

CHAPTER 5

IMPACT OF DEMOGRAPHIC AND SOCIO-ECONOMIC VARIABLES ON EMPOWERMENT

5.1 Introduction

Chapter 6 gave a brief description as to how SBLP movement in Assam has led to various forms of empowerment viz. economic, educational, social and political and how all the forms of empowerment are interrelated. In this chapter, an attempt is being made to analyse the impact of various demographic and socio-economic variables on the empowerment.

The chapter is divided into four sections. Section 1 is the introduction. Section 2 discusses the methodology. Section 3 discusses the results and discussion. And section 4 concludes the chapter.

5.2 Methodology

The objective is to check whether **“The empowerment variables identified through factor analysis differ significantly with various demographic and socio-economic variables.”** which is sought to be fulfilled through the analysis of the primary data. To analyze the effect of socio-economic and demographic variables on the empowerment factors, the socio-economic and demographic variables used for the study are **Age, Religion, Caste, Marital Status, Educational qualification, Occupation, Family income and Family Expenditure.** Demographic and socio-economic variables are considered as independent variables and factors obtained from the factor analysis are

considered as a dependent variable. Independent sample t-test has been used to test two means are the same or not; while ANOVA is used to test whether three or more means are the same or not. Therefore, the t-test tests the null hypothesis that two means are equal while ANOVA tests the null hypothesis that all group means are equal. In ANOVA the F-ratio for the combined- group effect confirm if the group means are the same.

A cut-off point of .05 is used as a criterion for statistical significance for both t-test and ANOVA. If the observed significance value is less than .05 then it can be concluded that there is a significant difference between various demographic and socioeconomic variables on empowerment variables.

Levene's Test of Homogeneity of Variances has been checked. The test is designed to check the null hypothesis that the variances of the groups are the same. In the present study, Levene's test is, therefore, testing that the variances are significantly not different for the empowerment variables with regards to the different demographic and socioeconomic variables used in the study. If Levene's test is significant (i.e. the value of *Sig.* is less than .05) then it can be concluded that the variances are significantly different. This would mean that one of the assumptions of ANOVA has been violated and the violation needs to be rectified. A more common way to rectify differences between group variances is to transform all of the data and then reanalyze these transformed values or use Welch's *F*, or the Brown-Forsythe *F*. The present study uses Welch's *F* as a measure of rectification. After ANOVA tests to check further and analyze which groups differ, various post hoc tests are used. The present study uses Games-Howell procedure.

5.3 Results and Discussions

5.3.1 Results of Independent Sample t-Test for Age Group

To check whether the empowerment variables identified through factor analysis differ significantly with age. The following hypothesis is tested

H₀₁: Empowerment through SHG does not differ significantly with respect to age.

For the age group, the mean age was calculated for a sample size of 340 and it is found that the mean age is **34.17 years**. Therefore age above the mean age is considered to be one group and that below the mean age is considered as the second group for comparison.

Table 5.1: Results for Independent Sample t-Test Analysis for Age Group

| Variables | t statistic |
|--------------------------------|--------------------|
| Economic Empowerment | 1.284 |
| Educational Empowerment | 2.569** |
| Social Empowerment | 1.202 |
| Political Empowerment | 1.048 |

Source: Calculated by the author from Primary data

** Significant at the 0.05 level

In Table 5.1 the results of t-test show that there is a significant difference between the two age groups i.e. below 34.17 and above 34.17 years with regards to educational empowerment (.015<.05). This may be because women above the mean age group have lost their habit of reading and writing over time. As such their capacity for learning any new concept is a little difficult than those who have finished their education recently. The other reason may be elderly respondents are less educated than the younger generation.

5.3.2 Results of ANOVA for Religion

To check whether the empowerment variables identified through factor analysis differ significantly with religion. The following hypothesis is tested

H₀₂: Empowerment through SHG does not differ significantly with respect to religion.

Table 5.2 represents the result of ANOVA test for religion and empowerment variables. The Levene's test was performed and it is found that except for economic empowerment, for all the other empowerment variables the test is significant (i.e. the value of *Sig.* is less than .05). Therefore, it can be concluded that **variance** of the educational, social and political empowerment variables are **not the same** and therefore ANOVA cannot be used to check if empowerment differs significantly with respect to religion. As such the results of Welch F are presented for these three empowerment variables while the result of ANOVA is present for economic empowerment.

Table 5.2: Results for ANOVA Analysis for Religion

| Empowerment Variables | <i>Levene's Test for Homogeneity of Variance</i> | <i>ANOVA for Equality of Means</i> | <i>Robust Test for Equality of Means</i> |
|------------------------------|--|--|--|
| | <i>Levene Statistic</i> | <i>F</i> | <i>Welch F</i> |
| Economic | 2.401 | 25.731** | |
| Educational | 9.346** | | 50.643** |
| Social | 6.898** | | 5.826** |
| Political | 4.920** | | 737.327** |

Source: Calculated by the author from Primary data

******. Significant at the 0.05 level

In table 5.2 in the column representing both ANOVA and Welch- F it is seen that for all the empowerment variables the significance value is less than .05, which means that there exist significant differences between various religions with regards to empowerment through SHG. So, to check which groups differ significantly, Games-Howell procedure as a post hoc test was used for analysis. The results for the same are presented in table 5.3.

Table 5.3: Results of Post Hoc Analysis for Empowerment Variables and Different Religion

| Empowerment Variables | Independent Variable (I) | Dependent Variable (J) | Mean Difference (I-J) |
|------------------------------|---------------------------------|-------------------------------|------------------------------|
| Economic | Hindu | Christian | 2.855** |
| | Muslim | Christian | 3.013** |
| Educational | Hindu | Muslim | .536** |
| | | Christian | .809** |
| | Muslim | Christian | .272** |
| Social | Hindu | Christian | 2.744** |
| | Muslim | Christian | 2.635** |
| Political | Hindu | Muslim | .400** |
| | | Christian | 1.610** |
| | Muslim | Christian | 1.209** |

Source: Calculated by the author from Primary data

*** Significant at the 0.05 level.*

From table 5.3 it is seen that for all the forms of empowerment there exists a difference between the people belonging to Hindu religion with that belonging to Muslim and Christian. The difference also exists between Muslims and Christians. These mean differences are significant at a 0.05 level of significance. That may be due to the fact that only 2% of respondents in sample household belong to a Christian community who works as a daily labourer in tea gardens. That resulted in less contribution of that community in the overall empowerment scenario which further leads to significant differences between the groups. Among Hindu and Muslim community, significant differences are observed in all forms of empowerment which may be due to the differences in their religious beliefs with regards to types of occupation, participation in family decision making, going outside for marketing of their produce and participation in politics.

5.3.3 Results of ANOVA for Caste

To check whether the empowerment variables identified through factor analysis differ significantly with caste. The following hypothesis is tested

H₀₃: Empowerment through SHG does not differ significantly with respect to Caste.

Table 5.4 represents the result of ANOVA test for caste and empowerment variables. The Levene's test is performed and it is found that for all the empowerment variables the test is significant (i.e. the value of *Sig.* is less than .05). Therefore, it can be concluded that the variance of the empowerment variables are not the same and therefore ANOVA cannot be used to check if empowerment differs significantly with respect to caste. As such the results of Welch F are presented.

Table 5.4: Results for ANOVA Analysis for Caste

| Empowerment Variables | Homogeneity of Variance | Robust Test for Equality of Means |
|------------------------------|--------------------------------|--|
| | Levene Statistic | Welch F |
| Economic | 40.299** | 10.209** |
| Educational | 29.541** | .532** |
| Social | 15.611** | 9.353** |
| Political | 28.164** | 17.361** |

Source: Calculated by the author from Primary data

** Significant at the 0.05 level

In table 5.4 in the column representing Welch- F it is seen that for all the empowerment variables the significance value is less than .05, which means that there exist significant differences between various castes with regards to empowerment through SHG. So, to check which groups differ significantly, Games- Howell procedure as a post hoc test was used for analysis. The results for the same are presented in table 5.4.

Table 5.5: Results of Post Hoc Analysis for Empowerment Variables and Different Caste

| Empowerment Variables | Independent Variable (I) | Dependent Variable (J) | Mean Difference (I-J) |
|------------------------------|---------------------------------|-------------------------------|------------------------------|
| Economic | ST | General | .290** |
| | OBC/MOBC | General | .403** |
| Social | ST | OBC/MOBC | -.538** |
| | | General | -.343** |
| Political | ST | General | .292** |

Source: Calculated by the author from Primary data

** Significant at the 0.05 level

From table 5.5 it is seen that for economic empowerment there exists a difference between the people belonging Schedule Tribes (ST) and the General Category and the OBC/MOBC and the General category. This is due to the fact that General Category people are better off than ST and OBC/MOBC people in the study area even before joining SHG on the basis of family income and occupation. Again for the social empowerment there exists a significant difference between the ST and the OBC/MOBC and also with the General Category. ST respondents are even actively participating in family decision making pre-joining SHG. Also, no single incident of domestic violence against General Category people has been reported. All these made a significant

difference between the caste categories in terms of social empowerment. Finally, for political empowerment, there exists a difference between the ST and the General Category. All the mean difference is significant at a 0.05 level of significance. From the field survey, it is evident that there are very few incidences of women participation in the political arena. But those few people who have the lowest rate of participation are ST women. That may have resulted in differences in political empowerment between the two groups. However, the post hoc analysis showed indeterminate results regarding which caste actually differ with respect to educational empowerment.

5.3.4 ANOVA for Marital Status

To check whether the empowerment variables identified through factor analysis differ significantly with marital status. The following hypothesis is tested

H₀₄: Empowerment through SHG does not differ significantly with respect to marital status.

Table 5.6 represents the result of ANOVA test for marital status and empowerment variables. The Levene's test was performed and it was found that for all the empowerment variables except social empowerment, the test was significant (i.e. the value of *Sig.* is less than .05). Therefore, it can be concluded that the variance of three empowerment variables are not the same and therefore ANOVA cannot be used to check if empowerment differs significantly with respect to marital status. As such the results of ANOVA for social empowerment and that of Welch F for the other three forms of empowerment are presented.

Table 5.6: Results for ANOVA Analysis for Marital Status

| Empowerment Variables | <i>Levene's Test for Homogeneity of Variance</i> | <i>ANOVA for Equality of Means</i> | <i>Robust Test for Equality of Means</i> |
|------------------------------|--|------------------------------------|--|
| | <i>Levene Statistic</i> | <i>F</i> | <i>Welch F</i> |
| Economic | 7.070** | | 16.748** |
| Educational | 10.190** | | 13.963** |
| Social | 1.736 | 8.005** | |
| Political | 8.296** | | 12.881** |

Source: Calculated by the author from Primary data

** . Significant at the 0.05 level

In table 5.6 in the columns representing ANOVA and Welch- F it is seen that for all the empowerment variables the significance value is less than .05, which means that there exist significant differences between various marital statuses with regards to empowerment through SHG. So, to check which groups differ significantly, Games-Howell procedure as a post hoc test is used for analysis. The results for the same are presented in table 5.7

Table 5.7: Results of Post Hoc Analysis for Empowerment Variables and Marital Status

| Empowerment Variable | Independent Variable (I) | Dependent Variable (J) | Mean Difference (I-J) |
|-----------------------------|---------------------------------|-------------------------------|------------------------------|
| Economic | Married | Unmarried | .336** |
| Educational | Married | Unmarried | .303** |
| | Unmarried | Widow | -.471** |
| Social | Married | Widow | -.574** |
| | Unmarried | Widow | -.639** |
| Political | Married | Unmarried | .321** |
| | Unmarried | Widow | -.367** |

Source: Calculated by the author from Primary data

** Significant at the 0.05 level

From table 5.7 it is seen that for economic empowerment there exists a difference between those who are married and those not married. For educational empowerment, there exists a difference between those who are married and those not married and also those who are not married and the widow. Again for the social empowerment, there exists a significant difference between those who are married and the widow and the unmarried and the widow. Finally for political empowerment there exists a difference

between those who are married and those not married and the unmarried and the widow. All the mean difference is significant at a 0.05 level of significance.

That may be because married women are more dependent on their spouses in all aspects of life than those who are unmarried and widow. Another reason is, only 18 % of women respondents are married, the rest are either unmarried or widow. That resulted in less contribution of the married group in overall empowerment scenario also resulted in significant differences between the groups.

5.3.5 ANOVA for Education

To check whether the empowerment variables identified through factor analysis differ significantly with education. The following hypothesis is tested

H₀₅: Empowerment through SHG does not differ significantly with respect to educational qualification.

Table 5.8 represents the result of ANOVA test for educational qualification and empowerment variables. The Levene's test was performed and it was found that for all the empowerment variables the test was significant (i.e. the value of *Sig.* is less than .05). Therefore, it can be concluded that the variance of the empowerment variables are not the same and therefore ANOVA cannot be used to check if empowerment differs significantly with respect to caste. As such the results of Welch F are presented.

Table 5.8: Results for ANOVA Analysis for Educational Qualification

| Empowerment Variables | <i>Levene's Test for Homogeneity of Variance</i> | <i>Robust Test for Equality of Means</i> |
|------------------------------|--|--|
| | <i>Levene Statistic</i> | <i>Welch F</i> |
| Economic | 7.229** | 55.867** |
| Educational | 19.029** | 50.621** |
| Social | 45.806** | 22.064** |
| Political | 45.901** | 16.831** |

Source: Calculated by the author from Primary data

** . Significant at the 0.05 level

In table 5.8 in the column representing Welch- F it is seen that for all the empowerment variables the significance value is less than .05, which means that there exist significant differences between various educational qualifications with regards to empowerment through SHG. So, to check which groups differ significantly, Games- Howell procedure as a post hoc test was used for analysis. The results for the same are presented in table 5.8.

Table 5.9: Results of Post Hoc Analysis for Empowerment Variables and Educational Qualification

| Empowerment Variable | Independent Variable (I) | Dependent Variable (J) | Mean Difference (I-J) |
|-----------------------------|---------------------------------|-------------------------------|------------------------------|
| Economic | Illiterate | HSLC | -1.122** |
| | | HS | -1.696** |
| | | Degree and above | -1.673** |
| | Primary | HSLC | -.341** |
| | | HS | -.916** |
| | | Degree and above | -.893** |
| | HSLC | HS | -.574** |
| | | Degree and above | -.551** |
| | Education | Illiterate | HS |
| Degree and above | | | -2.024** |
| Primary | | HSLC | -.465** |
| | | HS | -1.041** |

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|------------------|------------|------------------|----------|
| | | Degree and above | -.857** |
| | HSLC | HS | -.576** |
| | | Degree and above | -.392** |
| Social | Primary | HSLC | -.366** |
| | | HS | -.566** |
| | | Degree and above | -.715** |
| Political | Illiterate | HSLC | -.905** |
| | | HS | -1.704** |
| | | Degree and above | -1.627** |
| | Primary | HSLC | -.358** |
| | | HS | -1.156** |
| | | Degree and above | -1.080** |

Source: Calculated by the author from Primary data

** Significant at the 0.05 level

From table 5.9 it is seen that for economic empowerment there exists a difference between the illiterates with HSLC, HS and Degree and above. Again a difference is observed between those with primary education with HSLC, HS and Degree and above.

Further, the difference is observed with those passing HSLC with those Passing HS and Degree and above. For educational empowerment, there exists a difference between the illiterates with those with HS and Degree and above. Again a difference is observed between those with primary education and those with HSLC, HS and Degree and above. Further, the difference is observed with those passing HSLC with those Passing HS and Degree and above. And last, there also exists a difference between those passing HS with those having Degree and above category.

Again for the social empowerment, there exists a significant difference between the illiterates with those with HSLC, HS and Degree and above.

Finally, for political empowerment, there exists a difference between the illiterates with those with HSLC, HS and Degree and above. Again a difference is observed between those with primary education and those with HSLC, HS and Degree and above.

This may be because of the fact that different level of educational attainment comes with a different level of income-generating opportunities, educational empowerment, involvement with the decision-making process and political participation. Moreover, there are only 2% sample respondents who are uneducated and 3% population with a degree and above. So their contribution to the overall empowerment scenario is minuscule.

5.3.6 ANOVA for Occupation

To check whether the empowerment variables identified through factor analysis differ significantly with the occupation. The following hypothesis is tested

H₀₆: Empowerment through SHG does not differ significantly with respect to the occupation.

Table 5.10 represents the result of ANOVA test for occupation and empowerment variables. The Levene's test was performed and it was found that for all the empowerment variables the test was significant (i.e. the value of *Sig.* is less than .05). Therefore, it can be concluded that the variance of the empowerment variables are not the same and therefore ANOVA cannot be used to check if empowerment differs significantly with respect to caste. As such the results of Welch F are presented.

Table 5.10: Results for ANOVA Analysis for Occupation

| Empowerment Variables | <i>Levene's Test for Homogeneity of Variance</i> | <i>Robust Test for Equality of Means</i> |
|------------------------------|--|--|
| | <i>Levene Statistic</i> | <i>Welch F</i> |
| Economic | 10.486** | 4.125** |
| Educational | 19.438** | 2.522** |
| Social | 6.874** | 1.098** |
| Political | 5.475** | 4.391** |

Source: Calculated by the author from Primary data

** . Significant at the 0.05 level

In table 5.10 in the column representing Welch- F it is seen that for all the empowerment variables the significance value is less than .05, which means that there exist significant

differences between various occupations with regards to empowerment through SHG. So, to check which groups differ significantly, Games- Howell procedure as a post hoc test was used for analysis. The results for the same are presented in table 5.11.

Table 5.11: Results of Post Hoc Analysis for Empowerment Variables and Occupation

| Empowerment Variable | Independent Variables (I) | Dependent Variables (J) | Mean Difference (I-J) |
|-----------------------------|----------------------------------|--|------------------------------|
| Economic | Unemployed | Engaged under government scheme | -.561** |
| | | Petty business owner | -1.109** |
| | | Agricultural Farmer | .656** |
| | | Employed in unorganised sector | .823** |
| | | service plus livestock and poultry farming | -1.086** |
| | | Daily Labourer | -.843** |
| | Engaged under government scheme | Petty business owner | -.548** |
| | | Agricultural Farmer | 1.217** |
| | | Employed in unorganised sector | 1.384** |
| | | service plus livestock and poultry farming | -.525** |
| | | Daily Labourer | -.282** |
| | Petty business owner | Agricultural Farmer | 1.766** |

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|--------------------|------------------------------------|--|----------|
| | | Employed in unorganised sector | 1.933** |
| | | Daily Labourer | .266** |
| | Agricultural Farmer | Employed in unorganised sector | .166** |
| | | service plus livestock and poultry farming | -1.743** |
| | | Daily Labourer | -1.500** |
| | Employed in the unorganised sector | service plus livestock and poultry farming | -1.910** |
| | | Daily Labourer | -1.666** |
| Educational | Unemployed | Engaged under government scheme | -.461** |
| | | Petty business owner | -1.382** |
| | | Agricultural Farmer | -.769** |
| | | Employed in unorganised sector | -.279** |
| | | service plus livestock and poultry farming | -1.603** |
| | | Daily Labourer | -.370** |
| | Engaged under government scheme | Petty business owner | -.921** |
| | | service plus livestock and poultry farming | -1.141** |
| | Petty business owner | Agricultural Farmer | .613** |
| | | Employed in unorganised sector | 1.103** |
| | | Daily Labourer | 1.012** |
| | Agricultural Farmer | Employed in unorganised sector | .489** |

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|---------------|--|--|----------|
| | | service plus livestock and poultry farming | -.834** |
| | | Daily Labourer | .398** |
| | Employed in the unorganised sector | service plus livestock and poultry farming | -1.323** |
| | | Daily Labourer | -.090** |
| | service plus livestock and poultry farming | Daily Labourer | 1.232** |
| Social | Unemployed | Agricultural Farmer | 3.364** |
| | | Employed in unorganised sector | 2.620** |
| | | Daily Labourer | 1.719** |
| | Engaged under government scheme | Agricultural Farmer | 3.416** |
| | | Employed in unorganised sector | 2.673** |
| | | Daily Labourer | 1.771** |
| | Petty business owner | Agricultural Farmer | 3.757** |
| | | Employed in unorganised sector | 3.013** |
| | | service plus livestock and poultry farming | .647** |
| | | Daily Labourer | 2.112** |
| | Agricultural Farmer | Employed in unorganised sector | -.743** |
| | | service plus livestock and poultry farming | -3.110** |
| | | Daily Labourer | -1.645** |
| | Employed in the unorganised sector | service plus livestock and poultry farming | -2.366** |

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|------------------|--|--|----------|
| | | Daily Labourer | -.901** |
| | service plus livestock and poultry farming | Daily Labourer | 1.465** |
| Political | Unemployed | Engaged under government scheme | -1.728** |
| | | Petty business owner | -2.284** |
| | | service plus livestock and poultry farming | -2.673** |
| | | Daily Labourer | -2.375** |
| | Engaged under government scheme | Petty business owner | -.555** |
| | | Agricultural Farmer | 1.579** |
| | | Employed in unorganised sector | 1.981** |
| | | service plus livestock and poultry farming | -.945** |
| | | Daily Labourer | -.647** |
| | Petty business owner | Agricultural Farmer | 2.135** |
| | | Employed in unorganised sector | 2.537** |
| | Agricultural Farmer | Employed in unorganised sector | .401** |
| | | service plus livestock and poultry farming | -2.525** |
| | | Daily Labourer | -2.227** |
| | Employed in the unorganised sector | service plus livestock and poultry farming | -2.927** |
| Daily Labourer | | -2.628** | |

Source: Calculated by the author from Primary data

** Significant at the 0.05 level

From table 5.11 it is seen that for economic empowerment there exists a difference between Unemployed with all the forms of occupation. The difference also exists between those Engaged under government scheme with all the forms of occupation. For the Self Employed except for service plus livestock and poultry farming, there exists a difference between all the other forms of occupation. There also exists a significant difference between Agricultural Farmer with all the forms of occupation. The difference is also observed between those Employed in the unorganised sector with all the forms of occupation.

For educational empowerment, there exists a difference between Unemployed with all the forms of occupation. The difference also exists between those Engaged under government scheme with petty business owner and service plus livestock and poultry farming. For the Self Employed there exist a difference between agricultural farmer, employed in the unorganized sector and daily labourer. There also exists a significant difference between Agricultural Farmer with all the forms of occupation except people engaged under government schemes. The difference is also observed between those Employed in the unorganised sector with service plus livestock and poultry farming and daily labourers. Finally, the difference is observed between those engaged in service plus livestock and poultry farming with the Daily labourer.

Again for the social empowerment, there exists a significant difference between Unemployed with the Agricultural farmer, employed in the unorganized sector and daily labourer. The difference also exists between those Engaged under government scheme with the agricultural farmer, employed in the unorganized sector and daily labourer. For the petty business owner there exist a difference between all forms of occupation except unemployment and engaged under a government scheme. There also exists a significant

difference between Agricultural Farmer with all the forms of occupation. The difference is also observed between those Employed in the unorganised sector with all the forms of occupation. Finally, the difference is observed between those engaged in service plus livestock and poultry farming with all the forms of occupation except unemployed and those engaged under government scheme and self-employed.

Finally, for political empowerment, there exists a difference between Unemployed with all the forms of occupation except an agricultural farmer and those engaged in the unorganised sector. The difference also exists between those engaged under government scheme with Unemployed with all the forms of occupation. For the Self Employed there exists a difference between unemployed, agricultural farmer and those who are employed in the unorganised sector. There also exists a significant difference between Agricultural Farmer with all the forms of occupation except unemployed. The difference is also observed between those employed in the unorganised sector with all the forms of occupation except the unemployed. All the mean differences are significant at a 0.05 level of significance.

Based on observations it has been found that respondents with diverse types of occupation will have differences in attaining empowerment. Respondents engaged in various types of work will utilise their loan amount differently which will bring different amounts of return/profit. Moreover dissimilar types of occupation require different educational knowledge. For example, those who got engaged in petty business post joining SHG will need to have a fair knowledge of money calculation, bank transaction etc. than those who are unemployed or daily labourer. This results in a significant difference in attaining educational empowerment. Moreover, Daily labourer and those who work in agricultural fields or government schemes need to go out of their house for

a living whereas respondents who own livestock and poultry and those who are unemployed basically stays at home. Similarly to some extent participation in political arena get influenced by types of occupation.

5.3.7 t-Test for Monthly Income

To check whether the empowerment variables identified through factor analysis differ significantly with monthly income. The following hypothesis is tested

H₀₇: Empowerment through SHG does not differ significantly with respect to monthly income.

For the income group, the mean income is calculated for a sample size of 340 and it is found that the mean income is **8332 INR**. Therefore income above the mean income is considered to be one group and that below the mean income is considered as the second group for comparison.

Table 5.12: Results for Independent Sample t-test Analysis for Monthly Income

| Empowerment Variables | t Statistic |
|--------------------------------|--------------------|
| Economic Empowerment | -11.494** |
| Educational Empowerment | -6.706** |
| Social Empowerment | -8.734** |
| Political Empowerment | -5.174** |

Source: Calculated by the author from Primary data

******. Significant at the 0.05 level

Note: Monthly Income-8332 INR (poverty estimate, 2011-12)

The figure has been inflated to the 2016 rate with the help of inflation rate

In table 5.12, the result of t-test shows that there is a significant difference between the two income groups with regards to economic empowerment ($.000 < .01$), educational empowerment ($.000 < .01$), social empowerment ($.000 < .01$), political empowerment ($.000 < .01$).

Based on observations it was found that respondents who attained a higher level of income post joining SHG eventually obtained a higher level of economic empowerment which led to other forms of empowerment.

5.3.8 t-Test for Monthly Expenditure

To check whether the empowerment variables identified through factor analysis differ significantly with monthly income. The following hypothesis is tested

H₀₈: Empowerment through SHG does not differ significantly with respect to monthly expenditure.

For monthly expenditure, the mean expenditure was calculated for a sample size of 340 and it is found that the mean expenditure is **4810 INR**. Therefore expenditure above the mean expenditure is considered to be one group and that below the mean expenditure is considered as the second group for comparison.

Table 5.13: Results for t-test for Monthly Expenditure

| Empowerment Variables | t Statistic |
|--------------------------------|--------------------|
| Economic Empowerment | -3.826** |
| Educational Empowerment | -4.726** |
| Social Empowerment | -3.697** |
| Political Empowerment | -3.904** |

Source: Calculated by the author from Primary data

** . Significant at the 0.05 level

Note: Monthly Expenditure- 4810 INR (poverty estimate, 2011-12)

The figure has been inflated to the 2016 rate with the help of inflation rate

In table 5.13 the result of t-test shows that there is a significant difference between the two expenditure groups with regards to economic empowerment (.000 <.01), educational empowerment (.000<.01), social empowerment (.000<.01), political empowerment (.000<.01).

Spending money on productive ventures and education will lead to economic and educational empowerment respectively. Social and political empowerments are also directly related to a higher level of expenditure. That makes significant differences in two expenditure groups with respect to empowerment.

5.4 Conclusion

The results t-test shows that there is a significant difference between the two age groups, with regards to educational empowerment. The result of t-test further shows that there is a significant difference between the two income and expenditure groups with regards to economic empowerment, educational empowerment, social empowerment and political empowerment.

The result of ANOVA and Welch F shows there exist significant differences between religious groups, marital status, educational qualification and occupation with regards to various forms of empowerment through SHG. The result of Welch F shows there exist significant differences between various castes with regards to economic, social and political empowerment through SHG.