking ( $r=-0.159$ ) and Conflict ( $r=-0.124$ ). Debate ( $r=0.032$ ) has a weak positive correlation with Individual creativity but correlation is not significant at 1% or 5% level. Therefore it is evident that organisations expecting their employees to exhibit creativity, the organization should ensure they provide sufficient freedom, resources and support to the employees for evolving and realizing their ideas.

Correlation between Creative Climate Factors, Creative Self-Efficacy, Individual Creativity and Innovative work behaviour reveals that among the 12 Creative Climate Factors, significant positive correlation with Innovative work behaviour exist for eight factors namely Involvement, Autonomy, Openness, Idea time, Sufficient resources, Supervisor support, Organizational support and Work group support. Among the eight factors strong positive correlation exist for the factors Autonomy ( $r=0.550$ ), Openness ( $r=0.637$ ), Supervisor support ( $r=0.506$ ), Organizational support ( $r=0.584$ ). Moderate positive correlation exist for the factors Involvement ( $r=0.460$ ), Sufficient resources ( $r=0.418$ ) and Work group support ( $r=0.475$ ). Weak positive correlation exist for Idea time ( $r=0.148$ ). Creative Self-Efficacy ( $r=0.762$ ) and Individual creativity ( $r=0.677$ ) have significant positive correlation with Innovative work behaviour. Risk taking ( $r=-0.180$ ) factor alone, has a significant negative correlation with Innovative work behaviour. Debate ( $r=0.060$ ) is positively correlated with Innovative work behaviour but the correlation is not significant at 1% or 5% level of significance. Humour ( $r=-0.070$ ) and Conflict ( $r=-0.021$ ) is negatively correlated with Innovative work behaviour and correlation is not significant at 1% or 5% level of significance. For employees to exhibit tangible innovative outcomes the climate should be characterized with autonomy, openness among employees and effective supportive environment along with the employees being efficacious of his/her creative ability.

Correlation among the twelve Creative Climate Factors, Creative self-efficacy, Individual Creativity, Innovative work behaviour and Employee engagement reveals that among the twelve factors of Creative Climate, significant positive correlation with Employee engagement exist for eight factors namely Involvement, Autonomy, Openness, Idea time, Sufficient resources, Supervisor support, Organizational support and Work group support. Among the factors high correlation exist for Supervisor support ( $r=0.682$ ) and Openness ( $r=0.517$ ). Medium correlation exist for the factors Involvement ( $r=0.316$ ), Autonomy ( $r=0.456$ ), Sufficient resources ( $r=0.315$ ), Organizational support ( $r=0.452$ ) and Work group support ( $r=0.355$ ). Low correlation exist for the factor Idea time ( $r=0.177$ ) with Employee Engagement. Creative self-efficacy ( $r=0.400$ ), Individual creativity ( $r=0.430$ ) and Innovative work behaviour ( $r=0.447$ ) have significant positive correlation with Employee engagement. Risk taking ( $r=-0.180$ ) factor alone, has



significant negative correlation with Innovative work behaviour. Debate ( $r=0.050$ ) is positively correlated with Employee engagement but the correlation is not significant at 1% or 5% level. Humour ( $r=-0.094$ ), Conflict ( $r=-0.006$ ) and Risk taking ( $r=-0.047$ ) are negatively correlated with Employee engagement and correlation is not significant at 1% or 5% level of significance. Organisations that are keen in engaging their employees need to focus on nurturing and enhancing the creativity and innovative skills of their employees.

b) Regression analysis is carried out to find out the influence of Creative Climate Factors and Creative Self-Efficacy on Individual Creativity; Creative Climate Factors, Creative Self-Efficacy and Individual Creativity on Innovative Work Behaviour; Creative Climate Factors, Creative Self-Efficacy, Individual Creativity and Innovative Work Behaviour on Employee Engagement.

Results of regression analysis with Creative Climate Factors and Creative Self-Efficacy as independent variables and Individual Creativity as dependent variable reveals that, 66.3% variability in Individual Creativity is being predicted by the Independent variables, Creative Self-Efficacy, Work Group Support, Sufficient Resources, Risk Taking, Organisational Support and Idea Time. Among the independent variables Creative Self-Efficacy has the highest positive significant influence to the extent of 0.354 ( $\beta$ ) on Individual Creativity.

Results of regression analysis with Creative Climate Factors, Creative Self-Efficacy and Individual Creativity as Independent variables and Innovative Work Behaviour as Dependent variable reveals that, 67.9% variability in the dependent variable Innovative Work Behaviour is being predicted by the independent variables Creative Self-Efficacy, Openness, Individual Creativity, Organisational Support and Autonomy. Among the independent variables Creative Self-Efficacy has the highest positive significant influence to the extent of 0.449 ( $\beta$ ) on Innovative Work Behaviour.

Results of regression analysis with Creative Climate Factors, Creative Self-Efficacy, Individual Creativity and Innovative Work Behaviour as independent variables and Employee Engagement as dependent variable reveals that, 50.9% variability in the dependent variable Employee Engagement is being predicted by the independent

variables Supervisor Support, Openness, Sufficient Resources and Individual Creativity. Among the independent variables Supervisor Support has the highest positive significant influence to the extent of 0.596 ( $\beta$ ) on Employee Engagement.

c) Regression for sub groups is performed to identify whether Creative Self-Efficacy and the Creative Climate Factors has an influence on Individual Creativity among the respondents of each of the sub groups of the demographic factors.

**Age wise:** The study categorized respondents into 5 age groups namely below 25 years, 25-35 years, 36-45 years, 46-55 years and above 55 years. Creative self-efficacy has significant influence on Individual Creativity only among respondents of age group below 25 years and 25-35 years.

Among the respondents below 25 years of age, 84.7% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Two Creative Climate Factors namely Humour and Work Group support have a significant influence on Individual Creativity.

With respect to respondents of the age group 25-35 years, 60.6% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Four Creative Climate Factors namely Risk taking, Sufficient resources, Organizational support and Work group support have a significant influence on Individual Creativity.

Among the respondents of the age group 36-45 years, 64.4% variability in Individual Creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Among the Creative Climate Factors only one factor namely Sufficient Resources has a significant influence on Individual Creativity.

For the respondents of the age group 46-55 years, 66% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Here, none of the Creative Climate Factors has a significant influence on Individual Creativity.

With regard to the age group above 55 years, 82.5% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy.

Among the Creative Climate Factors three factors namely Involvement, Autonomy and Sufficient resources have a significant influence on Individual Creativity.

**Education wise:** The study categorized respondents into 5 groups namely ITI/Diploma, UG-Engineering, PG-Engineering, UG-Arts and Science and PG-Arts and Science based on their educational qualification. Creative self-efficacy has significant influence on Individual Creativity among UG-Engineering and PG-Arts and Science graduates.

Among the respondents of ITI/Diploma background, 13% variability in the dependent variable Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Two Creative Climate Factors namely Autonomy and Risk taking have a significant influence on Individual Creativity.

For the respondents of UG-Engineering background, 67.2% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Among the Creative Climate Factors two factors namely Humour and Work group support have a significant influence on Individual Creativity.

With regard to respondents of PG-Engineering background, 75.1% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Among the Creative Climate Factors only one factor Work-group support has a significant influence on Individual Creativity.

Among the respondents of UG-Arts and science background, 92.4% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Two Creative Climate Factors namely Involvement and Humour have a significant influence on Individual Creativity.

With regard to the respondents of PG-Arts and Science background, 88.6% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Among the Creative Climate Factors three factors namely Openness, Sufficient resources and Organizational support have a significant influence on Individual Creativity.

**Designation wise:** The study categorized respondents into 3 groups based on their Designation namely Senior level, Middle level and Junior level. Among the respondents

occupying the Middle level and Junior level, Creative self-efficacy has a significant influence on Individual Creativity.

Among the respondents occupying the Senior level, 27.7% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Creative Climate Factors Work group support alone has a significant influence on Individual Creativity.

Among the Middle level employees, 73.5% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Three Creative Climate Factors namely Conflict, Risk Taking and Work Group Support have a significant influence on Individual Creativity.

Among the respondents in the junior level, 77.7% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Among the Creative Climate Factors Autonomy, Openness, Humour, Sufficient Resources and Work Group Support have a significant influence on Individual Creativity.

**Experience wise:** The study categorized respondents into 5 groups namely less than 1 year, 1-5 years, 6-10 years, 11-15 years and Above 15 years based on their experience. Creative self-efficacy has a significant influence on Individual Creativity among the respondents of Less than 1 year, 1-5 years and 6-10 years of experience.

Among respondents with less than 1 year of experience, 89.1% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Among the Creative Climate Factors Idea Time and Humour have a significant influence on Individual Creativity.

Among the respondents with 1-5 years of experience, 73.9% variability in Individual Creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Five Creative Climate Factors namely Involvement, Conflict, Sufficient Resources, Organizational Support and Work Group Support have a significant influence on Individual Creativity.

For the respondents with 6-10 years' of experienced, 64% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Among the Creative Climate Factors Risk Taking, Sufficient Resources and Work Group Support have a significant influence on Individual Creativity.

Among the respondents with 11-15 years of experience, 32.9% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Among the twelve Creative Climate Factors, Risk taking alone has a significant influence on Individual Creativity.

Among respondents with over 15 years' of experience, 56.9% variability in Individual creativity is being predicted by the Creative Climate Factors and Creative Self-Efficacy. Three Creative Climate Factors namely Risk Taking, Sufficient Resources and Organizational Support have a significant influence on Individual Creativity.

- d) PLS-SEM analysis is performed for the model validation. The importance findings are
- Creative Climate Factors and Creative Self-Efficacy has positive significant influence on Individual Creativity (Adjusted  $R^2=0.665$ )
  - Creative Climate Factors, Creative Self-Efficacy and Individual Creativity has positive significant influence on Innovative Work Behaviour (Adjusted  $R^2=0.439$ )
  - Creative Climate Factors, Creative Self-Efficacy, Individual Creativity and Innovative Work Behaviour has positive significant influence on Employee Engagement (Adjusted  $R^2=0.803$ )

#### **5.1.6 Discriminating Factors of Creative Climate and Creative Self-Efficacy among respondents of High and Low Individual Creativity**

Discriminant analysis is performed to identify the variables that discriminate employees with high individual creativity from those with low individual creativity. Results reveal that among the twelve Creative Climate Factors six factors namely Involvement, Autonomy, Openness, Sufficient resources, Organizational support, and Work group support and Creative self-efficacy helps in discriminating the employees with high individual creativity from those with low individual creativity. Among the six

Creative Climate Factors Work group support and Sufficient resources are the highly ranked discriminating variables.

### **5.1.7 Differences in the perception of respondents across varied demographic profile**

To examine the perceived level of importance of the study variables ANOVA and t-Test is performed and results are tested at 5% level of significance.

#### **a) ANOVA**

**Based on Age:** The study categorized respondents into 5 age groups namely below 25 years, 25-35 years, 36-45 years, 46-55 years and above 55 years.

Testing at 5% level of significance, among the twelve Creative climate factors and four other study variables, six variables have significant difference in the perception across respondents of varied age groups, of which four are creative climate factors namely Humour, Conflict, Risk Taking and Work Group Support; Creative Self-efficacy and Innovative Work Behaviour also have significant differences in the perception of respondents of varied age groups.

For the Creative climate factor Humour, respondents below 45 years of age have high perception, compared to respondents above 45 years of age group. With regard to Creative climate factor Conflict, respondents below 35 years have high perception, compared to respondents above 45 years. Employees above 45 years of age group have high perception for the Creative climate factor Risk Taking, compared to employees below 45 years of age. For the Creative climate factor Work group support, respondents above 36 years of age have high perception, compared to respondents below 36 years of age. Regarding Creative Self-efficacy, respondents above 25 years of age have high perception, compared to respondents below 25 years of age. Finally respondents above 36 years of age high perception, with regard to the factor Innovative Work Behaviour compared to respondents below 36 years of age.

**Based on Educational qualification:** The study categorized respondents into 5 groups namely ITI/Diploma, UG-Engineering, PG-Engineering, UG-Arts and Science and PG-Arts and Science, based on their educational qualification.

Testing at 5% level of significance, among the Creative climate factors and other four study variables considered nine variables have significant difference ( $p < 0.05$ ) in the perception of respondents of varied Educational background. Among the 12 Creative climate factors, 6 factors namely Involvement, Autonomy, Openness, Humour, Organizational Support and Work Group Support; Creative Self-efficacy, Individual Creativity and Innovative Work Behaviour have significant difference in the perception of respondents.

Respondents who have completed ITI/Diploma, UG-Arts and Science, UG-Engineering and PG-Engineering have high perception towards Creative climate factor Organisational Support and Individual Creativity compared to respondents of other educational background.

With regard to Creative climate factor Involvement and Innovative Work Behaviour, employees who have completed ITI/Diploma, UG-Engineering and PG-Engineering have high perception compared to respondents of other educational qualification. Other than employees who have completed PG-Engineering, employees of other educational qualification have low perception towards Creative climate factor Autonomy and Creative Self-Efficacy.

Employees who are engineers have high perception with regard to Creative climate factor Openness. Respondents with undergraduate degree have high perception with regard to Creative climate factor Humour compared to ITI/Diploma and Post graduates. Regarding Creative climate factor Work Group Support, employees who have completed PG-Engineering and ITI/Diploma have high perception compared to respondents of other educational qualification.

**Based on Designation:** The study categorized respondents into 3 groups based on their designation as Senior level, Middle level and Junior level.

Testing at 5% level of significance, among the twelve Creative climate factors and four other study variables considered ten variables have significant difference ( $p < 0.05$ ) in the perception of respondents of varied designation levels. From the Creative climate factors 8 factors namely Involvement, Autonomy, Openness, Humour, Conflict, Risk Taking, Sufficient resources and Work Group Support; Creative Self-efficacy and

Individual Creativity have significant difference in the perception of respondents of varied designation levels.

Respondents belonging to Senior level have high perception with regard to the Creative climate factors Involvement, Autonomy, Work Group Support, and Creative Self-Efficacy and Individual Creativity compared to Junior and Middle level employees.

Respondents belonging to middle level have a low perception with regard to Creative Climate Factors Openness and Risk Taking compared to employees in Junior and Senior level.

Employees occupying the Junior and Middle level have a high perception towards the Creative Climate Factors Humour, Conflicts and Sufficient Resources compared to employees in Senior level.

**Based on Experience:** The study categorized respondents working Experience into 5 groups namely Less than 1 year, 1-5 years, 6-10 years, 11-15 years and Above 15 years.

Testing at 5% level of significance, among the twelve factors of Creative climate and other four other study variables considered twelve variables have significant difference ( $p < 0.05$ ) across respondents of varied Experience, from the Creative climate factors the variables are Involvement, Autonomy, Openness, Humour, Conflict, Risk Taking, Sufficient resources and Work Group Support. Creative Self-efficacy, Individual Creativity, Innovative work behaviour and Employee engagement also have significant difference in the perception of respondents. The variables namely Openness, Idea Time, Conflicts, Debates, Sufficient Resource, Supervisor Support and Organisational Support, from the other study variables Creative Self-Efficacy and Individual Creativity and Individual Creativity does not have a significant difference in their perception across respondents of varied Experience.

Respondents with above 11 years of experience have high perception with regard to the Creative climate factors Involvement, Autonomy and Work Group Support compared to respondents with below 11 years of experience. Employees with below 6 years of experience have low perception towards the factors Innovative Work Behaviour and Employee Engagement compared to employees with above 6 years of experience.



Regarding Creative climate factor Humour, respondents with below 15 years of experience have high perception compared to those who have over 15 years' of experience. Respondents with 6-10 years' of experience have low perception regarding the creative climate factor Risk Taking.

From the ANOVA it is found that, significance difference exist in the perception of respondents of all demographic variables; Age, Education, Designation and Experience. Significant difference exists for maximum number of variables across varied education levels and designation compared to age and experience levels.

#### **b) t-Test**

##### **➤ Based on Gender**

Testing at 5% level of significance, significant difference exists in the perception of male and female respondents for the variables namely Involvement, Autonomy, Humour, Conflict, Risk Taking, Sufficient Resources and Individual Creativity. Male respondents have scored a high mean value for the Creative climate factors Involvement, Autonomy, and Sufficient Resources and Individual Creativity, while female respondents have scored a high mean value for the Creative climate factors namely Humour, Conflict and Risk Taking.

##### **➤ Based on Marital status**

Testing at 5% level of significance, significant difference exists in the perception of married and unmarried respondents for the Creative climate factor Work Group Support, Creative Self-Efficacy and Innovative Work Behaviour and married employees have scored high mean value for all the factors.

From the t-test it is found that male employees and married employees are more attached with their creative and innovative work positively, for their career growth as well as the growth of the organisation. The management can use the findings of the study as a base, while choosing their employees for the innovative process of the organisation.

## **5.2 SUGGESTIONS**

This study throws light on the need for climate factors that fosters creativity and also the need for the employees to be efficacious that they are creative by nature, since

these factors influences the creative outcomes of the employees and also enhances their engagement levels. The results of the study have several important contributions to the Automotive industry and Auto component manufacturing organisations. Owing to the fast changes in the globalised market, the need for creativity and innovation has become a central element in organizations' competitive strategy (Galunic & Eisenhardt, 2001). The only way out of the downturn or recession is Innovation. The blood of innovation management is employee's creativity that arises and synergises from the culmination of different kinds of knowledge, expertise and experience of an employee. Innovation and creativity has a vital contribution to the competitive advantage of the organization, when it is well managed.

The findings of the study have practical implications for both management and employees of the organisation. It is essential that the management gains insights into the factors that influence the creativity of employees and provide a climate that is conducive and fosters creativity, and thereby paving way for engaging the employees. On the other hand employees should realize and appreciate the climate provided by the management and utilize the opportunities provide to them, thus leading to personal growth and development, and later translating the same in to organizational growth and development.

Findings of the study reveals that to demonstrate creativity at work employees should exhibit a high level of involvement, seek autonomy to execute their ideas, brainstorm the incubating ideas and later indulge in open and healthy discussions with their peers, require the necessary resources in terms of time, materials, and equipment and seek adequate support from their supervisor, peers, and organization to take forward their creative and innovative ideas. For example every week on Friday post lunch brainstorming session like "Time to think and explore" can be organized to discuss and debate on the sprouting creative ideas that addresses to solve issues in products, services and processes.

Success of any activity needs involvement from the person. The organisation should concentrate in developing their employees' participation towards the creative process, which can be done through encouragement, giving the right job to the right

person, enriching and enlarging the job as required and providing awards and rewards for employees' achievements etc. Further, the results emphasize that supportive environment is an important factor which influences the employees creativity positively. Thus, the organisation should develop the culture of a supportive environment by creating awareness among the employees regarding the importance of support and collaboration especially among the employees who are involved in the creative and innovative process and with less experience in the organization. The organization could arrange ice breaking sessions, awareness programs, tours, visits to premier organizations etc. to enable the employees enhance collegiality among the employees and change their interpersonal relationships.

Debates among employees influence the creative and innovative process effectively. Since, debates and dialogues among employees of different departments are required to be part of the day to day life of the organizations. Therefore it is essential to document such important and critical discussions which could be retrieved as and when required. Thus knowledge management – knowledge creation, accumulation and sharing is likely to directly influence the organizational development and it can effectively contribute to the sharing of internal and external information.

The study result reveals that, the employees give less importance for risk taking. Though, it is an essential factor for the success of creative and innovative process, the employees are likely to be risk averse, due to fear of failure. Therefore the organisation should welcome employees to take risks and the tolerance of mistake should be high, since, new ideas could be evolved only through trial and error basis, success and failure of the process cannot be predicted and failures are the road to success.

Another important finding of this study is that excessive nurture and care by the organisation is likely to hamper the employees' creativity, since employees are likely to move to their comfort zone. Therefore it is essential for the management to provide the threshold level of support that is likely to foster creativity and ensure that rest of the support is provided on demand by the employees.

Results reveal that Creative Self-Efficacy is a prerequisite for exhibiting creativity at the work. Irrespective of the resources and support provided by the organization,

unless the employees are efficacious creativity shall remain a dream. Hence, the organisation must ensure that their employees are efficacious and employees also realize but they are efficacious and help them unleash their creative potential.

The findings of the study reveal that among the Creative Climate factors two factors namely Supervisor Support, and Openness and Individual Creativity has a positive significant influence on Employee Engagement, whereas Sufficient resources has negative significant influence on Employee Engagement. Therefore the organization should encourage employees to think critically the required resources and seek support regarding the same from the organization, than the organization readily providing the required resources. In the present scenario organisations are mainly focusing on engaging their employees since it is little tough and important for organisations development. Engaging employees is not as easy task in the current VUCA era and with Gen Y employees entering the workforce in large numbers. Hence effective support from supervisors and openness at the workplace is likely to keep creative employees engaged at the workplace.

Another important finding of this study is that Work group support and availability of Sufficient resources are the two main factors that helps in discriminating employees exhibiting high individual creativity from those with low individual creativity. Therefore it is imperative for the organization to ensure that peers support each other and required resources are available to foster employees exhibiting high levels of creativity at workplace.

Furthermore, this study recommends Humour at work place. Though in the Indian context it is less prevalent, but since in the near future the workplace is likely to be dominated by Gen Y, who are characterized as fun loving, techno savvy, ambitious, team players and communicators, it necessitates the management to proactively bring in changes in the workplace that has scope for fun at the work place and at the same time ensuring that it does not affect the quantity and quality of work outcomes.

For the effective creativity and innovation to unleash at the work place both employers and employees should give their effective contribution. From the employee side, they should have greater involvement in their work and realize their creative

potential. Employees should involve in healthy discussions with their peers and should come forward to take acceptable level of risk. On the other hand the employer should ensure that sufficient support is rendered to the employees and have the required resources to accomplish their ideas.

### **5.3 CONCLUSION**

Today's globalized economy demands organizations to endure with a number of challenges in the external and internal environment and be efficacious in this challenging and vibrant environment. To compete with all the challenges organisations should be contemporary and concentrate in exhibiting new ideas in their practices/processes, products, and services beyond the expectations of their stakeholders. Unfortunately, this is not an easy task for all the organisations to conduct this process effectively. According to Ahmed (1998, pp.30), "Virtually all companies talk about innovation and the importance of "doing" innovation, many actually try to "do it", and only a few actually succeed in doing it", because being innovative in the current competitive economy is not easy, and the question is "how organizations can enhance innovativeness in their organisations?" Employees' creativity or Individual creativity is one of the most imperative dimensions which have attracted the attention of researchers in the area of business management as one of the critical contributors of organizational success (Hellman and Thiele, 2011). Individual or employee creativity is equally important for the organisation to exhibit their innovative products, services, processes since it is ultimately the employees who think, act and bring to reality their ideas addressing the organization's requirements.

As individual creativity has taken a vital role in the organisational innovative process, organisations need to develop and enrich their employees' ability to think and evolve new ideas. But it is not a onetime process and easy task for organisations to make their employees think critically and evolve innovative ideas. Studies reveal that there are many factors which influences and enriches the individual creativity positively among the employees within the organisation. Among that Creative Climate is one of the important factor which is likely to influence the employee creativity to the maximum level. Hence, this study considers Creative climate as a factor that encompasses dimensions like

involvement of the employee towards the creative process, freedom at work, time to brainstorm and take forward the creative ideas, sufficient resources for bringing the ideas to reality, a supportive environment for the evolving and realizing new ideas, risk taking, openness, fun at work place, healthy discussions regarding the creative processes. Moreover, this study considers Creative Self-Efficacy as one of the essential factors for establishing individual creativity, since, the individual/employee should be efficacious enough regarding their ability to think and act creatively.

The current study throws light on the factors that influences individual creativity and the sequential impact of Creative Climate Factors and Creative Self-Efficacy on Individual Creativity; Innovative Work Behaviour and Employee Engagement among the employees working in Auto component manufacturing organisations in Coimbatore district.

Results reveal that among the twelve Creative Climate Factors considered in this study, nine factors namely Involvement, Autonomy, Supervisor support, Work group support, organisational support, Sufficient resources, Debates, Openness and Idea time are perceived crucial by the respondents for exhibiting their creativity at work place and three factors Humour, Conflict and Risk taking though essential are not perceived important in the Indian Context.

The study uses Moderated Multiple Regression analysis to examine the moderating effect of each of the Creative climate factors on the relationship between Creative Self-Efficacy and Individual creativity. Results reveal that Creative Climate factor on the whole has a weak negative moderation effect on the relationship between Creative self-efficacy and Individual creativity, while Creative Climate factors namely Involvement, Autonomy, Openness, Idea time, Risk taking, Sufficient resources, Supervisor support, Work group support and Organisational support has a positive significant influence on Individual Creativity. This result emphasise on a point that over care and nurturing, sometimes will impact negatively the creative process. At this point the organisations should have clear idea with regard to the do's and don'ts regarding the innovation process.

Correlation analysis reveals that, Creative climate factors namely Involvement, Autonomy, Openness, Sufficient resources, Supportive environment and Creative self-efficacy are highly correlated with Individual creativity, Innovative Work Behaviour and Employee Engagement. Hence it is essential for organizations to provide a supportive environment along with a climate that enhances the involvement of the employees, autonomy at work, openness to share ideas and adequate resources to enable the employees evolve with creative and innovative ideas and transform them to reality.

Results reveal that effective individual creativity will get translated into innovative outcomes at the workplace. When an organisation is more effective in exhibiting their innovative processes, it is likely to result in the development (increased profits, market value, market shares, better financial performance, etc.) of the organisation, which is the primary goal of all organisations. Further, this study emphasizes on Employee Engagement, since organizations find it challenging in engaging their employees. Currently organisations have 3 generations namely baby boomers, Gen X and Gen Y working together. Hence engaging the employees of each of these generations is a daunting challenge. Results of the study highlight that support at the work place and openness among the members of the organization is likely to help keep the employees engaged at the work place.

The study also brings to light that Creative Climate Factors namely Involvement, Autonomy, Openness, Sufficient resources, Organizational support and Work group support; and Creative self-efficacy helps in discriminating employees with the high individual creativity and low individual creativity. Among the six Creative Climate Factors Work group support and Sufficient resources are the highly ranked discriminating variables. The study also reveals that significant differences exist in the perception of respondents of varied demographic profile with respect to the study variables.

On the whole, the current study emphasizes that to compete in the competitive and continuously changing market it is essential for organisations to innovate their Products, Processes and Services constantly, for which nurturing the creativity of the employees is crucial. Organisation should understand the importance and necessity of

employee's creativity for innovative outcomes for the organisation. This study reinforces that the belief among employees that they are efficacious with regard to evolving creative and innovative ideas along with a climate that fosters creativity and innovation is crucial for tangible creative outcomes in the organization. Similarly creative employees are likely to be more engaged and participate effectively in evolving tangible creative outcomes.

“Innovate every day” is becoming the mantra in every organisation, because of globalization and competition and engaging the employees is another big challenge faced by organizations. This study emphasizes that facilitating a climate that is conducive and that which fosters creativity and innovation and healthy augments among the employees is essential to realize creative and innovative outcomes of the employees and is also likely to help the organisations engage their employees.

#### **5.4 SCOPE FOR FURTHER STUDY**

The present study focused in identifying the Creative Climate factors that fosters Creativity and Innovation among the employees working in auto-component manufacturing organizations in Coimbatore District. The study also aimed in identifying the Creative Climate factors that influences the Employee Engagement. The study lays the foundation for similar studies to be carried out in other sectors and in other dimensions.

- The current study lays the platform for carrying out similar kind of research in other manufacturing industries that demands creativity and innovation; namely aerospace and defence, medical devices, biotechnology, pharmaceutical, mining, construction, energy etc., and in service sector namely Health Care, Banking and Financial Services, Telecommunication etc.
- Similar studies could be extended across the country in regions where automotive manufacturing clusters are prominent.
- Studies could be carried out with other factors apart from Individual Creativity that are likely to foster innovation and creativity among the employees.