# Chapter V

# Business Environmental Factors (Internal and External) and the Performance of Rural Micro, Small and Medium Manufacturing Enterprises

## CHAPTER V

# BUSINESS ENVIRONMENTAL FACTORS (INTERNAL AND EXTERNAL) AND THE PERFORMANCE OF RURAL MICRO, SMALL AND MEDIUM MANUFACTURING ENTERPRISES

## 5.1 INTRODUCTION

Crijns and Ooghi (2000) have revealed that each and every stage of firm's growth is the result of the two environments where the firm does its business, namely, the internal and external environments that affect each other. The internal environment of an enterprise comprises of firm-related factors that have a direct influence on firms' performance. These include production, finance, marketing and human resources. The external environmental factors are beyond the control of a firm and have an influence on their business success. These are Micro and Macro environmental factors (Bouazza, et al., 2015). According to Fauzi et al. (2010), performance is the organization's ability to attain its goals by using resources in an efficient and effective manner. Performance can be measured by using both financial and non-financial information (Ango, 2008).

The objective of the study is to assess both the internal and external environmental factors and to analyse the performance of rural Micro, Small and Medium manufacturing enterprises.

## 5.2 INTERNAL ENVIRONMENTAL FACTORS

### Business location

The following table 5.1 describes the respondents' order of priority of the reasons for locating their business units in rural areas. The respondents have been given rank 1 for the highest priority and 7 for the least priority. The mean ranks have been found out for each item and are exhibited in the table 5.1

**Table 5.1: Mean rank - Business Location**

| Reasons | Mean Rank | Actual Rank |
|---------|-----------|-------------|
| **Birth place** | **2.81** | **1** |
| Availability of Land | 2.90 | 2 |
| Availability of materials and labours | 3.42 | 3 |
| Availability of Subsidy | 4.33 | 6 |
| Adequate infrastructure facilities | 3.99 | 5 |
| Proximity to market | 3.58 | 4 |
| Tax incentives | 5.30 | 7 |

*(Source: Computed)*

It is seen from the table 5.1 that, the reason for business location, namely, 'birth place' (Mean 2.81) has gained the top priority in ranking by the respondents, followed by 'availability of land' (mean 2.90), 'availability of materials and labourers' (mean 3.42), 'proximity to market' (mean 3.58), 'adequate infrastructure facilities' (mean 3.99), 'availability of subsidy' (mean 4.33) and 'tax incentives' (mean 5.30). Hence, it is inferred that most of the respondents have preferred to locate their business units in their native place. This is to help the rural people by creating an employment opportunities, which in turn helps to control rural migration. Similar finding is reported in the study by Dipanjan Chakmraborty, 2014.

Friedman rank test has been used to find out whether there exists any significant variation in mean ranks.

$H_0$: **"The mean rank of the business location does not differ significantly among the respondents"**

**Table 5.1(a): Friedman rank test- Business location**

| N | Chi-Square | Df | Sig. |
|---|-----------|----|----|
| 375 | 663.325 | 6 | ** |

*(\*\* - Significant at 1 % level)*

The ranking as per the above table 5.1(a) implies that, the chi square value ($\chi^2$ = 663.325, p<0.000) is valid and statistically significant. Hence, the null hypothesis has been rejected at 1 per cent level and reveals that, there exists a significant variation among the respondents in the order of assigning ranks for business location.

**Source of Energy**

The following table 5.2 portrays the classification of respondents based on energy consumption.

**Table 5.2: Source of Energy**

| Source | No. of respondents | Per cent |
|---|---|---|
| **Electricity** | **280** | **74.7** |
| Coal | 29 | 7.7 |
| Wood | 17 | 4.5 |
| Diesel | 49 | 13.1 |
| **Total** | **375** | **100** |

*(Source: Computed)*

It is inferred from the table 5.2 that, out of 375 respondents, 74.7 per cent of the respondents are using electricity as the source, 13.1 per cent of them are using diesel, 7.7 per cent of them are using coal and 4.5 per cent of them are using wood as source of energy to run their business units. Hence, majority of the respondents are using electricity to run their business units, because power is the lifeline of manufacturing enterprises.

**Business Premises**

The following table 5.3 exhibits the respondents classification based on the nature of business premises.

**Table 5.3: Business Premises**

| Nature | No. of respondents | Per cent |
|---|---|---|
| **Own** | **192** | **51.2** |
| Rental | 155 | 41.3 |
| Lease | 19 | 5.1 |
| Hire purchase | 9 | 2.4 |
| **Total** | **375** | **100** |

*(Source: Computed)*

It is noted from the table 5.3 that, out of 375 respondents, 51.2 per cent of the respondents run the business units in their own land, 41.3 per cent of the respondents run their business units in rental land, 5.1 per cent of them have taken land on lease basis and 2.4 per cent of them have hired the land to carry their business operations. Hence, most of the respondents run the business units in their own premises.

**Production**

The rural entrepreneurs' level of agreeability towards production resources have been analysed and the results are depicted in the following table 5.4

**Table 5.4: Descriptive statistics- Production**

| Statements | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Materials can be accessed at reasonable rate | 375 | 1 | 5 | 3.11 | 1.106 |
| Cost of the land is less in rural areas | 375 | 1 | 5 | 3.61 | .697 |
| Availability of Labours at cheaper cost. | 375 | 1 | 5 | 3.51 | .785 |
| **Low cost machinery is used for production** | **375** | **1** | **5** | **4.05** | **1.137** |
| Absence of competition in the place of existence | 375 | 1 | 5 | 3.34 | 1.210 |
| Infrastructure facilities can be accessed at less cost | 375 | 1 | 5 | 3.30 | 1.075 |

*(Source: Computed)*

On a five point scale, the respondents have given ratings for production resources ranging from 5 to 1 where 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree. It is observed from the table 5.4 that, the highest mean score has been found for the statement 'Low cost machinery is used for production' (mean 4.05), followed by 'cost of the land is less in rural areas' (mean 3.61), 'availability of labours at cheaper cost'(mean 3.51), 'absence of competition in the place of existence' (mean 3.34), 'Infrastructure facilities can be accessed at less cost'(mean 3.30) and 'materials can be accessed at reasonable rate' (mean 3.11). Hence, based on high mean rating it is inferred that, most of the respondents run their business units with low cost machinery. It implies that the majority of the business units in rural areas are micro enterprises, they lack in accessing of new technologies which are highly expensive and not affordable by them.

**Firm characteristics Vs Production**

ANOVA and t-test have been used to test whether the 'Production' mean score has differed significantly among the respondents classified based on 'Firm characteristics' with the following null hypothesis. When there exists a significant difference in F-value at 5 per cent level, Post Hoc analysis has been applied to find which group of respondents differs in their mean perception from the others.

**H$_0$: "The mean score of the production does not differ significantly among the firm characteristics"**

The null hypothesis has been tested for each of the firm characteristics separately and the results are presented in the following table 5.5

**Table 5.5: Firm characteristics and Production**

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Business age (in Years) | 5-7 | 3.3594 | .78186 | 64 | | .237 | Ns |
| | 8-10 | 3.2989 | .76856 | 92 | | | |
| | 11-13 | 3.3239 | .77094 | 71 | | | |
| | More than 13 | 3.3806 | .78054 | 148 | | | |
| Generation | First Generation | 3.4069 | .77089 | 247 | 2.129 | | * |
| | Antecedents | 3.2292 | .76847 | 128 | | | |
| Legal Status | Sole Proprietorship | 3.3626 | .75220 | 296 | | 2.897 | ** |
| | Partnership | 3.2143 | .84133 | 70 | | | |
| | Private Limited Company | 3.8333 | .76376 | 9 | | | |
| Nature of Business Activity | Textile unit | 3.3592 | .72564 | 103 | | .132 | Ns |
| | Engineering unit | 3.3310 | .81335 | 142 | | | |
| | Metal Fabrication unit | 3.3095 | .79419 | 56 | | | |
| | Food Processing unit | 3.4146 | .75840 | 41 | | | |
| | Others | 3.3485 | .76758 | 33 | | | |
| Total Investment in Plant and Machinery | Less than Rs.25 lakhs | 3.3927 | .72935 | 264 | | 5.110 | ** |
| | Rs.25 lakhs-Rs.5 crores | 3.0688 | .84170 | 63 | | | |
| | Rs.5 crores – Rs.10 crores | 3.4549 | .85105 | 48 | | | |
| Sources of Finance | Own fund | 3.3077 | .75795 | 52 | | 2.138 | Ns |
| | Borrowed fund | 3.7619 | .67531 | 14 | | | |
| | Both | 3.3339 | .77728 | 309 | | | |

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Permanent Employees (in numbers) | Less than 5 | 3.4744 | .77328 | 150 | | | Ns |
| | 5 – 10 | 3.2651 | .79518 | 105 | | | |
| | 11 – 15 | 3.2061 | .76271 | 38 | | 1.803 | |
| | 16 – 20 | 3.3036 | .69545 | 28 | | | |
| | More than 20 | 3.2685 | .75404 | 54 | | | |
| Daily Labourers (in numbers) | Less than 5 | 3.3558 | .76486 | 141 | | | |
| | 5 – 10 | 3.4507 | .84246 | 98 | | | |
| | 11 – 15 | 3.3046 | .75492 | 87 | | 1.088 | Ns |
| | 16 – 20 | 3.2273 | .74455 | 22 | | | |
| | More than 20 | 3.1481 | .61556 | 27 | | | |
| Annual Turnover (in lakhs) | Less than Rs.20,00,000 | 3.4524 | .74810 | 175 | | | |
| | Rs.20,00,000-Rs.40,00,000 | 3.2681 | .78093 | 120 | | | |
| | Rs.41,00,000-Rs.60,00,000 | 3.1198 | .82331 | 32 | | 2.494 | Ns |
| | Above Rs.60,00,000 | 3.3056 | .77820 | 48 | | | |
| Annual Profit (in lakhs) | Less than Rs.1,00,000 | 3.4579 | .73899 | 99 | | | |
| | Rs.1,00,000-Rs.5,00,000 | 3.3288 | .81462 | 147 | | | |
| | Rs.5,00,001-Rs.10,00,000 | 3.1009 | .74390 | 76 | | 4.464 | ** |
| | More than Rs.10,00,000 | 3.5377 | .68144 | 53 | | | |

*(Source: Computed) (\*\* - significant at 1 per cent level, \* - significant at 5 per cent level, Ns-Not significant)*

**Business age**

It is inferred from the table 5.5 that, the respondents who are surviving in business for more than 13years have high level of agreeability (3.3806) and the respondents who are surviving in business for a period of 8-10 years have less

agreeability towards production resources (3.2989). However, the F-ratio value reveals that, the respondents' have not varied in their agreeability for production when they are classified based on business age. Hence, the null hypothesis has been accepted.

**Generation**

The first generation entrepreneurs have been highly agreed with the production resources (3.4069) than the antecedents (3.2292) who run their business units in rural areas. However, the t-value shows that, there exists a significant variation in the respondents' agreeability for production resources when classified based on generation. It indicates that, running a manufacturing unit is a challenging and equally intense learning process for the first generation entrepreneurs. Hence, the null hypothesis has been rejected at 5 per cent level of significance.

**Legal Status**

Table 5.5 shows that, the production mean score is found to be high among the respondents who run private limited companies (3.8333) and it is found to be low among the respondents who run their business units with partners (3.2143). There exists a noticeable difference in the mean score. However, with the F-ratio value it is clear that, the mean score has varied significantly among the respondents based on legal status. Thus, with the significant F-ratio value the null hypothesis has been rejected at 5 per cent level. The following table 5.5 (a) shows the post hoc result.

**Table 5.5 (a): Post hoc- Tukey B Test for Legal status and Production**

| Legal status | N | Subset for alpha = 0.05 | |
| --- | --- | --- | --- |
| | | 1 | 2 |
| Partnership | 70 | 3.2143 | |
| Sole Proprietorship | 296 | | 3.3626 |
| Private Limited Company | 9 | | 3.8333 |

*(Source: Computed)*

The post hoc analysis for 'Production' resources has varied across with legal status of the firm and 2 subsets have emerged. The table 5.5 (a) indicates that, the respondents who run their business units with partners (3.2143) fall in subset 1 have a low mean perception for production. Similarly, the respondents who run sole proprietorship business (3.3626) and Private limited companies (3.83333) fall in subset 2 have a high mean perception for production.

**Nature of Business**

The highest mean score (3.4146) is found among the respondents who run food processing units indicates the high agreeability for production resources and the low mean score (3.3095) is found among the respondents who run metal fabrication units in rural areas. However, the F-ratio value reveals that, the production mean score has not varied significantly among the respondents classified based on nature of business. Therefore, the null hypothesis has been accepted.

**Total Investment in Plant and Machinery**

The respondents who have invested Rs.5 crores–Rs.10 crores in plant and machinery have been highly agreed (3.4549) and the respondents who have invested between Rs.25 lakhs - Rs.5 crores in plant and machinery have agreed less (3.0688) with respect to production resources. However, with the F-ratio value it is clear that, there exists a significant difference in the respondents agreeability for production resources when they are classified based on total investment. Thus, with the significant F- value the null hypothesis has been rejected at 1 per cent level. The following table 5.5 (b) shows the post hoc result.

**Table 5.5 (b): Post hoc- Tukey B Test for Total investment Vs Production**

| Investment | N | Subset for alpha = 0.05 | |
|---|---|---|---|
| | | 1 | 2 |
| Rs.25 lakhs-Rs.5 crores | 63 | 3.0688 | |
| Less than Rs. 25 lakhs | 264 | | 3.3927 |
| Rs.5 crores –Rs.10 crores | 48 | | 3.4549 |

*(Source: Computed)*

The post hoc analysis for 'Production' factor has varied across with total investment in plant and machinery and has resulted in 2 subsets. It is observed from the table 5.5 (b) that, the respondents who have invested Rs.25 lakhs-Rs.5 crores in plant and machinery (3.0688) fall in subset 1 have a low mean perception for production. Similarly, the respondents who have invested less than Rs.25 lakhs (3.3927) and Rs.5 crores-Rs.10 crores (3.4549) in plant and machinery fall in subset 2 have a high mean perception for production resources.

**Source of Finance**

The respondents who have used borrowed funds to run their business units have high level of agreeability (3.7619) and the respondents who have used own funds to run their business units have low level of agreeability towards production resources (3.3077). However, the F-ratio value shows that, there has been no significant difference in the respondents agreeability for production when they are classified based on source of finance. Therefore, the null hypothesis has been accepted.

**Permanent Employees**

The production mean score is found to be high (3.4744) among the respondents who run their business units with less than 5 permanent employees and the mean score is found to be low (3.2061) among the respondents who run their business units with 11-15 permanent employees. There exists a marginal difference in the mean score. However, it is clear with the F-ratio value that the mean score has not varied significantly among the respondents classified based on permanent employees. Therefore, the null hypothesis has been accepted.

**Daily Labourers**

The highest mean score is found (3.4507) among the respondents who operate their business units with 5-10 daily labourers and the low mean score (3.1481) is found among the respondents who operate their business units with more than 20 daily labourers. With the F-ratio value, it is understood that, there has been no significant difference in the mean score which proves that, the respondents have not varied in their agreeability for production when they are classified based on daily labourers. Hence, the null hypothesis has been accepted.

**Annual Turnover**

The respondents who have an annual turnover of less than Rs.20 lakhs have been highly agreed (3.4524) and the respondents who have an annual turnover between Rs.41 lakhs-Rs.60 lakhs have agreed less with respect to production resources (3.1198). However, the F-ratio value evinces that, the respondents' agreeability towards production has not varied significantly based on annual turnover. Therefore, the null hypothesis has been accepted.

**Annual Profit**

The mean score is found to be high among the respondents who has earned an annual profit of more than Rs.10,00,000 (3.5377) and it is found to be low among the respondents who has earned an annual profit between Rs.5,00,001-Rs.10,00,000 (3.1009). With the F-ratio value, it is clear that, there exists a significant difference in the production mean score which implies, that the respondents have varied in their agreeability towards production factor when classified based on annual profit. Thus, with the significant F-ratio value, the null hypothesis has been rejected at 1 per cent level. The following table 5.5 (c) shows the post hoc result.

**Table 5.5 (c): Post hoc- Tukey B Test for Annual profit Vs Production**

| Annual profits (in lakhs) | N | Subset for alpha = 0.05 | |
| --- | --- | --- | --- |
| | | 1 | 2 |
| Rs.5,00,001-Rs.10,00,000 | 76 | 3.1009 | |
| Rs.1,00,000-Rs.5,00,000 | 147 | 3.3288 | |
| Less than Rs.1,00,000 | 99 | | 3.4579 |
| More than Rs.10,00,000 | 53 | | 3.5377 |

*(Source: Computed)*

The post hoc analysis for 'Production' factor has varied across with an annual profit of the firm and has resulted in 2 subsets. The table 5.5 (c) shows that, the respondents who has earned an annual profit between Rs.5,00,001-Rs.10,00,000 (3.1009)

and between Rs.1,00,000-Rs.5,00,000 (3.3288) fall in subset 1 have a low mean perception for production. Similarly, the respondents who have earned an annual profit of less than Rs.1,00,000 (3.4579) and more than Rs.10,00,000 (3.5377) fall in subset 2 have a high mean perception for production.

**Finance**

Finance is essential in every aspects of business to monitor its success in a highly competitive environment. The following table 5.6 describes the respondents' borrowings from external sources to run their business units.

**Table 5.6: Source of External funds (Multiple responses)**

| Sources | No. of respondents | Per cent |
|---|---|---|
| Banks and financial Institutions | 179 | 26.8 |
| **Family members** | **248** | **37.2** |
| Friends and Relatives | 130 | 19.5 |
| Moneylenders | 110 | 16.5 |

*(Source: Computed)*

It is observed from the table 5.6 that, most (37.2 per cent) of the respondents have received financial support from their family members, 26.8 per cent of the respondents have received support from Banks and Financial Institutions, 19.5 per cent of the respondents have received assistance from friends and relatives and 16.5 per cent of the respondents have obtained support from money lenders to run their business units. Hence, it is revealed that most of the respondents have received financial support in the form of equity from their family members.

**Financial assistance**

Small firms have less access to external financing which lead them to restrain in their operations and growth compared to large firms (Berger and Udell, 1998; Galindo and Schantiarelli, 2003). The following table 5.7 presents the respondents accessibility of funds from external sources.

**Table 5.7: Financial assistance from external sources**

| Factors | Description | No. of respondents | Per cent |
|---|---|---|---|
| Investment of own funds | **Less than 26%** | **120** | **32.0** |
| | 26-50% | 115 | 30.7 |
| | 51-75% | 79 | 21.1 |
| | More than 75% | 61 | 16.3 |
| Investment of borrowed funds | Less than 26% | 51 | 13.6 |
| | 26-50% | 74 | 19.7 |
| | **51-75%** | **136** | **36.3** |
| | More than 75% | 114 | 30.4 |
| Approach to Banks and Financial Institutions for fixed assets loan | **Public sector banks** | **208** | **55.2** |
| | Private sector banks | 85 | 23.0 |
| | TIIC | 15 | 4.0 |
| | SIDBI | 10 | 2.6 |
| | Others | 57 | 15.2 |
| Approach to Banks and Financial Institutions for working capital loan | **Public sector banks** | **158** | **42.1** |
| | Private sector banks | 100 | 27.0 |
| | TIIC | 12 | 3.0 |
| | SIDBI | 17 | 4.5 |
| | Others | 88 | 23.4 |
| Loan amount availed for fixed assets from Banks and Financial Institutions | **Less than Rs.25 lakhs** | **302** | **75.7** |
| | Rs.25 lakhs – Rs.5 crores | 73 | 19.5 |

| Factors | Description | No. of respondents | Per cent |
|---|---|---|---|
| Loan amount availed for working capital from Banks and Financial Institutions | Less than Rs.50000 | 67 | 17.9 |
| | Rs.50001–Rs.1 lakh | 140 | 37.3 |
| | **Rs.1 lakh – Rs.5 lakhs** | **153** | **40.8** |
| | Rs.6 lakhs – Rs.10 lakhs | 15 | 4.0 |
| Accessibility of Government subsidies and schemes | Yes | 126 | 33.6 |
| | **No** | **249** | **66.4** |
| **Total** | | **375** | **100** |

*(Source: Computed)*

The table 5.7 shows that, 32.0 per cent of the respondents have invested less than 26 per cent of own funds to run their business units, 30.7 per cent of the respondents have invested up to 26-50 per cent, 21.1 per cent of the respondents have invested up to 51-75 per cent and 16.3 per cent of the respondents have invested more than 75 per cent of their own funds to run the business units. Hence, it is revealed that most of the respondents have used own funds to run their business units.

36.3 per cent of the respondents have used borrowed funds up to 51-75 per cent, 30.4 per cent of the respondents have used more than 75 per cent, 19.7 per cent of the respondents have used up to 26-50 percent and 13.6 per cent of the respondents have used less than 25 percent of borrowed funds to run their business units. Hence, most of the respondents have used borrowed funds up to 51-75 per cent to run their business units. It is due to delay payment from the customers which impede their performance.

To acquire fixed asset loan, 55.2 per cent of the respondents have approached public sector banks, 23.0 per cent of the respondents have approached private sector banks, 15.2 per cent of the respondents have approached the others sources namely, Co-operative Bank, Regional Rural Bank and Money lenders, 4.0 per cent of the respondents have approached Tamil Nadu Industrial Investment Corporation of India (TIIC) and 2.6 per cent of the respondents have approached Small Industries

Development Bank of India (SIDBI). Hence, majority of the respondents have approached public sector banks to acquire fixed assets loan, because the Government incentives and subsidies are offered through commercial banks.

With respect to working capital loan, 42.1 per cent of the respondents have approached public sector banks, 27.0 per cent of the respondents have approached private sector banks, 23.4 per cent of the respondents have approached the other sources namely, Co-operative Bank, Regional Rural Bank and moneylenders, 4.5 per cent of the respondents have approached Small Industries Development Bank of India (SIDBI) and 3.0 per cent of the respondents have approached Tamil Nadu Industrial Investment Corporation of India (TIIC). Hence, most of the respondents have availed working capital loan from public sector banks to run their business units.

Out of 375 respondents, 75.7 per cent of them have received less than Rs.25 lakhs and 19.5 per cent of them have received up to Rs.25lakhs- Rs.5crores as fixed asset loan. Hence, majority of the respondents have availed less than Rs.25 lakhs as fixed asset loan.

To meet the short-term obligations and day-to-day expenses, 40.8 per cent of the respondents have availed working capital loan of Rs.1 lakh–Rs.5 lakhs, 37.3 per cent of the respondents have availed between Rs.50,001–Rs.1 lakh, 17.9 per cent of the respondents have availed less than Rs.50,000 and 4.0 per cent of the respondents have availed between Rs.6 lakhs–Rs.10 lakhs as working capital to run their business units. Hence, it is revealed that most of the respondents have availed working capital loan of Rs.1 lakh –Rs.5 lakhs.

Among 375 respondents, 33.6 per cent of them have received subsidy under various schemes and remaining 66.4 per cent of them have not received subsidy under any scheme offered by the Government. Hence, Majority of the respondents have not received any subsidy offered by the Government. It is due to the lack of information and moreover, informal payments to public servants have restrained their benefits.

**Financial resource**

The rural entrepreneurs' level of agreeability towards financial resources have been analysed and the results are exhibited in the following table 5.8

**Table 5.8: Descriptive Statistics - Financial resource**

| Statements | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| The firm employs the best financial mix / proper financial planning | 375 | 1 | 4 | 3.15 | .898 |
| Procurement of funds from different sources are at less cost | 375 | 2 | 5 | 3.47 | 1.007 |
| Loan amount is sanctioned on time | 375 | 1 | 4 | 3.13 | .886 |
| Rate of interest on business loan is moderate | 375 | 1 | 5 | 3.52 | 1.114 |
| Firm gets good banking services | 375 | 1 | 5 | 3.53 | 1.130 |
| Margin money loan from DIC is sufficient | 375 | 1 | 5 | 3.27 | .943 |
| Interest on Margin money loan is fair | 375 | 1 | 5 | 3.02 | 1.211 |
| Financial support from family, friends and relatives | 375 | 2 | 5 | 4.59 | .796 |
| Financial assistance from moneylenders are at moderate rate | 375 | 1 | 5 | 3.10 | .806 |

*(Source: Computed)*

On a five point scale, the respondents have given ratings for 'Financial resources' ranging from 5 to 1 where 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree. It is seen from the table 5.8 that, the highest mean score has been found for the statement 'Financial support from family, friends and relatives' (mean 4.59), followed by 'Firms get good banking services' (mean 3.53), 'Rate of interest on loan is moderate' (mean 3.52), 'Procurement of funds from different sources are at less cost' (mean 3.47), 'Margin money loan from District Industries Centre (DIC) is sufficient' (mean 3.27), 'The firm employs proper financial mix' (mean 3.15), 'Loan amount is sanctioned on time' (mean 3.13), 'Financial assistance from moneylenders are at

moderate rate (mean 3.10)' and 'Interest on margin money loan is fair' (mean 3.02). Hence, based on high mean rating it is evident that, most of the respondents have strongly agreed that financial assistance from family, friends and relatives are helpful to run their business units productively.

**Firm characteristics Vs Financial resource**

ANOVA and t-test have been used to test whether the mean score obtained for 'Finance' has differed significantly among the respondents' classified based on 'Firm characteristics' with the following null hypothesis. When there exists a significant difference in F-value at 5 per cent level, Post Hoc analysis has been applied to find which group of respondents differs in their mean perception from the others.

**H$_0$: "The mean score of the finance does not differ significantly among the firm characteristics"**

The null hypothesis has been tested for each of the firm characteristics separately and the results are presented in the following table 5.9

**Table 5.9: Firm characteristics and Finance**

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Business age (in Years) | 5-7 | 3.3056 | .74391 | 64 | | .699 | Ns |
| | 8-10 | 3.3176 | .71109 | 92 | | | |
| | 11-13 | 3.2222 | .78590 | 71 | | | |
| | More than 13 | 3.3769 | .75154 | 148 | | | |
| Generation | First Generation | 3.3536 | .73535 | 247 | 1.179 | | Ns |
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| | Private Limited Company | 3.2840 | .56413 | 9 | | | |

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
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| Nature of Business Activity | Textile units | 3.3085 | .59448 | 103 | | .159 | Ns |
| | Engineering units | 3.3138 | .76470 | 142 | | | |
| | Metal Fabrication units | 3.2897 | .91494 | 56 | | | |
| | Food Processing units | 3.3496 | .65242 | 41 | | | |
| | Others | 3.4074 | .90807 | 33 | | | |
| Total Investment in Plant and Machinery | Less than Rs.25 lakhs | 3.4190 | .72588 | 264 | | 4.335 | ** |
| | Rs.25 lakhs-Rs.5 crores | 3.0741 | .83363 | 63 | | | |
| | Rs.5 crores –Rs.10 crores | 3.3620 | .68272 | 48 | | | |
| Sources of Finance | Own fund | 3.3312 | .85742 | 52 | | .012 | Ns |
| | Borrowed fund | 3.3413 | .54340 | 14 | | | |
| | Both | 3.3182 | .73627 | 309 | | | |
| Permanent Employees (in numbers) | Less than 5 | 3.4141 | .75116 | 150 | | 1.244 | Ns |
| | 5 – 10 | 3.2349 | .75380 | 105 | | | |
| | 11 – 15 | 3.3304 | .82926 | 38 | | | |
| | 16 – 20 | 3.3452 | .60507 | 28 | | | |
| | More than 20 | 3.2099 | .71445 | 54 | | | |
| Daily Labourers (in numbers) | Less than 5 | 3.2884 | .73882 | 141 | | .828 | Ns |
| | 5 – 10 | 3.4127 | .82348 | 98 | | | |
| | 11 – 15 | 3.3065 | .72899 | 87 | | | |
| | 16 – 20 | 3.3838 | .66111 | 22 | | | |
| | More than 20 | 3.1523 | .60084 | 27 | | | |

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Annual Turnover (in lakhs) | Less than Rs.20,00,000 | 3.4197 | .76760 | 175 | | 1.932 | Ns |
| | Rs.20,00,000-Rs.40,00,000 | 3.2343 | .73035 | 120 | | | |
| | Rs.41,00,000-Rs.60,00,000 | 3.2292 | .81353 | 32 | | | |
| | Above Rs.60,00,000 | 3.2384 | .62895 | 48 | | | |
| Annual Profit (in lakhs) | Less than Rs.1,00,000 | 3.4377 | .77710 | 99 | | 2.610 | ** |
| | Rs.1,00,000-Rs.5,00,000 | 3.3228 | .75833 | 147 | | | |
| | Rs.5,00,001-Rs.10,00,000 | 3.1287 | .74658 | 76 | | | |
| | More than Rs.10,00,000 | 3.3732 | .60549 | 53 | | | |

*(Source: Computed) (\*\* - significant at 1 per cent level, \* - significant at 5 per cent level, Ns-Not significant)*

**Business age**

It is observed from the table 5.9 that, the respondents who are existing in the business for more than 13 years in rural areas have high level of agreeability (3.3769) and the respondents who are existing in the business for a period of 11-13 years have less agreeability (3.2222) towards financial resources. However, with the F-ratio value it is clear that, the respondents have not varied significantly in their agreeability towards financial resources when they are classified based on business age groups. Hence, the null hypothesis has been accepted.

**Generation**

The highest mean score (3.3536) is found among the first generation entrepreneurs than the antecedents (3.2578) who run their business units in rural areas. There exists a marginal difference in the mean score. However, with the t-value it is inferred that, the finance mean score has not varied significantly among the respondents classified based on generation. Hence, the null hypothesis has been accepted.

**Legal Status**

The finance mean score is found to be high among the respondents who run sole proprietorship business (3.3371) and it is found to be low among the respondents who run their business units with partners (3.2571). However, the F-ratio value shows that, the mean score has not varied significantly among the respondents classified based on legal status. Therefore, the null hypothesis has been accepted.

**Nature of Business**

The respondents who run the business units such as coir, plastics, paper etc., have obtained high mean score, which implies that they have high level of agreeability towards finance (3.4074) and the respondents who run metal fabrication units have less agreeability for finance (3.2897). It is evident with the F-ratio value that, there has been no significant difference in the respondents' agreeability for finance when they are classified based on nature of business. Hence, the null hypothesis has been accepted.

**Total Investment in Plant and Machinery**

The respondents who have invested less than Rs.25 lakhs in plant and machinery have been highly agreed (3.4190) and the respondents who have invested Rs.25 lakhs - Rs.5 crores in plant and machinery have agreed less with the financial resources (3.0741). The F-ratio value shows that, the respondents have varied in their agreeability for finance when they are classified based on total investment. Thus, with the significant F-ratio value, the null hypothesis has been rejected at 1 per cent level. The following table 5.9 (a) shows the post hoc result.

**Table 5.9 (a): Post hoc- Tukey B Test for Total Investment level Vs Finance**

| Investment level | N | Subset for alpha = 0.05 | |
|---|---|---|---|
| | | 1 | 2 |
| Rs.25 lakhs-Rs.5 crores | 63 | 3.0741 | |
| Rs.5 crores – Rs.10 crores | 48 | | 3.4190 |
| Less than Rs.25 lakhs | 264 | | 3.3620 |

*(Source: Computed)*

The Post hoc analysis for 'Finance' factor has varied across with total investment in plant and machinery and has resulted in 2 subsets. The table 5.9 (a) shows that, the respondents who have invested Rs.25 lakhs-Rs.5 crores in plant and machinery (3.0741) fall in subset 1 have a low mean perception for finance. Similarly, the respondents who have invested less than Rs.25 lakhs (3.3620) and between Rs.5 crores-Rs.10 crores (3.4190) in plant and machinery fall in subset 2 have a high mean perception for finance.

**Sources of Finance**

The finance mean score is found to be high (3.3413) among the respondents who have used only borrowed funds to run their business units and it is found to be low (3.3182) among the respondents who have used both own and borrowed funds to run their business units. There exists a marginal difference in the mean score. However, with the F-ratio value it is clear that, the mean score has not varied significantly among the respondents classified based on source of finance. Hence, the null hypothesis has been accepted.

**Permanent Employees**

With a mean score of 3.4141 it is evident that, the respondents who are operating their business units with less than 5 permanent employees have been highly agreed and the respondents who are operating their business units with more than 20 permanent employees have agreed less (3.2099) with respect to financial resources. The F-ratio value shows that, there has been no significant difference in the respondents' agreeability for finance when they are classified based on permanent employees. Hence, the null hypothesis has been accepted.

**Daily Labourers**

The highest mean score is found among the respondents who run their business units with 5-10 daily labourers indicating, high level of agreeability for finance (3.4127) and the low mean score is found among the respondents who run their business units with more than 20 daily labourers (3.1523). However, the F-ratio value shows that, the mean score has not varied significantly among the respondents classified based on daily labourers. Hence, the null hypothesis has been accepted.

**Annual Turnover**

The respondents who have an annual turnover of less than Rs.20 lakhs have been highly agreed (3.4197) and the respondents whose turnover falls between Rs.41 lakhs-Rs.60 lakhs have agreed less with respect to financial resources (3.2292). However, it is clear with the F-ratio value that, the respondents' have not varied in their agreeability for finance when classified based on annual turnover. Hence, the null hypothesis has been accepted.

**Annual Profit**

It is noted from the table 5.9 that, the mean score is found to be high among the respondents who have generated an annual profit of less than Rs.1,00,000 (3.4377) and it is found to be low among the respondents who have generated an annual profit between Rs.5,00,001-Rs.10,00,000 (3.1287). However, it is understood with the F-ratio value that, the mean score has differed significantly, which implies that the respondents vary in their agreeability for finance when they are classified based on annual profit. Thus, with the significant F-ratio value, the null hypothesis has been rejected at 1 per cent level. The following table 5.9 (b) shows the post hoc result:

**Table 5.9 (b): Post hoc- Tukey B Test for Annual profit Vs Finance**

| Annual profit (in lakhs) | N | Subset for alpha = 0.05 | |
|---|---|---|---|
| | | 1 | 2 |
| Rs.5,00,001-Rs.10,00,000 | 76 | 3.1287 | |
| Rs.1,00,000-Rs.5,00,000 | 147 | 3.3228 | 3.3228 |
| More than Rs.10,00,000 | 53 | 3.3732 | 3.3732 |
| Less than Rs.1,00,000 | 99 | | 3.4377 |

*(Source: Computed)*

The Post hoc analysis for 'Finance' factor has varied across with annual profit and has resulted in 2 subsets. From the table 5.9 (b) it is understood that, the respondents who have earned an annual profit between Rs.5,00,001-Rs.10,00,000 (3.1287) fall in subset 1. Similarly, the respondents who have earned an annual profit between Rs.1,00,000-Rs.5,00,000 (3.3228) and more than Rs.10,00,000 (3.3732) fall in both subsets 1 and 2. But, the mean score has been found closer to subset1. Hence, it is appropriate to include the groups falling in both subsets in to subset 1. The result indicates that, the respondents

who have earned an annual profit of more than Rs.1,00,000 fall in subset 1 have a low mean perception for finance and the respondents who have earned an annual profit of less than Rs.1,00,000 fall in subset 2 have a high mean perception for finance.

**Marketing**

Marketing is considered as an essential factor for the success of any enterprise. The rural entrepreneurs marketing strategy has been analysed and the results are shown in table 5.10

**Table 5.10: Marketing**

| Factors | Description | No. of respondents | Per cent |
|---|---|---|---|
| Place of Marketing | District level | 128 | 34.1 |
| | **State level** | **148** | **39.5** |
| | National level | 71 | 18.9 |
| | International level | 28 | 7.5 |
| Involvement of Intermediaries | **Agents** | **84** | **22.4** |
| | Government agencies | 4 | 1.1 |
| | Personally to the customers | 218 | 58.1 |
| | Others | 69 | 18.4 |
| Pricing policy | Demand price | 85 | 22.7 |
| | **Cost plus price** | **144** | **38.4** |
| | Competitors price | 24 | 6.4 |
| | Others (economical and penetration pricing) | 122 | 32.5 |
| Exporting | Yes | 28 | 7.5 |
| | **No** | **347** | **92.5** |
| | **Total** | **375** | **100** |

*(Source: Computed)*

From the table 5.10 it is inferred that, 39.5 per cent of the respondents have marketed their products to different districts, 34.1 per cent of the respondents have marketed within the district, 18.9 per cent of the respondents have marketed to different

states and 7.5 per cent of the respondents have marketed to other countries. Hence, most of the respondents have marketed their products to different districts.

Among 375 respondents, 58.1 per cent of the respondents have distributed products directly to the customers, 22.4 per cent of them have distributed through agents, 18.4 per cent of them have distributed through others namely, wholesalers and retailers who are located nearby markets and 1.1 per cent of them have distributed through Government agencies. Hence, majority of the respondents have distributed products directly to the customers to avoid intermediary cost which are highly expensive.

With respect to pricing, out of 375 respondents, 38.4 per cent of the respondents have followed cost plus pricing, 32.5 per cent of them have followed other pricing policies namely, economical and market penetration pricing, 22.7 per cent of them have fixed price based on demand and 6.4 per cent of them have fixed price based on competition. Hence, it is revealed that most of the respondents have followed cost plus pricing policy.

With regard to exporting, 92.5 per cent of the respondents have not exported and only 7.5 per cent of the respondents have exported their products to different countries. Hence, majority of the respondents have not experienced exporting due to various reasons such as lack of awareness, cumbersome procedures, high legal formalities etc.,

**Exporting countries**

The following table 5.11 portrays the classification of respondents based on exported countries:

**Table 5.11: Exporting**

| Countries | No. of respondents | Per cent |
|-----------|-------------------|----------|
| America | 5 | 17.9 |
| Europe | 7 | 25.0 |
| Middle east | 2 | 7.1 |
| **Asia specific** | **14** | **50.0** |
| **Total** | **28** | **13.1** |

*(Source: Computed)*

The table 5.11 shows that, out of 28 respondents, 50.0 per cent of them have exported to Asia specific, 25.0 per cent of them have exported to European countries, 17.9 per cent of them have exported to America and 7.1 per cent of them have exported to Middle East. Hence, it is found that most of the respondents have exported their products to Asia specific, because majority of textiles (cotton, apparel) and electronic products (machinery) manufactured by the rural Micro, Small and Medium enterprises have traded to East Asian countries. Similar finding

**Export Percentage in total sales**

The following table 5.12 shows the classification of respondents based on export percentage earned in total sales:

**Table 5.12: Export Percentage in total sales**

| Export Percentage | No. of respondents | Per cent |
|---|---|---|
| Less than 10 per cent | 9 | 32.1 |
| **10-25** per cent | **7** | **60.7** |
| 26-50 per cent | 2 | 7.2 |
| **Total** | **28** | **100** |

*(Source: Computed)*

From the table 5.12 it is understood that, among 28 respondents, 60.7 per cent of them have received 10-25 per cent on exports, 32.1 per cent of them have received less than 10 per cent and 7.2 per cent of them have received 26-50 per cent on exports. Hence, majority of the respondents have received 10-25 per cent on export in total sales.

**Marketing**

The rural entrepreneurs' level of agreeability towards marketing have been analysed and the results are presented in the table 5.13

131

**Table 5.13: Descriptive Statistics-Marketing**

| Statements | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| **Customers feedback are taken into account to improve the quality of production** | **375** | **2** | **5** | **4.04** | **.946** |
| Credit sales is encouraged | 375 | 2 | 5 | 3.81 | .935 |
| Products are displayed in trade fairs | 375 | 2 | 5 | 3.68 | 1.025 |
| Middlemen service charge is relatively low | 375 | 2 | 5 | 3.65 | 1.147 |
| Business links are supportive | 375 | 1 | 5 | 3.85 | 1.087 |

*(Source: Computed)*

On a five point scale, the respondents have given ratings for 'Marketing' ranging from 5 to 1 where 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree. It is observed from the table 5.13 that, the high mean score has been found for the statement 'customers feedback are taken into account' (mean 4.04), followed by 'business links are supportive' (mean 3.85), 'credit sale is encouraged' (mean 3.81), 'products are displayed in trade fairs' (mean 3.68) and 'middlemen service charges are relatively low' (mean 3.65). Therefore, based on high mean rating it is evident that, most of the respondents have agreed that the feedback from their customer provide useful insights to enrich the product quality.

**Firm characteristics Vs Marketing**

The following ANOVA and t-test table 5.14 reveals whether there exists any significant difference between marketing and firm characteristics with the following null hypothesis. When there exists a significant difference in F-value at 5 per cent level, Post Hoc analysis has been applied to find which group of respondents differs in their mean perception from the others.

**H$_0$: "The mean score of the marketing does not vary significantly among the firm characteristics"**

The null hypothesis has been tested for each of the firm characteristics separately and the results are presented in the table 5.14

**Table 5.14: Firm characteristics and Marketing**

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Business age (in Years) | 5-7 | 3.7969 | .78679 | 64 | | | |
| | 8-10 | 3.7370 | .92910 | 92 | | 0.368 | Ns |
| | 11-13 | 3.8056 | .86452 | 71 | | | |
| | More than 13 | 3.8541 | .80156 | 148 | | | |
| Generation | First Generation | 3.8534 | 0.81454 | 247 | 1.465 | | Ns |
| | Antecedents | 3.7156 | 0.88864 | 128 | | | |
| Legal Status | Sole Proprietorship | 3.8264 | .82584 | 296 | | | |
| | Partnership | 3.6829 | .93281 | 70 | | 1.429 | Ns |
| | Private Limited Company | 4.1111 | .48074 | 9 | | | |
| Nature of Business Activity | Textile units | 3.7961 | .76951 | 103 | | | |
| | Engineering units | 3.8268 | .90396 | 142 | | | |
| | Metal Fabrication units | 3.7429 | .82921 | 56 | | 0.124 | Ns |
| | Food Processing units | 3.8439 | .91380 | 41 | | | |
| | Others | 3.8121 | .74823 | 33 | | | |
| Total Investment in Plant and Machinery | Less than Rs.25 lakhs | 3.8364 | .80901 | 264 | | | |
| | Rs.25 lakhs-Rs.5 crores | 3.6413 | .89526 | 63 | | 1.474 | Ns |
| | Rs.5 crores –Rs.10 crores | 3.8583 | .93623 | 48 | | | |

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Source of Finance | Own fund | 3.8538 | .89715 | 52 | | | Ns |
| | Borrowed fund | 3.7714 | .77601 | 14 | | 0.103 | |
| | Both | 3.8000 | .83759 | 309 | | | |
| Permanent Employees (in numbers) | Less than 5 | 3.9200 | .81133 | 150 | | | |
| | 5 – 10 | 3.6914 | .89229 | 105 | | | |
| | 11 – 15 | 3.7263 | .77727 | 38 | | 1.350 | Ns |
| | 16 – 20 | 3.7143 | .86483 | 28 | | | |
| | More than 20 | 3.8185 | .84520 | 54 | | | |
| Daily Labourers (in numbers) | Less than 5 | 3.7957 | .84497 | 141 | | | |
| | 5 – 10 | 3.9388 | .77880 | 98 | | | |
| | 11 – 15 | 3.6897 | .88226 | 87 | | 1.048 | Ns |
| | 16 – 20 | 3.8000 | .80711 | 22 | | | |
| | More than 20 | 3.7630 | .93486 | 27 | | | |
| Annual Turnover (in lakhs) | Less than Rs.20,00,000 | 3.8731 | .76962 | 175 | | | |
| | Rs.20,00,000-Rs.40,00,000 | 3.7817 | .87313 | 120 | | 1.397 | Ns |
| | Rs.41,00,000-Rs.60,00,000 | 3.5500 | 1.03488 | 32 | | | |
| | Above Rs.60,00,000 | 3.7958 | .86491 | 48 | | | |
| Annual Profit (in lakhs) | Less than Rs.1,00,000 | 3.8909 | .76892 | 99 | | | |
| | Rs.1,00,000-Rs.5,00,000 | 3.8245 | .84753 | 147 | | | |
| | Rs.5,00,001-Rs.10,00,000 | 3.5816 | .96010 | 76 | | 2.518 | ** |
| | More than Rs.10,00,000 | 3.9208 | .73206 | 53 | | | |

*(Source: Computed) (\*\* - significant at 1 per cent level, \* - significant at 5 per cent level, Ns-Not significant)*

**Business age**

It is noted from the table 5.14 that, the respondents who are existing in the business for more than 13 years in rural areas have high level of agreeability (3.8541) and the respondents who are existing in the business for the period of 8-10 years have less agreeability towards marketing resources (3.7370). However, the F-ratio indicates that, there has been no significant difference in the respondents' agreeability for marketing when they are classified based on business age groups. Hence, the null hypothesis has been accepted.

**Generation**

The first generation entrepreneurs have been highly agreed with the marketing resources (3.8534) than the antecedents (3.7156). However, the t-value shows that the respondents have not varied significantly towards agreeability for marketing when classified based on generation. Hence, the null hypothesis has been accepted.

**Legal Status**

The mean score is found to be high among the respondents who run private limited companies (4.1111) and it is found to be low among the respondents who run their business units with partners (3.6829). However, the F-ratio value shows that, the marketing mean score has not varied significantly among the respondents classified based on legal status. Hence, the null hypothesis has been accepted.

**Nature of Business**

The respondents who run food processing units in rural areas have been highly agreed (3.8439) and the respondents who run metal fabrication units have agreed less with the marketing resources (3.7429). However, with the F-ratio value it is evident that, there has been no significant difference in the respondents' agreeability for marketing when they are classified based on nature of business. Hence, the null hypothesis has been accepted.

**Total Investment in Plant and Machinery**

The high mean score is found (3.8583) among the respondents who have invested Rs.5 crores –Rs.10 crores in plant and machinery and the low mean score is found (3.6413) among the respondents who have invested Rs.25 lakhs - Rs.5 crores in plant and

machinery. However, the F-ratio value shows that, the mean score has not varied significantly among the respondents classified based on total investment in plant and machinery. Hence, the null hypothesis has been accepted.

**Source of Finance**

The respondents who have used their own funds to run the business units have high level of agreeability (3.8538) and the respondents who have used borrowed funds to run the business units have low level of agreeability for marketing (3.7714). However, with the F-ratio value it is revealed that, the respondents have not varied in their agreeability towards marketing when they classified based on source of finance. Hence, the null hypothesis has been accepted.

**Permanent Employees**

The respondents who operate their business units with less than 5 permanent employees have obtained the high mean score (3.9200) which implies that, they have high agreeability for marketing resources and the respondents who operate their business units with 5-10 permanent employees have obtained the least mean score (3.6914). However, the F-ratio shows that, there has been no significant difference in the respondents agreeability for marketing when they are classified based on permanent employees. Hence, the null hypothesis has been accepted.

**Daily Labourers**

The marketing mean score is found to be high (3.9388) among the respondents who run their business units with 5-10 daily labourers and it is found to be low among the respondents who run their business units with 11-15 daily labourers (3.6897). However, it is inferred with the F-ratio value that, the mean score has not varied significantly among the respondents classified based on daily labourers. Hence, the null hypothesis has been accepted.

**Annual Turnover**

The respondents who have an annual turnover of less than Rs.20 lakhs have been highly agreed (3.8731) and the respondents who have an annual turnover between Rs.41 lakhs-Rs.60 lakhs have agreed less with respect to marketing resource (3.5500).

However, with the F-ratio value, it is understood that the respondents have not been varied in their agreeability for marketing when they are classified based on annual turnover. Hence, the null hypothesis has been accepted.

**Annual Profit**

The respondents who have earned an annual profit of more than Rs.10 lakhs have high level of agreeability (3.9208) and the respondents who have earned an annual profit of Rs.5,00,001-Rs.10,00,000 have less agreeability towards marketing resource (3.5816). However, the F-ratio value shows that, there exists a significant variation in the respondents' agreeability for 'Marketing' factor when they are classified based on annual profits. Thus, with the significant F-ratio value, the null hypothesis has been accepted. The following table 5.14 (a) shows the post hoc result.

**Table 5.14 (a): Post hoc- Tukey B Test for Annual profit Vs Marketing**

| Annual profit (in lakhs) | N | Subset for alpha = 0.05 | |
| --- | --- | --- | --- |
| | | 1 | 2 |
| Rs.5,00,001-Rs.10,00,000 | 76 | 3.5816 | |
| Rs.1,00,000-Rs.5,00,000 | 147 | 3.8245 | 3.8245 |
| Less than Rs.1,00,000 | 99 | 3.8909 | 3.8909 |
| More than Rs.10,00,000 | 53 | | 3.9208 |

*(Source: Computed)*

The Post hoc analysis for 'marketing' factor has varied across with respondents' annual profit and has resulted in 2 subsets. The respondents who have earned an annual profit between Rs.5,00,001-Rs.10,00,000 (3.5816) fall in subset 1. Similarly, the respondents who have earned an annual profit between Rs.1,00,000-Rs.5,00,000 (3.8245) and less than Rs.1,00,000 (3.8909) fall in both subsets 1 and 2. But the mean score has been found closer to subset1. Hence, it is appropriate to include the groups falling in both subsets in to subset 1. Thus, the result indicates that, the respondents who have earned an annual profit of less than Rs.10,00,000 fall in subset 1 have a low mean perception for marketing and the respondents who have earned an annual profit of more than Rs.10,00,000 fall in subset 2 have a high mean perception for marketing.

**Human Resources**

The following table 5.15 presents the techniques adopted by rural entrepreneurs while recruiting their workforces.

**Table 5.15: Employees Recruitment**

| Methods | No. of respondents | Per cent |
|---|---|---|
| **Word of mouth** | **173** | **46.1** |
| Advertisement | 32 | 8.5 |
| Employment referrals | 159 | 42.4 |
| Labour contractors | 11 | 2.9 |
| **Total** | **375** | **100** |

*(Source: computed)*

It is observed from the table 5.15 that, among 375 respondents, 46.1 per cent of the respondents have recruited their workforce by word of mouth, 42.4 per cent of them have considered their employee referrals, 8.5 per cent of them have given advertisements, and 2.9 per cent of them have recruited their workforce through contractors. Hence, most of the respondents have recruited their workforce by word of mouth.

**Technology Up-gradation among Employees**

The following table 5.16 presents the employees' up-gradation of emerging technologies.

**Table 5.16: Technology Up-gradation**

| Technology Up-gradation among the employees | No. of respondents | Per cent |
|---|---|---|
| **Yes** | **238** | **63.4** |
| No | 137 | 36.5 |
| **Total** | **375** | **100** |

*(Source: Computed)*

From the table 5.16 it is clear that, 63.4 per cent of the respondents have upgraded their employees about the accessing of new technologies and the remaining 36.5 per cent of the respondents have not upgraded their employees about the accessing of new technologies. Hence, majority of the respondents have upgraded their employees about the accessing of new technologies through 'on the job training' method.

**Employee Retention**

Retention of employees in a manufacturing concern is imperative for their success. The following table 5.17 depicts the measures undertaken by the respondents to retain their employees.

**Table 5.17: Measures undertaken for employee retention (Multiple responses)**

| Measures | No. of Respondents | Per cent |
|---|---|---|
| Incentives and allowances | 217 | 13.8 |
| Flexible work schedule | 229 | 14.6 |
| **Wages are paid fully** | **326** | **20.8** |
| On job training provided | 268 | 17.1 |
| Labours participation | 215 | 13.7 |
| Bonus | 313 | 20.0 |

*(Source: Computed)*

The table 5.17 shows that, 20.8 per cent of the respondents have paid full wages, followed by bonus (20.0 per cent), on the job training (17.1 per cent), flexible work schedule (14.6 per cent), incentives and allowances (13.8 per cent) and participation in decision making (13.7 per cent). Hence, most of the respondents have paid full wages followed by bonus to retain their rural workforce in business operations.

**Human resource**

The rural entrepreneurs' level of agreeability towards human resource have been analysed and the results are displayed in the following table 5.18

**Table 5.18: Descriptive Statistics - Human resource**

| Human Resources | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Firms adhere to the labour laws which are suitable to the enterprise | 375 | 1 | 5 | 3.58 | 1.083 |
| Stress free environment is provided to labourers | 375 | 1 | 5 | 3.76 | .928 |
| **Cordial relationship is maintained with the labourers** | **375** | **2** | **5** | **3.85** | **1.050** |
| Job security is provided to workers | 375 | 1 | 5 | 3.64 | 1.204 |
| Labourers are regular in their work | 375 | 2 | 5 | 3.50 | 1.065 |
| Employees are praised and acknowledged for their work | 375 | 1 | 5 | 3.78 | .930 |

*(Source: computed)*

On a five point scale, the respondents have assigned ratings for 'Human resource' factor ranging from 5 to 1 where 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree. It is observed from the table 5.18 that, the high mean rating has been found for the statement 'cordial relationship is maintained with them' (mean 3.85) followed by 'employees are praised and acknowledged for their work' (mean 3.78) 'stress free environment is provided to them' (mean 3.76), 'job security is given to them' (mean 3.64), 'firms adhere to labour laws' (mean 3.58) and 'labourers are regular in work' (mean 3.50). Hence, based on high mean rating, it is clear that the respondents have agreed that cordial relationship is maintained with their employees increases the production and their performance.

**Human Resources Vs Firm characteristics**

ANOVA and t-test have been used to test whether the mean scores obtained for 'Human Resource' has differed significantly among the respondents classified based on

'Firm characteristics' with the following null hypothesis. When there exists a significant difference in F-value at 5 per cent level, Post Hoc analysis has been applied to find which group of respondents differs in their mean perception from the others.

**H$_0$: "The mean score of the human resource does not differ significantly among the firm characteristics"**

The null hypothesis has been tested for each of the firm characteristics separately and the results are presented in the following table 5.19

**Table 5.19: Firm characteristics and Human Resources**

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Business age (in Years) | 5-7 | 3.6328 | .76761 | 64 | | .448 | Ns |
| | 8-10 | 3.6341 | .74299 | 92 | | | |
| | 11-13 | 3.6784 | .84905 | 71 | | | |
| | More than 13 | 3.7399 | .82346 | 148 | | | |
| Generation | First Generation | 3.7335 | .78959 | 247 | 1.671 | | Ns |
| | Antecedents | 3.5885 | .80948 | 128 | | | |
| Legal Status | Sole Proprietorship | 3.6982 | .80812 | 296 | | .610 | Ns |
| | Partnership | 3.6024 | .78086 | 70 | | | |
| | Private Limited Company | 3.8519 | .59771 | 9 | | | |
| Nature of Business Activity | Textile unit | 3.6812 | .64131 | 103 | | .373 | Ns |
| | Engineering unit | 3.6526 | .85757 | 142 | | | |
| | Metal Fabrication unit | 3.6577 | .89973 | 56 | | | |
| | Food Processing unit | 3.7154 | .91382 | 41 | | | |
| | Others | 3.8333 | .65749 | 33 | | | |
| Total investment in Plant and Machinery | Less than Rs.25 lakhs | 3.7159 | .76638 | 264 | | .806 | Ns |
| | Rs.25 lakhs-Rs.5 crores | 3.5794 | .94417 | 63 | | | |
| | Rs.5 crores – Rs.10 crores | 3.6458 | .76618 | 48 | | | |

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Sources of Finance | Own fund | 3.7212 | .88974 | 52 | | | |
| | Borrowed fund | 3.7976 | 1.02152 | 14 | | .229 | Ns |
| | Both | 3.6726 | .77319 | 309 | | | |
| Permanent Employees (in numbers) | Less than 5 | 3.8378 | .81099 | 150 | | | |
| | 5 – 10 | 3.6286 | .84677 | 105 | | | |
| | 11 – 15 | 3.4649 | .73128 | 38 | | 2.688 | ** |
| | 16 – 20 | 3.5357 | .76357 | 28 | | | |
| | More than 20 | 3.5957 | .66635 | 54 | | | |
| Daily Labourers (in numbers) | Less than 5 | 3.6974 | .71564 | 141 | | | |
| | 5 – 10 | 3.7772 | .87243 | 98 | | | |
| | 11 – 15 | 3.5939 | .88656 | 87 | | 1.111 | Ns |
| | 16 – 20 | 3.7803 | .66346 | 22 | | | |
| | More than 20 | 3.4877 | .71151 | 27 | | | |
| Annual Turnover (in lakhs) | Less than Rs.20,00,000 | 3.7695 | .77819 | 175 | | | |
| | Rs.20,00,000-Rs.40,00,000 | 3.5667 | .86167 | 120 | | | |
| | Rs.41,00,000-Rs.60,00,000 | 3.7031 | .80292 | 32 | | 1.571 | Ns |
| | Above Rs.60,00,000 | 3.6528 | .67882 | 48 | | | |
| Annual Profit (in lakhs) | Less than Rs.1,00,000 | 3.7879 | .79675 | 99 | | | |
| | Rs.1,00,000-Rs.5,00,000 | 3.6723 | .84206 | 147 | | | |
| | Rs.5,00,001-Rs.10,00,000 | 3.5088 | .79856 | 76 | | 2.029 | Ns |
| | Rs.10,00,000 | 3.7736 | .63473 | 53 | | | |

*(Source: Computed) (** - significant at 1 per cent level, * - significant at 5 per cent level, Ns-Not significant)*

**Business age**

It is observed from the table 5.19 that, the respondents who have survived in business for more than 13 years in rural areas have been highly agreed (3.7399) and the respondents who have survived for a period of 5-7 years in rural areas have agreed less with respect to human resources (3.6328). However, the F-ratio value shows that, there has been no significant difference in the respondents' agreeability for human resource when they are classified based on business age groups. Hence, the null hypothesis has been accepted.

**Generation**

The first generation entrepreneurs have a high level of agreeability for human resource (3.7335) than the antecedents (3.5885) who run their business units in rural areas. There exists a marginal difference in the mean score. The t-value shows that, the respondents have not varied in their agreeability for human resources when classified based on generation. Hence, the null hypothesis has been accepted.

**Legal Status**

The mean score is found to be high (3.8519) among the respondents who run private limited companies in rural areas and it is found to be low among the respondents who run their business units with partners (3.6024). Hence, it is inferred with the F-ratio value that, the human resource mean score has not varied significantly among the respondents classified based on legal status. Hence, the null hypothesis has been accepted.

**Nature of Business**

The respondents who run the business units such as coir, paper, plastics etc., in rural areas have been highly agreed (3.8333) and the respondents who run engineering units in rural areas have agreed less with respect to human resources (3.6526). However, the F-ratio value reveals that, the respondents have not been varied significantly in their agreeability towards human resource when classified based on nature of business. Hence, the null hypothesis has been accepted.

**Total Investment in Plant and Machinery**

The highest mean score (3.7159) is found among the respondents who have invested less than Rs.25 lakhs in plant and machinery indicates, higher agreeability for human resources and the low mean score is found among the respondents who have invested between Rs.25 lakhs - Rs.5 crores in plant and machinery (3.5794). However, with the F-ratio value it is clear that, the mean score of human resource has not been varied significantly among the respondents classified based on total investment in plant and machinery. Hence, the null hypothesis has been accepted.

**Sources of Finance**

The respondents who have used borrowed funds to run their business units have been highly agreed (3.7976) and the respondents who have used both own and borrowed funds to run their business units have agreed less with respect to human resources (3.6726). Thus, it is inferred with the F-ratio value that, there has been no significant difference in the respondents agreeability for human resources when they classified based on source of finance. Hence, the null hypothesis has been accepted.

**Permanent Employees**

With respect to permanent employees, the high mean score is found among the respondents who operate their business units with less than 5 employees (3.8378) and the low mean score is found among the respondents who operate their business units with 11-15 permanent employees (3.4649). However, with the F-ratio value it is evident that, there exists a significant difference in the mean score which implies that the respondents have varied in their agreeability for human resource when classified based on Permanent employees. Thus, with the significant F-ratio value, the null hypothesis has been rejected at 1 per cent level. The following table 5.19 (a) shows the post hoc result.

**Table 5.19 (a): Post hoc- Tukey B Test for Permanent Employees Vs Human resources**

| Permanent Employees | N | Subset for alpha = 0.05 |
| | | 1 |
| --- | --- | --- |
| 11 – 15 | 38 | 3.4649 |
| 16 – 20 | 28 | 3.5357 |
| More than 20 | 54 | 3.5957 |
| 5 – 10 | 105 | 3.6286 |
| Less than 5 | 150 | 3.8378 |

*(Source: Computed)*

From the table 5.19 (a) it is observed that, the Post hoc analysis for 'human resource' factor has varied across with Permanent employees and has resulted in a single subset. It implies that, the respondents who operate their business units with permanent employees irrespective of its number have a low mean perception for human resources, because the people in rural areas are unskilled.

**Daily Labourers**

The respondents who run their business units with 16-20 daily labourers have high level of agreeability (3.7803) and the respondents who run their business units with more than 20 daily labourers have low level of agreeability towards human resources (3.4877). However, the F-ratio value shows that, there has been no significant difference in the respondents level of agreeability for human resources when they are classified based on daily labourers. Hence, the null hypothesis has been accepted.

**Annual Turnover**

The human resource mean score is found to be high among the respondents who have an annual turnover of less than Rs.20 lakhs (3.7695) and it is found to be low among the respondents who have an annual turnover between Rs.20 lakhs-Rs.40 lakhs (3.5667). However, it is inferred with the F-ratio value that, the mean score has not been varied significantly among the respondents classified based on annual turnover. Hence, the null hypothesis has been accepted.

**Annual Profit**

The respondents who have earned an annual profit of less than Rs.1,00,000 have been highly agreed (3.7879) and the respondents who have earned an annual profit between Rs.5,00,001-Rs.10,00,000 have agreed less with respect to human resources (3.5088). However, the F-ratio value shows that, there has been no significant difference in the respondents agreeability for human resource when they are classified based on annual profit. Hence, the null hypothesis has been accepted.

## 5.3 EXTERNAL ENVIRONMENTAL FACTORS

External environmental factors assist the firms to identify the new opportunities and possible threats through environmental scanning. These factors are uncontrollable by the business firm but still influence the performance of an enterprise. Hence, the study has classified the external environmental factors in to micro environment and macro environment.

**Micro Environmental Factor**

Micro Environmental factors consist of individuals or groups which are very close to the business firm and with whom the organization comes into frequent and direct contact, to perform its business activities. It comprise of customers, suppliers, intermediaries, competitors, and the public.

**Source of raw materials**

The rural entrepreneurs have been asked to rank the following sources based upon the place from where the raw materials have been purchased. They have given rank 1 for the most preferred source and 4 for the least preferred. The mean values of the rank have been found out for each factor and are depicted in the following table 5.20

**Table 5.20: Source of raw materials procurement**

| Source | Mean rank | Actual rank |
|---|---|---|
| **Locally** | **1.78** | **1** |
| Within the state | 2.02 | 2 |
| Outside the state but within the country | 2.55 | 3 |
| Outside the country | 3.66 | 4 |

*(Source: Computed)*

It is seen from the table 5.20 that, 'Local market' has been highly preferred among the respondents for the procurement of raw materials (mean 1.78), followed by 'Within the state' (mean 2.02), 'Outside the state but within the country' (mean 2.55) and the least preference has been given to 'Outside the country' (mean 3.66). It implies that due to the absence of storage facility, majority of the respondents have acquired raw materials in the open market at very high prices. The similar finding is reported in Joel Jebadurai .D, 2013

Friedman rank test has been used to find out the significant variation among the respondents in the order of their preference.

**H$_0$: "The mean ranks for the source of raw material does not differ significantly among the respondents"**

**Table 5.20 (a): Friedman rank test- Source of raw materials**

| N | Chi-Square | Df | Sig. |
|---|---|---|---|
| 375 | 480.271 | 3 | ** |

*(** - Significant at 1 per cent level)*

The ranking as per the above table 5.20 (a) shows that, the chi square value ($\chi^2$ = 480.271, p<0.000) is statistically significant which implies that, the respondents have been varied in their preference of acquiring raw materials from different sources. Hence, the null hypothesis has been rejected at 1 per cent level of significance and reveals that there exists a significant difference in mean ranks.

**Micro Environmental factors**

The rural entrepreneurs level of agreeability towards Micro environmental factors have been analysed and the results are presented in table 5.21

**Table 5.21: Descriptive statistics - Micro Environmental factors**

| Statements | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Different suppliers are available to procure raw materials | 375 | 1 | 5 | 3.58 | 1.025 |
| **There is sufficient and timely availability of raw materials** | **375** | **1** | **5** | **3.72** | **.947** |
| Raw materials are supplied on credit basis, if necessary | 375 | 1 | 5 | 3.49 | 1.029 |
| Customers sufficient purchasing power leads to increase in demand | 375 | 1 | 5 | 3.57 | 1.007 |
| Customers attitude and desire are supportive to the business | 375 | 1 | 5 | 3.53 | .949 |
| Products are sold to different types of customers | 375 | 1 | 5 | 3.55 | .986 |
| Market potential is identified from the competitors | 375 | 2 | 5 | 3.53 | .967 |
| Competitors dynamic move alert us | 375 | 1 | 5 | 3.27 | 1.087 |
| Appropriate market intermediaries are involved in distributing the products | 375 | 1 | 5 | 3.51 | .854 |
| Regulatory agencies (DIC, NSIC, Ministries etc) are helpful in promoting the business | 375 | 1 | 5 | 3.45 | .964 |
| Non-Government organization(NGO) is helpful | 375 | 1 | 5 | 3.42 | 1.069 |
| Local public are co-operative | 375 | 1 | 5 | 3.41 | 1.064 |

*(Source: Computed)*

A five point rating scale ranging from 5 to 1 where 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree has been constructed to obtain the opinion of the respondents on micro environmental factors. From the mean

ratings, it is observed from the above table 5.21 that, the high mean rating has been found for the statement, 'there is sufficient and timely availability of raw materials' (mean 3.72), followed by 'different suppliers are available to procure raw materials' (mean 3.58), 'customers sufficient purchasing power leads to increase in demand' (mean 3.57), 'Products are sold to different types of customers' (mean 3.55), 'customers attitude and desire are supportive to the business' (mean 3.53), 'market potential is identified from the competitors' (mean 3.53), 'appropriate market intermediaries are involved in distributing the products' (mean 3.51), 'Raw materials are supplied on credit basis if necessary' (mean 3.49), 'Regulatory agencies (DIC, NSIC, Ministries etc) are helpful in promoting the business' (mean 3.45), 'Non-Government organization (NGO) are helpful' (mean 3.42), 'local public are co-operative' (mean 3.41) and 'Competitors dynamic move alert us' (mean 3.27). Therefore, based on high mean rating, it is inferred that most of the respondents have agreed with the statement that 'there is sufficient and timely availability of raw materials' which does not affect their production cycle.

**Firm characteristics Vs Micro Environmental factor**

The following ANOVA and t-test table 5.22 reveals, whether there exists any significant difference between 'Micro environmental factor' and 'Firm characteristics' with the following null hypothesis. When there exists a significant difference in F-value at 5 per cent level, Post Hoc analysis has been applied to find which group of respondents differs in their mean perception from the others.

**H$_0$: "The mean score of the micro environmental factor does not differ significantly among the firm characteristics".**

The null hypothesis has been tested for each of the firm characteristics separately and the results are presented in the table5.22

**Table 5.22: Firm characteristics and Micro Environmental factor**

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Business age (Years) | 5-7 | 3.6615 | .82414 | 64 | | 1.024 | Ns |
| | 8-10 | 3.4656 | .85905 | 92 | | | |
| | 11-13 | 3.4965 | .69357 | 71 | | | |
| | More than 13 | 3.4657 | .78757 | 148 | | | |
| Generation | First Generation | 3.5611 | .78959 | 247 | 1.906 | | Ns |
| | Antecedents | 3.3965 | .80948 | 128 | | | |
| Legal Status | Sole Proprietorship | 3.5524 | .81726 | 296 | | 8.759 | * |
| | Partnership | 3.2167 | .61702 | 70 | | | |
| | Private Limited Company | 4.1852 | .59040 | 9 | | | |
| Nature of Business Activity | Textile units | 3.3883 | .66764 | 103 | | 833 | Ns |
| | Engineering units | 3.5346 | .77504 | 142 | | | |
| | Metal Fabrication units | 3.5476 | .72454 | 56 | | | |
| | Food Processing units | 3.6098 | 1.07794 | 41 | | | |
| | Others | 3.5379 | .95381 | 33 | | | |
| Total Investment in Plant and Machinery | Less than Rs.25 lakhs | 3.5022 | .79687 | 264 | | .351 | Ns |
| | Rs.25 lakhs-Rs.5 crores | 3.4563 | .81290 | 63 | | | |
| | Rs.5 crores–Rs.10 crores | 3.5833 | .77624 | 48 | | | |
| Sources of Finance | Own funds | 3.3974 | .72510 | 52 | | 3.467 | ** |
| | Borrowed funds | 3.0238 | 1.02085 | 14 | | | |
| | Both | 3.5448 | .78964 | 309 | | | |

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Permanent Employees (in numbers) | Less than 5 | 3.5022 | .85884 | 150 | | | |
| | 5 – 10 | 3.3183 | .75460 | 105 | | | |
| | 11 – 15 | 3.8202 | .92584 | 38 | | 3.526 | ** |
| | 16 – 20 | 3.4970 | .47439 | 28 | | | |
| | More than 20 | 3.6574 | .63147 | 54 | | | |
| Daily Labourers (in numbers) | Less than 5 | 3.5012 | .78040 | 141 | | | |
| | 5 – 10 | 3.4626 | .83882 | 98 | | | |
| | 11 – 15 | 3.5852 | .82172 | 87 | | .622 | Ns |
| | 16 – 20 | 3.3220 | .90131 | 22 | | | |
| | More than 20 | 3.5679 | .50055 | 27 | | | |
| Annual Turnover (in lakhs) | Less than Rs.20,00,000 | 3.5462 | .80451 | 175 | | | |
| | Rs.20,00,000-Rs.40,00,000 | 3.6188 | .78677 | 120 | | | |
| | Rs.41,00,000-Rs.60,00,000 | 3.0130 | .62005 | 32 | | 5.539 | * |
| | Above Rs.60,00,000 | 3.3976 | .77723 | 48 | | | |
| Annual Profit (in lakhs) | Less than Rs.1,00,000 | 3.4402 | .76321 | 99 | | | |
| | Rs.1,00,000-Rs.5,00,000 | 3.6241 | .85804 | 147 | | | |
| | Rs.5,00,001-Rs.10,00,000 | 3.4057 | .71224 | 76 | | 1.853 | Ns |
| | More than Rs.10,00,000lakhs | 3.4371 | .76741 | 53 | | | |

*(Source: Computed) (** - significant at 1 per cent level, * - significant at 5 per cent level, Ns-Not significant)*

**Business age**

It is evident from the above table 5.22 that, the micro environmental factor mean score is found to be high among the respondents who run their business units for about 5 -7 years in rural areas (3.6615) and it is found to be low among the respondents who run their business units for a period of 8-10 years (3.4656). However, with the F-ratio value it is revealed that, the mean score has not been varied significantly among the respondents classified based on business age. Hence, the null hypothesis has been accepted.

**Generation**

The first generation entrepreneurs have high level of agreeability towards micro environmental factors (3.3965) than the antecedents (3.5611) who run their business units in rural areas. There exists a marginal difference in the mean score. However, the t-value shows that, the respondents have not been varied in their agreeability for micro environmental factors when classified based on generation. Hence, the null hypothesis has been accepted.

**Legal Status**

The respondents who run private limited companies in rural areas have been highly agreed (4.1852) and the respondents who run their business units with partners have been agreed less with respect to micro environmental factors (3.2167). However, the F-ratio value shows that, there exists a significant difference in the respondents agreeability for micro environmental factors when they are classified based on legal status. Thus, with the significant F-ratio value, the null hypothesis has been rejected at 1 per cent level. The following table 5.22 (a) shows the post hoc result.

**Table 5.22 (a): Post hoc- Tukey B Test for Legal status Vs Micro Environmental factor**

| Legal status | N | Subset for alpha = 0.05 | |
| --- | --- | --- | --- |
| | | 1 | 2 |
| Partnership | 70 | 3.2167 | |
| Sole Proprietorship | 296 | 3.5524 | |
| Private Limited Company | 9 | | 4.1852 |

*(Source: Computed)*

It is seen from the above table 5.22 (a) that, the Post hoc analysis for Micro environmental factor has varied across with legal status and has resulted in 2 subsets. The respondents who run partnership (3.2167) and sole proprietorship form of business organization (3.5524) fall in subset 1 have a low mean perception for micro environmental factors. Similarly, the respondents who run private limited companies in rural areas (4.1852) fall in subset 2 have a high mean perception for micro environmental factors.

**Nature of Business**

The respondents who run food processing units in rural areas have high level of agreeability (3.6098) and the respondents who run textile processing units have low level of agreeability for micro environmental factors (3.3883). However, the F-ratio value reveals that, there has been no significant difference in the respondents agreeability for micro environmental factors when they are classified based on nature of business. Hence, the null hypothesis has been accepted.

**Total investment in Plant and Machinery**

The micro environmental mean score is found to be high among the respondents who have invested between Rs.5 crores-Rs.10 crores in plant and machinery (3.5833) and it is found to be low among the respondents who have invested between Rs.25 lakhs - Rs.5 crores in plant and machinery (3.4563). However, it is clear with the F-ratio value that, the mean score has not varied significantly among the respondents classified based on total investment level. Hence, the null hypothesis has been accepted.

**Sources of Finance**

The respondents who have used both own and borrowed funds to run their business units have been highly agreed (3.5448) and the respondents who have used only borrowed funds to run their business units have been agreed less with respect to micro environmental factors (3.0238). However, with the F-ratio value it is understood that, the respondents have been varied significantly in their agreeability towards micro environmental factors when they are classified based on source of finance. Thus, with the significant F-ratio value, the null hypothesis has been rejected at 5 per cent level. The following table 5.22 (b) shows the post hoc result.

**Table 5.22 (b): Post hoc- Tukey B Test for Sources of Finance Vs Micro Environmental factor**

| Sources of Finance | N | Subset for alpha = 0.05 | |
| --- | --- | --- | --- |
| | | 1 | 2 |
| Borrowed funds | 14 | 3.0238 | |
| Own funds | 52 | 3.3974 | 3.3974 |
| Both | 309 | | 3.5448 |

*(Source: Computed)*

It is seen from the above table 5.22 (b) that, the Post hoc analysis for Micro Environmental factor has been varied across with sources of finance and has resulted in 2 subsets. The respondents who have used only borrowed funds to run their business units (3.0238) fall in subset 1. Similarly, the respondents who have used only own funds to run the business units (3.3974) fall in both subsets 1 and 2. But, the mean value has been found closer to subset 1. Hence, it is appropriate to include them in subset 1. Further, the respondents who have used both own and borrowed funds to run their business units (3.5448) fall in subset 2. Therefore, the result indicates that the respondents who have used both own and borrowed funds to run their business units have a high mean perception for micro environmental factors and the respondents who have used only own funds and only borrowed funds to run their business units have a low mean perception for micro environmental factors.

**Permanent Employees**

The respondents who operate their business units with 11-15 permanent employees have high level of agreeability (3.8202) and the respondents who operate their business units with 5-10 permanent employees have low level of agreeability towards micro environmental factors (3.3183). However, with the F-ratio value it is inferred that, there exists a significant variation in the respondents agreeability for micro environmental factors when they are classified based on permanent employees. Thus, with the significant F-ratio value, the null hypothesis has been rejected at 1 per cent level. The following table 5.22 (c) shows the post hoc result.

**Table 5.22 (c): Post hoc- Tukey B Test for Permanent employees Vs Micro Environmental factor**

| Permanent employees (in numbers) | N | Subset for alpha = 0.05 | |
|---|---|---|---|
| | | 1 | 2 |
| 5 – 10 | 105 | 3.3183 | |
| 16 – 20 | 28 | 3.4970 | 3.4970 |
| Less than 5 | 150 | 3.5022 | 3.5022 |
| More than 20 | 54 | 3.6574 | 3.6574 |
| 11 – 15 | 38 | | 3.8202 |

*(Source: Computed)*

It is clear from the above table 5.22 (c) that, the Post hoc analysis for 'Micro Environmental factor' has been varied across with Permanent employees and 2 subsets have emerged. The respondents who operate their business units with 5-10 permanent employees (3.3183) fall in subset 1. Similarly, the respondents who operate their business units with 16-20 employees (3.4970), less than 5 employees (3.5022) and more than 20 employees (3.6574) fall in both subsets 1 and 2. But, the mean values have been found closer to subset 1. Hence, it is appropriate to include the groups falling in both subsets in subset 1. The respondents who operate their business units with 11-15 permanent employees (3.8202) fall in subset 2. Therefore, the result indicates that the respondents who operate their business units with 11-15 employees have a high mean perception for micro environmental factors than the others.

**Daily Labourers**

The respondents who run their business units with 11-15 daily labourers have been highly agreed (3.5852) and the respondents who run their business units with 16-20 daily labourers have agreed less with respect to micro environmental factors (3.3220). However, the F-ratio value shows that, there has been no significant difference in the respondents agreeability for micro environmental factors when classified based on daily labourers. Hence, the null hypothesis has been accepted.

**Annual Turnover**

The micro environmental mean score is found to be high among the respondents who have an annual turnover of Rs.20,00,000- Rs.40,00,000 (3.6188) and it is found to be low among the respondents who have an annual turnover of Rs.41,00,000-Rs.60,00,000 (3.0130). There exists a noticeable difference in the mean score. Therefore, with the F-ratio value it is clear that, the micro environmental mean score has been varied significantly among the respondents classified based on annual turnover. Thus, with the significant F-ratio value the null hypothesis has been rejected at 1 per cent level. The following table 5.22 (d) shows the post hoc result.

**Table 5.22 (d): Post hoc- Tukey B Test for Annual Turnover Vs Micro Environmental factor**

| Annual Turnover (in lakhs) | N | Subset for alpha = 0.05 | |
| --- | --- | --- | --- |
| | | **1** | **2** |
| Rs.41,00,000-Rs.60,00,000 | 32 | 3.0130 | |
| Above Rs.60,00,000 | 48 | | 3.3976 |
| Less than Rs.20,00,000 | 175 | | 3.5462 |
| Rs.20,00,000-Rs.40,00,000 | 120 | | 3.6188 |

*(Source: Computed)*

From the above table 5.22 (d) it is noted that, the Post hoc analysis for 'Micro Environmental factor' has varied across with annual turnover and 2 subsets have appeared. The respondents who have an annual turnover of Rs.41,00,000-Rs.60,00,000 (3.0130) fall in subset 1 have a low mean perception for micro environmental factors. Similarly, the respondents who have an annual turnover of above Rs.60,00,000 (3.3976), less than Rs.20,00,000 and between Rs.20,00,000-Rs.40,00,000 fall in subset 2 have a high mean perception for micro environmental factors.

**Annual Profit**

The micro environmental mean score is found to be high among the respondents who generates an annual profit between Rs.1,00,000–Rs.5,00,000 (3.6241) and it is found to be low among the respondents who generates an annual profit between Rs.5,00,001 lakhs-Rs.10,00,000 (3.4057). Thus, with the F-ratio value it is understood that, the mean score has not varied significantly among the respondents classified based on annual profits. Hence, the null hypothesis has been accepted.

**Macro environmental factors**

The respondents' level of agreeability towards 'Macro environmental factor' have been analysed and the results are exhibited in the following table 5.23

**Table 5.23: Descriptive statistics -Macro Environment Factor**

| Statements | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Government regulations and procedures are simple | 375 | 1 | 5 | 2.00 | 1.351 |
| Industrial policy changes are liberalized | 375 | 1 | 5 | 3.26 | .955 |
| Government schemes and subsidy are accessible | 375 | 1 | 5 | 3.28 | 1.071 |
| Ministries enhance assistance on the functional areas of the business | 375 | 1 | 5 | 3.07 | 1.063 |
| Labour laws are simple and streamlined | 375 | 1 | 5 | 3.15 | 1.095 |
| **Business registration is easy** | **375** | **1** | **5** | **3.80** | **.728** |
| Line departments are prompt in issuing certificates | 375 | 1 | 5 | 3.27 | .880 |
| Monetary and Fiscal incentives are supportive | 375 | 1 | 5 | 3.06 | 1.243 |
| Proper utilization of capacity during price inflation | 375 | 1 | 5 | 3.22 | 1.021 |

| Statements | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Technological changes makes production faster | 375 | 1 | 5 | 3.57 | 1.281 |
| Family support is essential to start the business | 375 | 1 | 5 | 3.62 | .752 |
| Materials used for the production are recyclable. | 375 | 1 | 5 | 3.51 | .964 |

*(Source: Computed)*

On a five point scale, the respondents have given ratings for the 'Macro environmental factor' ranging from 5 to 1 where 5 for strongly agree, 4 for agree, 3 for neutral, 2 for disagree and 1 for strongly disagree. From the above table 5.23 it is observed that, the high mean ratings has been found for the statement 'business registration is easy' (mean 3.80), followed by 'family support is essential to start the business' (mean 3.62), 'technological changes makes production faster' (mean 3.57), 'materials used for the production are recyclable'(mean 3.51), 'Government schemes and subsidy are accessible'(mean 3.28), 'line departments are prompt in issuing certificates'(mean 3.27), 'industrial policy changes are liberal'(mean 3.26), 'Proper utilization of capacity during price inflation'(mean 3.22), 'labour laws are simple and streamlined' (mean 3.15), 'Ministries enhance assistance on the functional areas of the business' (mean 3.07), 'monetary and fiscal incentives are supportive' (mean 3.06) and 'Government regulations and procedures are simple' (mean 2.00). Hence, based on high mean rating, it is evident that, most of the respondents have agreed with the statement that the business registration is easy. This is due to the emergence of e-portals.

**Firm characteristics Vs Macro Environmental factor**

ANOVA and t-test have been applied to test whether the score obtained for 'Macro environmental factor' has differed significantly among the respondents classified based on 'Firm characteristics' with the following null hypothesis. When there exists a significant difference in F-value at 5 per cent level, Post Hoc analysis has been applied to find which group of respondents differs in their mean perception from the others.

**H₀: "The mean score of the macro environmental factor does not vary significantly among the firm characteristics".**

The null hypothesis has been tested for each of the firm characteristics separately and the results are exhibited in the following table 5.24

**Table 5.24: Firm characteristics and Macro Environmental factor**

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Business age (Years) | 5-7 | 3.1862 | .76488 | 64 | | .260 | Ns |
| | 8-10 | 3.2382 | .73873 | 92 | | | |
| | 11-13 | 3.2829 | .74489 | 71 | | | |
| | More than 13 | 3.2675 | .65243 | 148 | | | |
| Generation | First Generation | 3.2767 | .70502 | 274 | 1.036 | | Ns |
| | Antecedents | 3.1966 | .71821 | 128 | | | |
| Legal Status | Sole Proprietorship | 3.2582 | .72369 | 296 | | .633 | Ns |
| | Partnership | 3.1869 | .66386 | 70 | | | |
| | Private Limited Company | 3.4444 | .58926 | 9 | | | |
| Nature of Business Activity | Textile units | 3.2128 | .75306 | 103 | | .264 | Ns |
| | Engineering units | 3.2406 | .67745 | 142 | | | |
| | Metal Fabrication units | 3.2753 | .65538 | 56 | | | |
| | Food Processing units | 3.3415 | .63950 | 41 | | | |
| | Others | 3.2424 | .88838 | 33 | | | |
| Total Investment in Plant and Machinery | Less than Rs.25 lakhs | 3.2645 | .73691 | 264 | | .207 | Ns |
| | Rs.25 lakhs-Rs.5 crores | 3.2183 | .61519 | 63 | | | |
| | Rs.5 crores-Rs.10 crores | 3.2066 | .68157 | 48 | | | |
| Sources of Finance | Own funds | 3.1731 | .66315 | 52 | | 7.032 | * |
| | Borrowed funds | 3.9286 | .33470 | 14 | | | |
| | Both | 3.2314 | .71528 | 309 | | | |

| Firm characteristics | Groups | Mean | S.D | No. | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Permanent Employees (in numbers) | Less than 5 | 3.1872 | .80938 | 150 | | | |
| | 5 – 10 | 3.3095 | .67183 | 105 | | | |
| | 11 – 15 | 3.3070 | .60562 | 38 | | .630 | Ns |
| | 16 – 20 | 3.3244 | .59634 | 28 | | | |
| | More than 20 | 3.2253 | .60389 | 54 | | | |
| Daily Labourers (in numbers) | Less than 5 | 3.2506 | .70707 | 141 | | | |
| | 5 – 10 | 3.2177 | .69974 | 98 | | | |
| | 11 – 15 | 3.3621 | .68197 | 87 | | 1.352 | Ns |
| | 16 – 20 | 2.9924 | .87284 | 22 | | | |
| | More than 20 | 3.2037 | .68303 | 27 | | | |
| Annual Turnover (in lakhs) | Less than Rs.20,00,000 | 3.2286 | .73385 | 175 | | | |
| | Rs.20,00,000-Rs.40,00,000 | 3.2840 | .71812 | 120 | | | Ns |
| | Rs.41,00,000-Rs.60,00,000 | 3.3672 | .55068 | 32 | | .693 | |
| | Above Rs.60,00,000 | 3.1597 | .69655 | 48 | | | |
| Annual Profit (in lakhs) | Less than Rs.1,00,000 | 3.2508 | .70966 | 99 | | | |
| | Rs.1,00,000-Rs.5,00,000 | 3.2523 | .72274 | 147 | | | |
| | Rs.5,00,001-Rs.10,00,000 | 3.2248 | .69802 | 76 | | .052 | Ns |
| | More than Rs.10,00,000 | 3.2736 | .70831 | 53 | | | |

*(Source: Computed) (\*\* - significant at 1 per cent level, \* - significant at 5 per cent level, Ns-Not significant)*

**Business age**

It is noted from the above table 5.24 that, the respondents who are existing in business for a period of 11-13 years in rural areas have been highly agreed (3.2829) and the respondents who are existing in business for a period of 5-7 years have been agreed

less with respect to macro environmental factors (3.1862). However, with the F-ratio value it is clear that, there has been no significant difference in the respondents agreeability towards macro environmental factors when classified based on business age. Hence, the null hypothesis has been accepted.

**Generation**

The macro environmental factors agreeability is found to be high (3.2767) among the first generation entrepreneurs than the antecedents who come from an entrepreneurial family background (3.1966). There exists a marginal difference in the mean score. However, the t-value shows that the respondents' agreeability towards macro environmental factors have not varied based on generation. Hence, the null hypothesis has been accepted.

**Legal Status**

The mean score is found to be high among the respondents who run private limited companies (3.4444) and it is found to be low among the respondents who run their business units with partners (3.1869). Though, there exists a noticeable difference in the mean score, with the F-ratio value it is understood that, the mean score has not varied significantly among the respondents classified based on legal status. Hence, the null hypothesis has been accepted.

**Nature of Business**

The respondents who run food processing units have high level of agreeability (3.3415) and the respondents who run textile processing units have low level of agreeability towards macro environmental factor (3.2138). However, the F-ratio value shows that the respondents have not varied in their agreeability towards macro environmental factors when they are classified based on nature of business. Hence, the null hypothesis has been accepted.

**Total Investment in Plant and Machinery**

The high mean score is found among the respondents who have invested less than Rs.25 lakhs in plant and machinery (3.2645), which implies that they have high level of agreeability towards macro environmental factors and the low mean score is found

among the respondents who have invested between Rs.5 crores-Rs.10 crores in plant and machinery (3.2066). However, the F-ratio value has shown that, the mean score has not varied significantly among the respondents classified based on total investment level. Therefore, the null hypothesis has been accepted.

**Sources of Finance**

The macro environmental mean score is found to be high among the respondents who have used borrowed funds to run their business units (3.9286) and it is found to be low among the respondents who have invested own funds to run their business units (3.1731). However, the F-ratio value shows that, there exists a significant difference in the mean score, which implies that the respondents have been varied in their agreeability for macro environmental factors when they are classified based on sources of finance. Thus, with the significant F-ratio value, the null hypothesis has been rejected at 5 per cent level. The following table 5.24 (a) shows the post hoc result.

**Table 5.24 (a): Post hoc- Tukey B Test for Sources of Finance Vs Macro Environmental Factor**

| Sources of Finance | N | Subset for alpha = 0.05 | |
| | | 1 | 2 |
|---|---|---|---|
| Own funds | 52 | 3.1731 | |
| Both | 309 | 3.2314 | |
| Borrowed funds | 14 | | 3.9286 |

*(Source: Computed)*

From the above table 5.24 (a) it is clear that, the Post hoc analysis for 'Macro Environmental Factor' has varied across with sources of finance and has resulted in 2 subsets. The respondents who have invested own funds to run their business units (3.1731) and who has used both own and borrowed funds to run their business units (3.2314) fall in subset1 have a low mean perception for macro environmental factors. Similarly, the respondents who have used only borrowed funds to run their business units (3.9286) fall in subset 2 have a high mean perception for macro environmental factors.

**Permanent Employees**

The respondents who run their business units with 16-20 employees have been highly agreed (3.3244) and the respondents who run their business units with less than 5 permanent employees have agreed less towards macro environmental factors (3.1872). However, the F-ratio value shows that, there has been no significant difference in the respondents agreeability for macro environmental factors when they are classified based on permanent employees. Therefore, the null hypothesis has been accepted.

**Daily Labourers**

With respect to daily labourers, the macro environmental agreeability is high among the respondents who are operating their business units with 11-15 daily labourers (3.3621) and it is found to be low among the respondents who are operating their business units with 16-20 daily labourers (2.9924). However, it is understood with the F-ratio value that, the respondents have not varied in their agreeability towards macro environmental factors when they are classified based on daily labourers. Therefore, the null hypothesis has been accepted.

**Annual Turnover**

The respondents who have an annual turnover of Rs.41,00,000-Rs.60,00,000 have high level of agreeability (3.3672) and the respondents who have an annual turnover of more than Rs.60,00,000 lakhs have low level of agreeability towards macro environmental factors (3.1597). However, it is inferred with the F-ratio value that, there has been no significant difference in the respondents agreeability for macro environmental factors when they are classified based on annual turnover. Therefore, the null hypothesis has been accepted.

**Annual Profit**

The macro environmental mean score is found to be high among the respondents who have earned an annual profit of more than Rs.10,00,000 (3.2736) and it is found to be low among the respondents who have earned an annual profit of Rs.5,00,001-Rs.10,00,000 (3.2248). Thus, it is inferred with the F-ratio value that, the mean score has not varied significantly among the respondents classified based on annual profit. Therefore, the null hypothesis has been accepted.

## 5.4 BUSINESS PERFORMANCE

The respondents' satisfaction towards their Performance have been analysed and the results are presented in the following table 5.25

**Table 5.25: Descriptive Statistics - Business performance**

| Statements | N | Minimum | Maximum | Mean | Std. Deviation |
|---|---|---|---|---|---|
| Cost of production | 375 | 1 | 5 | 3.44 | .980 |
| Sales volume | 375 | 1 | 5 | 4.05 | .962 |
| Profit | 375 | 1 | 5 | 3.95 | .973 |
| Employees strength | 375 | 1 | 5 | 3.97 | .973 |
| Return on investment | 375 | 1 | 5 | 3.50 | 1.042 |
| Customer satisfaction | 375 | 1 | 5 | 4.14 | .881 |
| Customer retention | 375 | 1 | 5 | 4.10 | .973 |
| Business image | 375 | 1 | 5 | 3.71 | .997 |
| Market share | 375 | 1 | 5 | 4.05 | .990 |
| Expansion and diversification | 375 | 1 | 5 | 3.80 | .934 |

*(Source: Computed)*

A five point rating scale ranging from 5 to 1 where 5 for highly satisfied, 4 for satisfied, 3 for Neutral, 2 for dissatisfied and 1 for highly dissatisfied have been constructed to obtain the opinion of the respondents on their level of satisfaction in business performance. It is noted from the above table 5.25 that, the high mean rating has been found for the statement 'customer satisfaction' (mean 4.14) followed by customer retention (mean 4.10), sales volume increase (mean 4.05), market share (mean 4.05), number of employees increase (mean 3.97), profit increase (mean 3.95), expansion and diversification (mean 3.80), business image (mean 3.71), return on investment (mean 3.50) and 'reduction in the cost of production' (mean 3.44). Hence, based on high mean rating it is evident that, the respondents have been satisfied with the statement 'customers' satisfaction' which is imperative for the growth and development of business. The respondents have also opined neutrally for the statement 'reduction in the cost of production'.

**Firm characteristics Vs Business Performance**

ANOVA and t-test have been used to test whether the satisfaction mean score has differed significantly among the respondents classified based on 'Firm characteristics' with the following null hypothesis. When there exists a significant difference in F-value at 5 per cent level, Post Hoc analysis has been applied to find which group of respondents differs in their mean perception from the others.

$H_0$: **"The mean score of the business performance does not differ significantly among the firm characteristics".**

The null hypothesis has been tested for each of the firm characteristics separately and the results are presented in the table 5.26

**Table 5.26: Firm characteristics and Business Performance**

| Firm characteristics | Groups | Mean | S.D | No | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Business age (Years) | 5-7 | 4.0953 | .61604 | 64 | | .751 | Ns |
| | 8-10 | 4.0500 | .72164 | 92 | | | |
| | 11-13 | 3.9437 | .68426 | 71 | | | |
| | More than 13 | 3.9723 | .74877 | 148 | | | |
| Generation | First Generation | 4.0215 | .68484 | 247 | 0.551 | | Ns |
| | Antecedents | 3.9789 | .75343 | 128 | | | |
| Legal Status | Sole Proprietorship | 4.0220 | .72460 | 296 | | 1.807 | Ns |
| | Partnership | 3.9014 | .65707 | 70 | | | |
| | Private Limited Company | 4.3333 | .37749 | 9 | | | |
| Nature of Business Activity | Textile units | 3.8748 | .66682 | 103 | | 1.346 | Ns |
| | Engineering units | 4.0570 | .67450 | 142 | | | |
| | Metal Fabrication units | 4.0179 | .65647 | 56 | | | |
| | Food Processing units | 4.1122 | .84119 | 41 | | | |
| | Others | 4.0545 | .85553 | 33 | | | |

| Firm characteristics | Groups | Mean | S.D | No | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Total Investment in Plant and Machinery | Less than Rs.25 lakhs | 3.9856 | .76677 | 264 | | .663 | Ns |
| | Rs.25 lakhs-Rs.5 crores | 4.0651 | .46287 | 63 | | | |
| | Rs.5 crores – Rs.10 crores | 4.0479 | .64081 | 48 | | | |
| Sources of Finance | Own fund | 4.0135 | .54089 | 52 | | 14.975 | ** |
| | Borrowed fund | 3.0286 | 1.44352 | 14 | | | |
| | Both | 4.0502 | .65374 | 309 | | | |
| Permanent Employees (in numbers) | Less than 5 | 4.0207 | .75212 | 150 | | .356 | Ns |
| | 5 – 10 | 3.9400 | .79682 | 105 | | | |
| | 11 – 15 | 4.0553 | .59078 | 38 | | | |
| | 16 – 20 | 4.0286 | .65707 | 28 | | | |
| | More than 20 | 4.0537 | .47611 | 54 | | | |
| Daily Labourers (in numbers) | Less than 5 | 3.9950 | .84527 | 141 | | .589 | Ns |
| | 5 – 10 | 3.9776 | .63903 | 98 | | | |
| | 11 – 15 | 3.9897 | .66280 | 87 | | | |
| | 16 – 20 | 4.2182 | .41247 | 22 | | | |
| | More than 20 | 4.0593 | .45764 | 27 | | | |
| Annual Turnover (in lakhs) | Less than Rs.20,00,000 | 4.0017 | .78868 | 175 | | 2.159 | Ns |
| | Rs.20,00,000-Rs.40,00,000 | 4.0058 | .59271 | 120 | | | |
| | Rs.41,00,000-Rs.60,00,000 | 3.7750 | .79636 | 32 | | | |
| | Above Rs.60,00,000 | 4.1833 | .55938 | 48 | | | |

| Firm characteristics | Groups | Mean | S.D | No | t-value | F-value | Sig. |
|---|---|---|---|---|---|---|---|
| Annual Profit (in lakhs) | Less than Rs.1,00,000 | 4.0273 | .81087 | 99 | | | |
| | Rs.1,00,000-Rs.5,00,000 | 3.9810 | .63896 | 147 | | | |
| | Rs.5,00,001-Rs.10,00,000 | 3.9882 | .65462 | 76 | | .240 | Ns |
| | More than Rs.10,00,000 | 4.0679 | .77305 | 53 | | | |

*(Source: Computed) (\*\* - significant at 1 per cent level, \* - significant at 5 per cent level, Ns-Not significant)*

**Business age**

It is inferred from the table 5.26 that, the respondents who have 5-7 years of business existence in rural areas have been highly satisfied (4.0953) and the respondents who have 11-13 years of business existence have satisfied less with respect to their business performance (3.9437). However, with the F-ratio value it is clear that the respondents have not varied in their level of satisfaction towards business performance when they are classified based on business age. Therefore, the null hypothesis has been accepted.

**Generation**

The first generation entrepreneurs have high level of satisfaction towards business performance (4.0215) than the antecedents who come from an entrepreneurial background family (3.9789). The t-value has inferred that the respondents' satisfaction for business performance has not varied significantly based on generation. Therefore, the null hypothesis has been accepted.

**Legal Status**

The satisfaction mean score is found to be high (4.3333) among the respondents who run private limited companies and it is found to be low among the respondents who run their business units with partners (3.9014). However, the F-ratio value shows that, the mean score has not varied significantly among the respondents classified based on legal status. Therefore, the null hypothesis has been accepted.

**Nature of Business**

The respondents who run food processing units in rural areas have high level of satisfaction (4.1122) and the respondents who run textile processing units have low level of satisfaction with respect to their performance (3.8748). However, with the F-ratio value it is inferred that, the respondents have not varied significantly in their satisfaction towards business performance when they are classified based on nature of business. Therefore, the null hypothesis has been accepted.

**Total Investment in Plant and Machinery**

The high mean score is found among the respondents who have invested between Rs.25 lakhs-Rs.5 crores in plant and machinery (4.0651) indicates, higher level of satisfaction towards performance and the low mean score is found among the respondents who have invested less than Rs.25 lakhs in plant and machinery (3.9856). However, the F-ratio value shows that, there has been no significant difference in the mean score, which implies that the respondents have not been varied significantly in their satisfaction towards business performance when classified based on total investment. Therefore, the null hypothesis has been accepted.

**Source of Finance**

The respondents who have used both own and borrowed funds to run their business units have been highly satisfied (4.0502) and the respondents who have used only borrowed funds to run their business units have less satisfaction with respect to their performance (3.0286). There exists a noticeable difference in the mean score. However, with the F-ratio value it is evident that, the respondents have been varied in their satisfaction towards business performance when they are classified based on source of finance. Thus, with the significant F- ratio value, the null hypothesis has been rejected at 1 per cent level. The following table 5.26 (a) shows the post hoc result

**Table 5.26 (a): Post hoc- Tukey B Test for Sources of Finance Vs Business Performance**

| Sources of Finance | N | Subset for alpha = 0.05 | |
| --- | --- | --- | --- |
| | | 1 | 2 |
| Borrowed fund | 14 | 3.0286 | |
| Own fund | 52 | | 4.1035 |
| Both | 309 | | 4.0502 |

*(Source: Computed)*

From the above table 5.26 (a) it is noted that, the Post hoc analysis for 'Business Performance' has been varied across with sources of finance and 2 subsets have emerged. The respondents who have used borrowed funds to run their business units (3.0286) fall in subset 1 have a low mean perception for business performance. Similarly, the respondents who run their business units with own fund contribution (4.1035) and the respondents who have used both own and borrowed funds to run their business units (4.0502) fall in subset 2 have a high mean perception for business performance.

**Permanent Employees**

The respondents who run their business units with 11-15 permanent employees have high level of satisfaction (4.0553) and the respondents who run their business units with 5-10 permanent employees have low level of satisfaction with respect to their business performance (3.9400). However, with the F-ratio value it is inferred that, there has been no significant difference in the respondents' satisfaction towards business performance when classified based on permanent employees. Therefore, the null hypothesis has been accepted.

**Daily Labourers**

With respect to daily labourers, the high mean score (4.2182) is found among the respondents who run their business units with 16-20 daily labourers, which implies that they have a high level of satisfaction towards their performance and the low mean score (3.9776) is found among the respondents who run their business units with 5-10 daily labourers. Though, there exists a noticeable difference in the mean score, it is clear with

the F-ratio value that, the satisfaction mean score has not varied significantly among the respondents classified based on daily labourers. Therefore, the null hypothesis has been accepted.

**Annual Turnover**

The respondents who have an annual turnover of above Rs.60 lakhs have been highly satisfied (4.1833) and the respondents who have an annual turnover between Rs.41 lakhs to Rs.60 lakhs have less satisfaction with respect to their performance (3.7750). However, with the F-ratio value, it is inferred that the respondents have not varied in their satisfaction towards business performance when they are classified based on annual turnover. Therefore, the null hypothesis has been accepted.

**Annual Profit**

The high mean score is found among the respondents who have earned an annual profit of more than Rs.10 lakhs, indicates the higher level of satisfaction towards their performance (4.0679), and the low mean score is found among the respondents who have earned an annual profit between Rs.1 lakh – Rs.5 lakhs (3.9810). However, the F-ratio value shows that, the mean score has not varied significantly among the respondents classified based on annual profit. Therefore, the null hypothesis has been accepted.

**5.5 Conclusion**

In this chapter, the business environmental factors both Internal and External environmental and the performance of rural Micro, Small and Medium manufacturing enterprises have been analysed by using percentage analysis, descriptive statistics, Friedman rank test, ANOVA, post hoc analysis and t-test. The results of the study have indicated that, the respondents have given the highest priority to "Birth place" for locating their business units and have preferred local market for the procurement of raw materials. It is revealed that, majority of the respondents run their production units in their own premises and consumes electricity, as power is the lifeline of manufacturing enterprises. Most of the respondents have received financial support in the form of equity from their family members. Most of the respondents have used own fund up to 25 per cent and borrowed funds up to 51-75 per cent to run their business units. Majority

of the respondents have approached public sector banks for fixed asset and working capital loan and have availed less than Rs. 25 lakhs to purchase fixed assets, and between Rs. 1-5 lakhs as working capital to run their business smoothly. Majority of them have not received subsidy under any scheme offered by the Government. Most of the respondents have followed cost plus pricing and have marketed their products to different districts. Majority of the respondents have not experienced exporting. Out of 28 respondents who have exporting experience, 50 per cent of them have exported their goods to Asia Pacific and have earned up to 10-25 per cent of export percentage on their total sales. Most of the respondents have recruited their workforce by word of mouth and have upgraded them in accessing the new technologies through 'on the job training' method. The respondents have paid full wages to their employees and have offered bonus to retain them in the business firm.

It is observed that, most of the respondents have strongly agreed to the statement 'Financial support from family, friends and relatives' (finance) and have agreed with the statements 'Low cost machinery is used for production' (production), 'Customers feedback are taken in to account to improve the product quality' (marketing), 'Cordial relationship is maintained with labourers' (Human resource), 'there is sufficient and timely availability of raw materials'(micro environmental factor), 'Business registration is easy' (macro environmental factor) and 'customer satisfaction' (Business performance). The firm characteristics namely, generation, legal status, total investment in plant and machinery, source of finance, permanent employees, annual turnover and annual profit have varied significantly with respect to Internal environmental factors, External environmental factors and Business Performance. The post hoc result reveals that, the respondents who run sole proprietorship business and private limited companies in rural areas, those with an investment of less than Rs.25 lakhs and between Rs.5 crores – Rs. 10 crores in plant and machinery, those who have earned an annual profit of less than Rs. 1 lakh and more than Rs. 10 lakhs have a high mean perception in production dimension. The respondents who have invested less than Rs.25 lakhs, between Rs.5 crores – Rs. 10 crores in plant and machinery and those who has earned an annual profit of less than Rs. 1 lakh have a high mean perception in finance dimension. The respondents who have earned an annual profit of more than Rs.10 lakhs have a high mean perception in marketing dimension.

The respondents who run private limited companies in rural areas, those who have used both own and borrowed funds to run their business units, those working with 11-15 permanent employees, those having an annual turnover of above Rs.60 lakhs, between Rs.20 – Rs.40 lakhs and less than Rs. 20 lakhs have a high mean perception in micro environmental factor. The respondents who have used only borrowed funds to run their business units have a high mean perception in macro environmental factor. The respondents who have used both own and borrowed funds to run their business units have a high mean perception towards the business performance. The respondents who run their business units irrespective of the number of permanent employees have a low mean perception in human resource dimension.

The study reveals that the rural entrepreneurs of MSME have depended only on internal source of finance, less cost equipments for production and have not availed any subsidy from the Government. Besides, they have not resorted to exporting of goods manufactured. This reveals the extent of unawareness and the practical difficulties they are exposed to availing financial and non-financial assistance from the nodal forces and the Government.