CHAPTER 5

DISCUSSION OF RESULTS

This study primarily aimed at studying Academic Achievement of 10+1 students in relation to their Metacognition, Self-Confidence and Family Environment. The aim was to see whether Metacognition, Self-Confidence, Family Environment have any relationship with Academic Achievement of 10+1 students and Demographic Variables like Gender, Locale and Type of School have any impact on Academic Achievement, Metacognition, Self-Confidence and Family Environment of 10+1 Students. Discussion of results is done by taking hypotheses:

Hypothesis related to Academic Achievement vs. Metacognition

H₀₁: There exists no significant relationship between Academic Achievement and Metacognition of 10+1 students.

There exists significant and positive relationship between metacognition and academic achievement of 10+1 students. It can be inferred from the result that students who have high metacognition perform academically better than those who have low metacognition. The possible reason for this could be that metacognition helps students to understand what they are supposed to learn and to become aware of whether or not they have actually achieved the goal. Thus, the hypothesis (H₀₁) that there exists no significant relationship between Academic Achievement and Metacognition of 10+1 students is REJECTED.

The result is similar with the findings of Landline and Stewart (1998) who found significant positive relationship between metacognition and academic achievement. Similarly, Gakhar (2006) observed that students who had stronger preference for thinking style were likely to get higher academic marks in the examination and vice versa. Thus, on the basis of present analysis, it can be concluded that metacognition is important for generating academic success rewards.
Hypothesis related to Academic Achievement vs. Self-Confidence

**H₀₂:** There exists no significant relationship between Academic Achievement and Self-Confidence of 10+1 students.

There is significant but low relationship between self-confidence and academic achievement of 10+1 students. Thus, the hypothesis (H₀₂) stating that there exists no significant relationship between Academic Achievement and Self-Confidence of 10+1 students is REJECTED. The possible reason for this could be that self-confident people have belief in their abilities and so have high academic achievement.

The results are similar with the findings of Berlanga (2004) who found that there is a definite effect on students’ self-confidence and a contribution to students’ successful academic performance. Partington (2004) found that students with high self-confidence would be more likely to have high levels of academic achievement and future aspiration than those with low self-confidence. Similarly, Gurubasappa (2009) found that there is significant correlation between academic achievement and self-confidence. The results of Jafri (2011) also reveal that self-confidence is significantly related with academic achievement.

**Hypotheses related to Academic Achievement vs. Family Environment**

**H₀₃:** There exists no significant relationship between Academic Achievement and Family Environment of 10+1 students.

There is positive and significant relationship between academic achievement and family environment of 10+1 students. Thus, the hypothesis (H₀₃) that there exists no significant relationship between Academic Achievement and Family Environment of 10+1 students is REJECTED. The students who have better family environment i.e. who have helping family members, supportive family, less conflicts and caring parents can achieve more in their academics.

The results are in consonant with Vamadevappa (2005) who found that there is a positive and significant relationship between parental involvement and academic achievement. The results are similar with the findings of Chopra (1982) that home adjustment was more clearly related to academic achievement. Wang, Wildman and Calhon (1995) found that children’s perceptions that their parents are involved and
interested in school, and encourage them to do well are positively related to academic achievement. Siwach (2008) found that good quality of home environment had significant positive correlation with high level of scholastic achievement. Jafri (2011) found that there exists significant relationship between family climate and academic achievement. Rais (2011) also revealed that family climate had positive and significant impact on academic achievement of adolescents.

**H04: There exists no significant relationship between Academic Achievement and Relationship Dimensions of Family Environment of 10+1 students.**

The relationship dimensions of family environment and academic achievement of 10+1 students are positively and significantly related to each other. Thus, the hypothesis (H04) stating that there exists no significant relationship between Academic Achievement and Relationship Dimensions of Family Environment of 10+1 students is REJECTED. It might be due to the fact that degree of commitment, help, and support of family members, freedom to express their feelings, less conflict in the family and unconditional acceptance help students to achieve higher in their academics.

**H05: There exists no significant relationship between Academic Achievement and Personal Growth Dimensions of Family Environment of 10+1 students.**

There is positive and significant relationship between personal growth dimension and academic achievement of 10+1 students. Thus, the hypothesis (H05) that there exists no significant relationship between Academic Achievement and Personal Growth Dimensions of Family Environment of 10+1 students is REJECTED. It can be inferred from the result that independent decision making and participation in various social and recreational activities help an individual to achieve more in academics.

**H06: There exists no significant relationship between Academic Achievement and System Maintenance Dimensions of Family Environment of 10+1 students.**

The system maintenance dimensions and academic achievement of 10+1 students are positively and significantly related to each other. Thus, the hypothesis (H06) stating that there exists no significant relationship between Academic Achievement and System Maintenance Dimensions of Family Environment of 10+1 students is REJECTED. The result leads to the inference that clear organization structure in planning family activities
and responsibilities helps an individual to plan their academic activities and hence have high academic achievement.

**Hypotheses Related to Academic Achievement**

**H₀₇:** There exists no significant mean difference between Academic Achievement of Male and Female 10+1 students.

There is significant mean difference between male and female students on academic achievement. When results are compared in the context of the mean scores, it is found that mean academic achievement scores of the male students is lower than that of female students. It shows that female students have high academic achievement than their male counterparts. It may be due to the fact that female students are more sincere and hardworking in their studies as compared to male students. As males are more impulsive and get involved in other activities, so they spend less time in their studies and score low in academics. Thus, the hypothesis (H₀₇) that there exists no significant mean difference between Academic Achievement of Male and Female 10+1 students is REJECTED.

Results are similar to that of Vamadevappa (2005) that there was significant difference between boys and girls in their academic achievement. Chadha and Kaur (2008) found that females academically perform markedly better than males. Joshi and Srivastava (2009) found that significant gender differences were found in academic achievement. Girls were significantly higher on academic achievement as compared to boys. Kaur (2010) found that female possess higher academic achievement than male adolescents. Chahal (2011) also found that there exists significant difference between the male and female adolescents on academic achievement.

**H₀₈:** There exists no significant mean difference between Academic Achievement of Rural and Urban 10+1 students.

The t- ratios between mean academic achievement scores of rural and urban 10+1 students are not significant. The mean scores of urban students is slightly higher than the mean scores of rural students but the difference is not significant. It shows that rural and urban 10+1 students do not differ in their academic achievement. This may be due to the fact that now- a-days equal opportunities were provided to rural as well as urban students.
Thus, the hypothesis ($H_{08}$) stating that there exists no significant mean difference between Academic Achievement of Rural and Urban 10+1 students is RETAINED.

The results are in contrast to the results of Joshi and Srivastava (2009) that there were significant differences with regard to academic achievement of rural and urban adolescents. Urban adolescents scored higher in academic achievement as compared to rural adolescents. Kaur (2010) found that rural adolescents have higher academic achievement than urban adolescents. Chahal (2011) also revealed that there exists significant difference between rural and urban adolescents on their level of academic achievement.

$H_{09}$: There exists no significant mean difference between Academic Achievement of 10+1 students of Government and Private Schools.

There is significant difference between the academic achievements mean scores of 10+1 students studying in government and private schools. The academic achievement mean score of students studying in private schools is higher than those studying in government schools. Thus, the hypothesis ($H_{09}$) stating that there exists no significant mean difference between Academic Achievement of 10+1 students of Government and Private Schools is REJECTED. The result shows that the 10+1 students studying in private schools perform academically better than the students studying in government schools. This may be due to the fact that private schools provide more congenial environment and better facilities like updated libraries and well equipped laboratories which make a difference in the academic performance of their students. Moreover, lesser student-teacher ratio in these schools make teaching more personalized and enhances learning process.

The present findings are in tune with Kaur (2010) who pointed out that adolescents studying in private schools seems to have better academic performance as compared to adolescents studying in government schools.

$H_{010}$ There exists no significant interactional effect of Gender, Locale, and Type of School on Academic Achievement of 10+1 students.

The result of two-way interaction analysis exhibits that a particular combination of Gender and Locale affects the Academic Achievement of 10+1 students. There is a significant mean difference between rural male and urban male students and rural male
and rural female students on academic achievement. Urban male students have higher academic achievement than rural male students. The reason behind this may be that urban male students have more facilities than rural male students. Also, rural female students have higher academic achievement as compared to rural male students. This may be due to the fact that female students are more sincere and hardworking in their studies as compared to their male counterparts. There exists no significant difference between the mean academic achievement scores of rural female and urban female students and urban male and urban female students. This may be due to the fact that both have equal educational opportunities.

The result of two-way interaction analysis between Gender and Type of School exhibits that when the two factors interact with one another; they create significant influence on the academic achievement of 10+1 students. There exists a significant mean difference between male students of government and private schools, female students of government and private schools and male and female students of private schools. The result shows that male and female students of private schools have higher academic achievement scores as compared to male and female students of government schools. The reason may be that the private schools have better teaching-learning facilities than government schools. The mean academic achievement score of female students of private schools is higher than those of male students of private schools. This may be due to the reason that female students are more sincere and serious about their studies. There exists no significant difference between male and female students of government school students on academic achievement. Both the groups have average level of academic achievement, this may be due to the fact that government schools do not have conducive learning environment.

The result of two-way interaction among Locale and Type of Schools exhibits no influence on the Academic Achievement of 10+1 students. The three-way interaction among Gender, Locale and Type of School has significant influence on Academic Achievement of 10+1 students. There exists significant difference between rural male students of government and private schools, urban male students of government and private schools, rural and urban male students of government schools, rural female students of government and private schools, urban female students of government and
private schools, rural male and female students of private schools and urban male and female students of private schools. The results show that among government and private school students, private school students have higher academic achievement because private schools have more facilities than government schools. Among male and female students female students have higher academic achievement than male students as female students are more sincere. Among rural and urban students, urban students have higher academic achievement score because urban students have more facilities than rural students. There exists no significant mean difference between rural and urban male students of private schools, rural and urban female students of private schools and urban male and female students of government schools. Thus, the hypothesis (H₀₁₀) that there exists no significant interactional effect of Gender, Locale, and Type of School on Academic Achievement of 10+1 students stands REJECTED.

Hypotheses Related to Metacognition

H₀₁₁: There exists no significant mean difference between Metacognition of Male and Female 10+1 students.

There is significant mean difference between male and female students on metacognition. Female students have high mean score as compared to male students on metacognition. The result shows that the female students have more inclination towards the use of different thinking strategies as compared to male students. Thus, the hypothesis (H₀₁₁) stating that there exists no significant mean difference between Metacognition of Male and Female 10+1 students is REJECTED.

The result is in accordance with Joshi and Sharma (2003) found that at certain age boys are more developed in verbal reasoning than girls, while girls are more developed in abstract reasoning. Zakaria, Yazid and Ahmad (2007) found that there was a significant difference in dimension of self-checking between males and females. Simsek and Balaban (2008) reported that female students were more effective in selecting and using appropriate strategies than male students.
H₀₁₂: There exists no significant mean difference between Metacognition of Rural and Urban 10+1 students.

There exists significant difference between the mean scores of rural and urban students on metacognition. Thus, the hypothesis (H₀₁₂) that there exists no significant mean difference between Metacognition of Rural and Urban students is REJECTED. Rural students shows higher metacognition than urban students, it shows that the rural students have more inclination towards the use of different thinking strategies as compared to urban students. This may be due to the reason that requirement of urban students get easily fulfilled and they are not exposed to real life experiences. The results are in contrast with the results of Sami and Ozgul (2009) who found that students in urban areas developed better knowledge of cognition and regulation of cognitive skills. Kaur (2010) found urban adolescents scored more on metacognition as compared to rural adolescents.

H₀₁₃: There exists no significant mean difference between Metacognition of 10+1 students of Government and Private Schools.

There is no significant difference between the metacognition mean scores of 10+1 students studying in government schools and 10+1 students studying in private schools. There is marginal difference between the mean score of government school students and private school students and this may be due to sampling error. Thus, the hypothesis (H₀₁₃) that there exists no significant mean difference between Metacognition of 10+1 students of Government and Private Schools is RETAINED. The result leads to the inference that both students studying in government schools and private schools have average metacognition scores, thus both use different type of thinking strategies, have knowledge of different learning strategies and problem solving strategies. Results are in contrast with the findings of Kaur (2010) that there exists significant difference between the metacognition of adolescents studying in government and private schools. Government school students have higher metacognition than private school students.

H₀₁₄ There exists no significant interactional effect of Gender, Locale, and Type of School on Metacognition of 10+1 students.

The result of two-way interaction analysis among Gender and Locale on Metacognition shows that a particular combination of Gender and Locale affects the
Metacognition of 10+1 students. There exists no significant difference between rural and urban male students and male and female urban students. Both the groups possess average level of metacognition; it shows that they sometimes use thinking and learning strategies. There exists significant difference between rural and urban female students and rural male and female students. Results show that rural female students have higher metacognition than urban female and rural male students. This may be due to the fact that rural female students have more struggling life than those of urban females and rural male students therefore they have more inclination towards thinking strategies.

Also, the result of two-way interaction among Gender and Type of School shows significant influence on metacognition of 10+1 students. There is no significant difference between mean scores of male students of government and private schools and male and female students of government schools. All of these possess average level of metacognition. There exists significant mean difference between female students of government and private schools and male and female students of private schools. Female students of private schools possess higher score on metacognition than female students of government schools and male students of private schools. This may be due to the fact that private schools provide more facilities and also female students are more serious in their studies as compared to male students.

The combined effect of Locale and Type of School has no influence on metacognition. Also, the three-way interaction analysis among Gender, Locale and Type of School has no influence on metacognition of 10+1 students. This may be due to the reason that demerits of one factor were overcome by the other. Thus, the hypothesis (H_014) that there exists no significant interactional effect of Gender, Locale, and Type of School on Metacognition of 10+1 students is RETAINED.

**Hypotheses Related to Self-Confidence**

**H_015:** There exists no significant mean difference between Self-Confidence of Male and Female 10+1 students.

There is significant mean difference between scores of male and female 10+1 students on self-confidence. Both male students and female students fall in the average level of self-confidence. Male students possess higher self-confidence as compared to
female students. This is due to the fact that male students are more ambitious, competitive and self-aware as compared to female students. Thus, the hypothesis (H\textsubscript{0}15) that there exists no significant mean difference between Self-Confidence of Male and Female 10+1 students is REJECTED.

Results are in tune with Ziegler and Heller (2000) who found that girls have significantly lower level of self-confidence regarding Chemistry than did boys. Similarly, Paliwal, Dube and Mathur (2006) also found that majority of boys and girls scored in average category on self-confidence. Joshi and Srivastava (2009) also found that boys scored significant higher on self-esteem as compare to girls. On the same front Parvathamamma and Sharanamamma (2010) found that there was a significant difference between self-confidence levels of boys and girls. Chahal (2011) found that there exists significant difference between male and female adolescents on their level of self-confidence.

However, the results are in contrast to Singh (2010) who found no significant difference between self-confidence level of male and female.

**H\textsubscript{0}16: There exists no significant mean difference between Self-Confidence of Rural and Urban 10+1 students.**

There is no significant difference between mean scores of rural and urban 10+1 students on self-confidence. The mean scores of urban students is slightly higher than the mean scores of rural students but the difference is not significant. It shows that rural and urban 10+1 students do not differ in their self-confidence both have average level of self-confidence. The reason may be that both rural and urban students have faith in their abilities, have general sense of control and both have almost equal abilities to analyze themselves. Thus, the hypothesis (H\textsubscript{0}16) stating that there exists no significant mean difference between Self-Confidence of Rural and Urban 10+1 students is RETAINED.

The results are in tune with Joshi and Srivastava (2009) whose findings indicated that there were no significant differences with regard to self-esteem of rural and urban adolescents. Chahal (2011) also found that there exists significant difference between rural and urban adolescents on self-confidence.


**H₀₁₇: There exists no significant mean difference between Self-Confidence of 10+1 students of Government and Private Schools.**

There exists significant difference between the mean scores of 10+1 students studying in government and private schools on the variable self-confidence. Mean scores of government and private school students indicates both possess average level of self-confidence, but students studying in private schools possess higher level of self-confidence as compared to students studying in government schools as higher the mean score lower the level of self-confidence. The reason for this may be that private school students have better institutional environment, better opportunities to explore their abilities, have more exposure than students studying in government schools. Thus, the hypothesis (H₀₁₇) stating that there exists no significant mean difference between Self-Confidence of 10+1 students of Government and Private Schools is REJECTED.

**H₀₁₈ There exists no significant interactional effect of Gender, Locale, And Type of School on Self-Confidence of 10+1 students.**

The two-way interactional analysis of Gender and Locale, Gender and Type of School and Locale and Type of School creates no influence on self-confidence of 10+1 students. Also, the three-way interactional among Gender, Locale and Type of School is not significant. It means that combination of these three factors have no influence on the self-confidence of 10+1 students. Thus, the hypothesis (H₀₁₈) that there exists no significant interactional effect of Gender, Locale, and Type of School on Self-Confidence of 10+1 students is RETAINED.

**Hypotheses Related to Family Environment**

**H₀₁₉: There exists no significant mean difference between Family Environment of Male and Female 10+1 students.**

There is significant mean difference between male and female students on family environment. When results are compared in the context of the mean scores, it is found that mean scores of the male students is lower than the female students. This shows that family members are more caring and helping, encouraged them to express their feelings, less conflicts, independent decision making, organized and planned family activities but more restrictions for female students as compare to male students. Thus, the hypothesis
(H₀19) that there exists no significant mean difference between Family Environment of Male and Female 10+1 students is REJECTED.

Results are similar with the findings of Mohanraj and Latha (2005) who found that boys and girls differed in perception of home environment.

**H₀20: There exists no significant mean difference between Family Environment of Rural and Urban 10+1 students.**

There exists significant mean difference between rural and urban students on family environment. When results are compared in the context of the mean scores, it is found that mean scores of the urban students is lower than the rural students. It means that rural students have better family environment than urban students i.e. rural students have helping and supportive family members, low conflicts in the family, unconditional acceptance and organized family structure where as urban students have nuclear families, parents have no time for their children. Thus, the hypothesis (H₀20) that there exists no significant mean difference between Family Environment of Rural and Urban 10+1 students is REJECTED.

**H₀21: There exists no significant mean difference between Family Environment of 10+1 students of Government and Private Schools.**

There exists no significant mean difference between 10+1 students studying in government and private schools on family environment. Both government school students and private school students have average score on family environment. It shows both have average cohesion, expressiveness, independence, conflicts, organization and control. Thus, the hypothesis (H₀21) that there exists no significant mean difference between Family Environment of 10+1 students of Government and Private Schools is RETAINED.

**H₀22 There exists no significant interactional effect of Gender, Locale, and Type of School on Family Environment of 10+1 students.**

The two-way interaction analysis exhibits that there is significant interactional effect of Gender and Locale on family environment of 10+1 students. There exists no significant difference between rural and urban male students and urban male and female students on family environment. Result shows that students of all these categories
possess average score on family environment. There exists significant mean difference between rural and urban female students and rural male and female students. This shows that rural female students have higher score on family environment as compared to urban female students and rural male students i.e. rural female students have better family environment.

There exists significant interactional effect of Gender and Type of School on family environment of 10+1 students. There is significant mean difference between male students of government and private schools and male and female students of private schools on family environment. Male students of government schools and female students of private schools possess higher score on family environment as compared to male students of private schools. There is no significant mean difference between the female students of government and private schools and male and female students of government schools. All the above groups possess average score on family environment.

The two factor interaction of Locale and Type of School on family environment of 10+1 students is not significant. This shows that these two factors in combination have no influence on family environment of 10+1 students. Also, the three-way interaction among Gender, Locale and Type of School is not significant. Thus, the hypothesis (H0 22) that there exists no significant interactional effect of Gender, Locale, and Type of School on Family Environment of 10+1 students is RETAINED.

Hypotheses Related to Relationship Dimensions of Family Environment

H0 23: There exists no significant mean difference between Relationship Dimensions of Family Environment of Male and Female 10+1 students.

There is a significant difference between male and female 10+1 students on the subscale cohesion of relationship dimensions of family environment. Results show that female students have high degree of commitment, helping and supportive family members than male students. There is no significant difference between male and female 10+1 students on expressiveness. Result shows that both male and female students are encouraged to express their feelings. There is no significant difference between the male and female students on conflict. It means that both male and female students have average conflicts in their family. There is a significant difference between male and
female students on acceptance and caring. Both male and female students have average score on acceptance and caring subscale of relationship dimensions of family environment, but female students have high mean score than male students. This shows that family members are more caring and accepting towards female students as compared to male students there exists a significant difference between male and female 10+1 students on the overall relationship dimensions of family environment. Thus, the hypothesis (H$_0$23) that there exists no significant mean difference between Relationship Dimensions of Family Environment of Male and Female 10+1 students is REJECTED.

**H$_0$24: There exists no significant mean difference between ‘Relationship Dimensions’ of Family Environment of Rural and Urban 10+1 students.**

There exists significant mean difference between rural and urban 10+1 students on subscales cohesion, expressiveness, conflict and acceptance and caring of relationship dimensions of family environment. In all the subscales rural students have higher mean value as compared to their urban counterparts. So, family members of rural students have high degree of commitment, help and support of family members, can express their feelings and thoughts directly, less conflicts, acceptance and caring attitude of family members. Also, there exists a significant difference between mean scores of rural and urban 10+1 students on the relationship dimensions of family environment. Thus, the hypothesis (H$_0$24) that there exists no significant mean difference between Relationship Dimensions of Family Environment of Rural and Urban 10+1 students is REJECTED.

**H$_0$25: There exists no significant mean difference between ‘Relationship Dimensions’ of Family Environment of 10+1 students of Government and Private Schools.**

There exists significant difference between mean scores of 10+1 students studying in government and private schools on the subscale cohesion of relationship dimension of family environment. Both have average level of cohesion, but government school students have higher mean value than private school students. It means government school students have average degree of commitment, help and supportive family members. There is significant mean difference between 10+1 students studying in government and private schools on expressiveness subscale of relationship dimensions. Government school students possess higher mean score than students of private schools.
This shows that government school students are encouraged to express their feelings and thoughts directly. There exists no significant difference between the mean scores of 10+1 students studying in government and private schools on the subscales conflict and acceptance and caring of relationship dimensions of family environment. Both government school students and private school students have average level of conflicts and some degree of acceptance and caring in the family. There exists no significant mean difference between the 10+1 students of government and private schools on the overall relationship dimensions of family environment. Thus, the hypothesis (H\(_0\)25) that there exists no significant mean difference between Relationship Dimensions of Family Environment of 10+1 students of Government and Private Schools is RETAINED.

**H\(_0\)26 There exists no significant interactional effect of Gender, Locale, and Type of School on ‘Relationship Dimensions’ of Family Environment of 10+1 students.**

The two factor interaction of Gender and Locale of 10+1 students shows no significant effect on relationship dimensions of family environment. When Gender and Type of School interact with one another creates significant influence on the relationship dimensions of family environment. There is significant difference between the male students of government and private schools, and male and female students of private schools. Male students of government schools shows higher score on relationship dimensions than the male students of private schools, this shows that male students of government schools have more cohesion, expressiveness and acceptance and caring but minimal conflicts as compared to male students of private schools. Similarly, female students of private schools shows higher score on these subscales as compared to male students of private schools. There exists no significant difference between female students of government and private schools, and male and female students of government schools. Both the groups show average value on the relationship dimension of family environment. The two-way interaction analysis between Locale and Type of School, and three-way interaction between Gender, Locale and Type of School have no significant influence on the relationship dimensions of family environment. Thus, the hypothesis (H\(_0\)26) that there exists no significant interactional effect of Gender, Locale, and Type of School on Relationship Dimensions of Family Environment of 10+1 students is RETAINED.
Hypotheses Related to Personal Growth Dimensions of Family Environment

**H₀27: There exists no significant mean difference between Personal Growth Dimensions of Family Environment of Male and Female 10+1 students.**

There is a significant difference between mean scores of male and female 10+1 students on the subscale independence of personal growth dimensions of family environment. Female students have average score on independence but male students have low score. It shows that family members of female students are more assertive as compared to male students. Also, there is a significant difference between male and female 10+1 students on the sub scale active recreational orientation. Results show that female students have more participation in recreational activities as compared to male students. There exists a significant difference between male and female 10+1 students on the personal growth dimensions of family environment. Thus, the hypothesis (H₀27) that there exists no significant mean difference between Personal Growth Dimensions of Family Environment of Male and Female 10+1 students is REJECTED.

**H₀28: There exists no significant mean difference between ‘Personal Growth Dimensions’ of Family Environment of Rural and Urban 10+1 students.**

There exists no significant difference between the mean scores of rural and urban 10+1 students on the subscale independence of personal growth dimensions of family environment. Both falls in the low category of expressiveness, it means that both rural and urban students are not independent in their own decision making and their family members are not assertive. There exists significant difference between mean scores of rural and urban 10+1 students on active recreational subscale of personal growth dimensions of family environment. Rural students have higher mean score than the urban students, but both have average active recreational orientation. It means that rural students have participated more in social and recreational activities as compared to urban students. Also, there exists no significant mean difference between rural and urban 10+1 students on overall personal growth dimension of family environment. Thus, the hypothesis (H₀28) that there exists no significant mean difference between Personal Growth Dimensions of Family Environment of Rural and Urban 10+1 students is RETAINED.
H₀₂₉: There exists no significant mean difference between ‘Personal Growth Dimensions’ of Family Environment of 10+1 students of Government and Private Schools.

There is no significant difference between the mean scores of 10+1 students studying in government and private schools on the subscales independence and active recreational orientation of personal growth dimensions of family environment. Both government and private school students possess average level of independence and active recreational orientation. Results show that both government and private school students have some degree of assertiveness and independent decision making, have some extent of participation in social and recreational activities. Also, there exists no significant difference between the overall mean score of personal growth dimensions of government and private school students. Thus, the hypothesis (H₀₂₉) that there exists no significant mean difference between Personal Growth Dimensions of Family Environment of 10+1 students of Government and Private Schools is RETAINED.

H₀₃₀ There exists no significant interactional effect of Gender, Locale, and Type of School on ‘Personal Growth Dimensions’ of Family Environment of 10+1 students.

The results of two-way interaction analysis show that there exists no significant interaction between Gender and Locale, Gender and Type of School; and Locale and Type of School. All these factors in combination have no influence on personal growth dimensions of family environment of 10+1 students. Also, three-way interaction analysis of Gender, Locale and Type of School creates no significant influence on the personal growth dimensions of family environment. This indicates that there exists no significant difference between mean scores of male and female rural school students and male and female urban school students, male and female government and male and female private school students and rural and urban government school students and rural and urban private school students on relationship dimensions of family environment. Thus, the hypothesis (H₀₃₀) that there exists no significant interactional effect of Gender, Locale, and Type of School on Personal Growth Dimensions of Family Environment of 10+1 students is RETAINED.
Hypotheses Related to System maintenance Dimensions of Family Environment

**H₀31: There exists no significant mean difference between System Maintenance Dimensions of Family Environment of Male and Female 10+1 students.**

There is a significant difference between male and female 10+1 students on the factor organization. Both male and female students have average score on the subscale organization, but female students have higher score. It means that female students have higher degree of organization structure in planning family activities and responsibilities as compared to male students. There is a significant difference between means of male and female 10+1 students on the factor control. Female students have high score on subscale control, it means that female students have high degree of limit setting within the family as compared to male students who have less restrictions. There exists a significant difference between male and female 10+1 students on the overall system maintenance dimensions of family environment. Thus, the hypothesis (H₀31) that there exists no significant mean difference between System Maintenance Dimensions of Family Environment of Male and Female 10+1 students is REJECTED.

**H₀32: There exists no significant mean difference between ‘System Maintenance Dimensions’ of Family Environment of Rural and Urban 10+1 students.**

There exists no significant mean difference between rural and urban 10+1 students on the subscale organization of system maintenance dimensions of family environment. Both rural and urban students have average mean score on this subscale, it shows that both have organized structure in planning family activities and responsibilities. There is significant mean difference between rural and urban 10+1 students on control subscale of system maintenance dimensions of family environment. Both rural and urban students have average score on this subscale, but mean score of rural students have higher score than urban students. It shows that rural students have higher degree of limit setting within the family as compared to urban students. There is no significant difference between the mean scores of rural and urban 10+1 students on the overall system maintenance dimensions of family environment. Thus, the hypothesis (H₀32) that there exists no significant mean difference between System Maintenance Dimensions of Family Environment of Rural and Urban 10+1 students is RETAINED.
Hₐ33: There exists no significant mean difference between ‘System Maintenance Dimensions’ of Family Environment of 10+1 students of Government and Private Schools.

There exists no significant difference between the mean scores of 10+1 students studying in government and private schools on the subscales organization and control of system maintenance dimensions of family environment. Government and private school students possess average level of organization and control. Both have average degree of importance of organization structure in planning family activities and responsibilities and have some degree of limit setting within the family. There exists no significant difference between the overall mean score of system maintenance dimensions of government and private school students. Thus, the hypothesis (H₀₃₃) that there exists no significant mean difference between System Maintenance Dimensions of Family Environment of 10+1 students of Government and Private Schools is RETAINED.

H₀₃₄ There exists no significant interactional effect of Gender, Locale, and Type of School on ‘System Maintenance Dimensions’ of Family Environment of 10+1 students.

The particular combination of Gender and Locale, and Gender and Type of School creates significant influence on the system maintenance dimensions of family environment of 10+1 students. There is no significant difference between mean scores of rural and urban male students and urban male and female students. All these groups possess average score on system maintenance dimensions. There exists significant difference between rural and urban female students and rural male and female students. Rural female students have higher score than urban students and rural male students; it shows that rural female students have organized structure in planning family activities but average degree of limit setting within the family as compared to urban female students and rural male students. Also, there exists no significant difference between male students of government and private schools, and male and female students of government schools. There exists significant difference between female students of government and private schools, and male and female students of private schools on system maintenance dimensions of family environment. Mean scores of female students of private schools is higher than the mean scores of female students of government schools and male students.
of private schools on system maintenance dimensions of family environment. The combination of Locale and Type of School creates no significant influence on system maintenance dimensions of family environment of 10+1 students. Also, three-way interaction among Gender, Locale and Type of School have no significant influence on the system maintenance dimensions of family environment of 10+1 students. Thus, the hypothesis (H₀34) that there exists no significant interactional effect of Gender, Locale, and Type of School on System Maintenance Dimensions of Family Environment of 10+1 students is RETAINED.