CHAPTER VI

CONCLUSIONS AND SUGGESTIONS:

The preceding chapter contains the interpretation of the f, ‘t’ and r values obtained after subjecting the academic achievement data of IXth graders studying under high, average and low learning climate by applying analysis of variance, ‘t’-test and correlation. The chapter in hand attempts to present the conclusions based on the interpretations of data pertaining to objectives and hypothesis of study.

It will be recalled, as per Chapter-1, the present study was designed with a view to achieve objective as under:-

1. To compare the academic achievement of IX graders studying under high, average and low level of learning climate of their secondary institutions.

2. To compare the academic achievement of high intelligent IXth graders studying under high, average and low level of institutional learning climate.

3. To compare the academic achievement of average intelligent IXth graders studying under high, average and low level of institutional learning climate.

4. To compare the academic achievement of low intelligent IXth graders studying under high average and low level of
institutional learning climate.

5. To compare the academic achievements of high creative IX\textsuperscript{th} graders studying under high, average and low level of institutional learning climate.

6. To compare the academic achievement of average creative IX\textsuperscript{th} graders studying under high, average and low level of institutional learning climate.

7. To compare the academic achievement of low creative IX\textsuperscript{th} graders, studying under high, average and low level of institutional learning climate.

8. To compute the magnitude of relationship between learning climate of an institution and academic achievement of its students.

Besides achieving the objectives specified above, the researcher sought ‘t’-test, the validity of these following hypotheses framed by her in context of the objective of her study. The hypotheses framed by researcher are as under:

1. IX\textsuperscript{th} graders studying under different levels of learning climate of their secondary institutions differ significantly in respect of their academic achievement.

2. IX\textsuperscript{th} graders characterized by similar level of intelligence
(high, average, low) but studying under different learning climate of their secondary institutions differ significantly in respect of their academic achievement.

3. IXth graders characterized by similar level of creativity (high, average and low), but studying under different learning climate of their secondary institutions, differ significantly in respect of their academic achievement.

4. Better is the learning climate of an educational institution, the higher is the academic achievement of its IXth graders studying in it.

The researcher proposes to present the conclusions objective wise and hypothesis wise in succeeding paragraphs:
OBJECTIVE : I

Academic achievement of IX\textsuperscript{th} graders at different levels of learning climate.

Learning climate has been reported by several studies as a very significant factor in the academic achievement of a learner. This observation receives support from the present study also. The reason is, the study has found significant differences in academic achievement of IX\textsuperscript{th} graders studying in different levels (High, average and low ) of learning climate. To be specific, F value in the present study is highly significant after the academic achievement data of IX\textsuperscript{th} graders of high, average and low learning climate schools were subjected to analysis of variance.

The following conclusions emerge in the context of this statistical finding:

(i) IX\textsuperscript{th} graders studying in secondary schools characterized by high, average and low level of learning climate differ significantly on their academic achievement.

(ii) The better is the learning climate of an institution, better is the academic achievement of its students studying in it. Needless to say the students on which the present study was conducted were IX\textsuperscript{th} graders. As such, this finding
specifically applies on them.

(iii) In the context of the Mean value of the academic achievement of IX\textsuperscript{th} graders belonging to institutions characterized by high, average and low learning climate, by and large, IX\textsuperscript{th} graders of institutions of high learning climate significantly make better academic achievement in comparison to the IX\textsuperscript{th} graders studying in poor learning climate of an institution.

(iv) IX\textsuperscript{th} graders studying in institutions characterized by good or high learning climate make better academic achievement in comparison to IX\textsuperscript{th} graders studying in institutions characterized by average learning climate.

(v) IX\textsuperscript{th} graders studying in high or good learning climate make much better academic achievement in comparison to those IX\textsuperscript{th} graders who are studying in institutions characterized by low learning climate.

(vi) IX\textsuperscript{th} graders studying in secondary schools characterized by average and low learning climate do not differ significantly in respect of their academic achievement.

The conclusion drawn by the present study in respect of the academic achievement of IX\textsuperscript{th} graders studying in secondary institutions differing in learning climate and support to the hypotheses framed by
the researcher in this regard. The implication is that the hypothesis frame is invalid. The reason being that IX\textsuperscript{th} graders studying in different levels of learning climate of secondary institutions have been found to differ significantly in respect of their academic achievement.
OBJECTIVE-II

Academic achievement of highly intelligent IX\textsuperscript{th} graders studying in secondary schools characterized by high, average and low level of learning climate.

The second objective of the study attempts to ascertain the influence of learning climate on academic achievement under constancy of intelligence. The study has attempted to ascertain relationship between two variables, namely, academic achievement and learning climate of an institution under constancy of intelligence of IX\textsuperscript{th} graders. The conclusions drawn are as under:

(i) No significant difference has been found among high intelligent IX\textsuperscript{th} graders studying in secondary institutions differing in the quality or level (high, average and low) of their learning climate.

(ii) Intelligence particularly at a high level is very potent factor which facilitates the acquisition of learning experience or what is usually termed as academic achievement.

(iii) Intelligence in this regard plays an important intervening role between learning climate and academic achievement.

(iv) The more intelligent are the learners, the higher is the level of their academic achievement irrespective of difference in
learning climate of secondary institutions.

(v) The above conclusions drawn in the study do not lend support to the hypothesis framed by the researcher in this regard.

The researcher hypothesized that IX\textsuperscript{th} graders of similar level of intelligence (high, average and low) but studying under different learning climate of their institution differ significantly in respect of their academic achievement.

However, conclusion enumerated above reveal that high intelligent IX\textsuperscript{th} graders studying in high, average and low learning climate of their institutions do not differ significantly on their academic achievement. As such, the findings of the present study in this regard do not lend support to the hypotheses framed by the researcher in chapter I of the research report.
OBJECTIVE III

Academic achievement of average intelligent IX\textsuperscript{th} graders studying in secondary schools characterized by high, average and low level of learning climate-

Learning climate is found to be a very significant factor in the academic achievement of the learner. This observation receives support from the significant F value yielded after subjecting the average intelligent IX\textsuperscript{th} graders academic achievement data under high, average and low learning climate of their institutions to one way analysis of variance.

The following conclusion emerges as a result of the data processed through analysis:

(i) IX\textsuperscript{th} graders of average intelligence studying under high, average and low level of learning climate of their institution differ significantly on their academic achievement.

(ii) The better is learning climate of an institution, better is the academic achievement of the average intelligent students studying in it. Needless to say the students on which the present study was conducted were IX\textsuperscript{th} graders. As such, this finding specifically applies on them.

(iii) In the context of the Mean value of the academic
achievement of average intelligent IX\textsuperscript{th} graders belonging to institutions characterized by high, average and low learning climate, by and large, IX\textsuperscript{th} graders of institutions of high learning climate significantly make better academic achievement in comparison to the IX\textsuperscript{th} studying in poor learning climate institutions.

(iv) Average intelligent IX\textsuperscript{th} graders studying in institutions characterized by good or high learning climate make better academic achievement in comparison to IX\textsuperscript{th} graders studying in institutions characterized by average learning climate.

(v) Average intelligent IX\textsuperscript{th} graders studying in high or good learning climate make much better academic achievement in comparison to the IX graders who are studying in institutions characterized by low learning climate.

(vi) Average intelligent IX\textsuperscript{th} graders studying in secondary schools characterized by average and low learning climate do not differ significantly in respect of their academic achievement.

The conclusion drawn by the present study strongly support to the hypotheses framed by the researcher in respect of difference in the academic achievement due to difference in learning climate of secondary
institutions. The average intelligent IXth graders have been found to be differing significantly in respect of their academic achievement because of the difference in the learning climate of the secondary institutions in which they were studying.

The hypotheses needs to be understood in the context of level of intelligence. The IXth graders on which the present study was conducted were of 3 types in respect of the intelligence, namely, (high, average and low). At high level of intelligence of the IXth graders, the hypothesis has not received empirical support. The hypotheses that learning climate of an institution influences academic achievement also received significant support from the F and ‘t’ value presented in the preceding chapter in table NO. 3.0 to 3.3.

The observation receive further support from the conclusion drawn after comparing the academic achievement of high and low intelligent IXth graders, studying in secondary institutions characterized by high, average and low level of learning climate.

However, the hypothesis enumerated above does not receive the same support, it has received in respect of the high and average leaning climate and the contrasting learning climate, that is, high and low. The reason is no significant difference has been observed when IXth graders studying in average and low level of learning climate secondary institutions were compared in respect of their academic achievement.
Precisely speaking, with the exception of contiguous group of average and low level of learning climate institutions, the IX\textsuperscript{th} graders studying in either high and low learning climate or high and average learning climate have been found to differ significantly on their academic achievement. These observations imply that learning climate is a very important facilitator of academic achievement of IX\textsuperscript{th} graders of average intelligent students.
OBJECTIVE IV

Academic achievement of low intelligent IXth graders studying in secondary schools characterized by high, average and low level of learning climate-

Learning climate has been found to be a significant factor in the academic achievement of a learner. This observation receive support from the significant F value yielded after analyzing and subjecting the learning climate to academic achievement by one way analysis of variance. The following conclusions emerge from the significance of F value of the achievement data of average intelligent IXth graders studying in high, average and low learning climate.

(i) IXth graders of low intelligence studying under high, average and low level of learning climate of their institution differ significantly on their academic achievement.

(ii) The better is learning climate of an institution, better is the academic achievement of the low intelligent students studying in it. Needless to say the students on which the present study was conducted were IXth graders. As such, this finding specifically applies on it.

(iii) In the context of the Mean value of the academic achievement of low intelligent IXth graders belonging to
institutions characterized by high, average and low learning climate, the finding is that by and large, IX\textsuperscript{th} graders of institutions of high learning climate significantly make better academic achievement in comparison to the IX\textsuperscript{th} studying in poor learning institutions.

(iv) Low intelligent IX\textsuperscript{th} graders studying in institutions characterized by good or high learning climate make better academic achievement in comparison to IX\textsuperscript{th} graders studying in institution characterized by average learning climate.

(v) Low intelligent IX\textsuperscript{th} graders studying in high or good learning climate make much better academic achievement in comparison to the IX\textsuperscript{th} graders who are studying in institutions characterized by low learning climate.

(vi) Low intelligent IX\textsuperscript{th} graders studying in secondary schools characterized by average and low learning climate do not differ significantly in respect of their academic achievement.

(vii) The conclusion drawn by the present study strongly support to the hypothesis framed by the researcher in respect of difference in the academic achievement due to difference in learning climate of secondary institutions. The low intelligent IX\textsuperscript{th} graders have been found to differ
significantly in respect of their academic achievement because of the difference in the learning climate of the secondary institutions in which they were studying.

The hypothesis needs to be understood in the context of level of intelligence. The IX<sup>th</sup> graders on which the present study was conducted were of three types in respect of the intelligence, namely, high, average and low. At high level of intelligence of the IX<sup>th</sup> graders, the hypothesis has not perceived empirical support as regards effect of learning climate on academic achievement. However, the hypothesis that learning climate of an institution influences academic achievement has receive significant support from the F and ‘t’ value presented in the preceding chapter in table NO. 4.0 to 4.3.

The above observations receive further support from the conclusion drawn after comparing the academic achievement of high and low intelligent IX<sup>th</sup> graders studying in secondary institutions characterized by high, average and low level of learning climate.

However, the hypothesis enumerated about does not receive the same support, it has received in respect of the high and average leaning climate and the contrasting learning climate that is, high and low. The reason is that no significant difference has been observed when IX<sup>th</sup> graders studying in average and low level of learning climate secondary institutions were compared in respect of their academic achievement.
Precisely speaking, with the exception of contiguous group of average and low level of learning climate institutions, the IX\textsuperscript{th} graders studying in either high and low learning climate or high and average learning climate have been found to differ significantly on their academic achievement. These observations imply that learning climate is a very important facilitator of academic achievement of IX\textsuperscript{th} graders of low intelligence student.
OBJECTIVE-V

Academic achievement of average creative IXth graders studying in secondary schools characterized by high, average and low level of learning climate.

Learning climate is found to be a very significant factor in the academic achievement of the learner. This observation receives support from the significant F value yielded after analyzing and subjecting the learning climate of institution and the academic achievement of the IXth graders studying in them to one way analysis of variance. The following conclusion emerges from the significance of F value of the achievement data of IXth graders studying in high, average and low learning climate.

(i) The creative IXth graders studying under high, average and low level of learning climate of their institutions differ significantly in respect of their academic achievement.

(ii) The better is learning climate of an institution, better is the academic achievement of the students studying in it. Needless to say the students on which the present study was conducted were IXth graders. As such, this finding specifically applies on them.

(iii) In the context of the Mean values of the academic achievement of IXth graders belonging to institutions
characterized by high, average and low learning climate, it can be concluded that by and large, IX\textsuperscript{th} graders of institutions of high learning climate significantly make better academic achievement in comparison to the IX\textsuperscript{th} studying in poor learning climate institutions in comparison to IX\textsuperscript{th} graders of institutions characterized by average and low learning climate.

(iv) High creative IX\textsuperscript{th} graders studying in institutions characterized by good by average learning climate do not differ significantly in respect of their academic achievement.

(v) High creative IX\textsuperscript{th} graders studying in high or good learning climate make much better academic achievement in comparison to the IX\textsuperscript{th} graders who are studying in institutions characterized by low learning climate.

(vi) High creative IX\textsuperscript{th} graders studying in secondary schools characterized by average and low learning climate do not differ significantly in respect of their academic achievement.

The conclusion drawn by the present study in respect of the differences in academic achievement of IX\textsuperscript{th} graders owing to differences in learning climate of institutions lend support to the hypothesis framed by researcher in this regard.
OBJECTIVE VI

Academic achievement of average creative IXth graders studying in secondary schools characterized by high, average and low level of learning climate.

Learning climate has been found to be a significant factor in the academic achievement of the learner. This observation receives support from the significant F value yielded after analyzing and subjecting the learning climate of institution and the academic achievement of the IXth graders studying in them to one way analysis of variance. The following conclusions emerge from the significance of F value of the achievement data of IXth graders studying in high, average and low learning climate:

(i) Average creative IXth graders studying under high, average and low level of learning climate of their institutions differ significantly in respect of their academic achievement.

(ii) The better is learning climate of an institution, better is the academic achievement of the students studying in it. Needless to say the students on which the present study was conducted were IXth graders. As such, this finding specifically applies on them.

(iii) In the context of the Mean values of the academic achievement of IXth graders belonging to institutions
characterized by high, average and low learning climate, it can be concluded that by and large, IX\textsuperscript{th} graders of institutions of high learning climate significantly make better academic achievement in comparison to the IX\textsuperscript{th} graders studying in learning climate institutions characterized by average and low learning climate.

(iv) Average creative IX\textsuperscript{th} graders studying in institutions characterized by good and average learning climate do not differ significantly in respect of their academic achievement.

(v) Average creative IX\textsuperscript{th} graders studying in high or good learning climate make much better academic achievement in comparison to the IX\textsuperscript{th} graders who are studying in institutions characterized by low learning climate.

(vi) Average creative IX\textsuperscript{th} graders studying in secondary schools characterized by average and low learning climate do not differ significantly in respect of their academic achievement.

The conclusion drawn by the present study in respect of the academic achievement of IX\textsuperscript{th} graders studying in secondary institutions differing in learning climate lend support to the hypotheses framed by researcher is valid. The reason being that IX\textsuperscript{th} graders studying in different level of learning climate of secondary institutions have been found to differ significantly in respect of their academic achievement.
OBJECTIVE VII

Academic achievement of low creative IXth graders studying in secondary school characterized by high, average and low level of learning climate-

Learning climate has been found to be a significant factor in the academic achievement of the learner. This observation receive support from the significant F value yielded after analyzing and subjecting the learning climate of institutions in respect of academic achievement of IXth graders to one way analysis of variance. The following conclusions emerge from the significance of F value:

(i) Low creative IXth graders studying under high, average and low level of learning climate of their institutions differ significantly on their academic achievement.

(ii) The better is learning climate of an institution, better is the academic achievement of the low creative students studying in it. Needless to say the students on which the present study was conducted were IXth graders. As such, this finding specifically applies on it.

(iii) In the context of the Mean values of the academic achievement of low creative IXth graders belonging to institutions characterized by high, average and low learning
climate it can be concluded that by and large IX\textsuperscript{th} graders of institutions of high learning climate significantly make better academic achievement in comparison to the IX\textsuperscript{th} graders studying in poor learning institutions.

(iv) Low creative IX\textsuperscript{th} graders studying in institutions characterized by good or high learning climate make better academic achievement in comparison to IX\textsuperscript{th} graders studying in institutions characterized by average learning climate.

(v) Low creative IX\textsuperscript{th} graders studying in high or good learning climate make much better academic achievement in comparison to the IX\textsuperscript{th} graders who are studying in institutions characterized by low learning climate.

(vi) Low creative IX\textsuperscript{th} graders studying in secondary schools characterized by average and low learning climate do not differ significantly in respect of their academic achievement.

The conclusion drawn by the present study lend strong support to the hypothesis framed by the researcher in respect of difference in the academic achievement due to differences in learning climate of secondary institutions. The low creative IX\textsuperscript{th} graders have been found to differ significantly in respect of their academic achievement because of the difference in the learning climate of the secondary institutions in which they were studying.
The hypothesis needs to be understood in the context of level of creativity. The IX\textsuperscript{th} graders on which the present study was conducted were of three types in respect of the creativity, namely, high, average and low. At high level of creativity of the IX\textsuperscript{th} graders, the hypothesis has received empirical support as regards effect of learning climate on academic achievement. However, at average level of creativity of the IX\textsuperscript{th} graders, the hypothesis that learning climate of an institution influences academic achievement has received significant support from the F and ‘t’ value presented in the preceding chapter in table NO. 7.0.

The observations receive further support from the conclusions drawn after comparing the academic achievement of high and low creative IX\textsuperscript{th} graders studying in secondary institutions characterized by high, average and low level of learning climate.

Precisely speaking, with the exception of contiguous group of average and low level of learning climate institutions, the IX\textsuperscript{th} graders studying in either high and low learning climate or high and average learning climate have been found to differ significantly on their academic achievement. These observations imply that learning climate is a very important facilitator of academic achievement of IX\textsuperscript{th} graders of low creativity.
OBJECTIVE VIII

Magnitude of relationship between learning climate of an institution and academic achievement of its students.

The present study has sought to ascertain the relationship between academic achievement and learning climate of an institution. The researcher hypothesized that better is the learning climate of an educational institution, the higher is the academic achievement of its IXth graders studying in it. This hypothesis when tested in the context of correlation between academic achievement of IXth graders and learning climate of the secondary institutions has been found to be highly valid. As already discussed in the preceding chapter, correlation between academic achievement and learning climate is +0.55. This value is a strong indicator of the fact that better is the learning climate of secondary institution; the higher will be the academic achievement of the students studying in it and vice versa.

Implications of the study

The implications of the conclusions drawn in the present study in respect of the teacher and infrastructure of the institution are as under:-

(i) The teacher in order to help the students to achieve curriculum objectives need to grow professionally. Comprehensively must keep himself abreast with the latest
trends in his teaching subjects as well as in its teaching methodology.

(ii) The teacher needs to adopt the democratic atmosphere in classroom during teaching-learning process.

(iii) The teacher must adopt teaching techniques which may contribute to optimization of interaction between him and his students.

(iv) The teacher must subject its learner to continuous testing and retesting of achievement made by his students.

(v) The teacher must diagnose the problems, difficulties and deficiencies of the students taught by him.

(vi) The teacher must adopt remedial teaching programmes for overcoming the deficiencies and shortcomings diagnosed by him by applying diagnostic test.

(vii) The teacher must plan visit to educational places and should provide freedom for exposure to the learners.

As regards the improvement of learning climate of institutions concerned, the school must make a library which should have seating capacity for readers coming to consult books. The school must have laboratory for conducting experiments as per requirement of the syllabus. The school must have the workshop where the students may have the facility to create appropriate materials in artistic, aesthetic, social and scientific value.
The school must have proper ventilation and light arrangement. The school must have a direct relationship between it and community in which it is. The school must have facility for indoor and outdoor games. The school must organize competitive socio-cultural activities. The school must organize seminars, workshops, projects, debate etc. The school may use computer technologies, television, radio and other techno-advances in classroom situations. It is thought that the above implication if properly used in the school will go a long way in improving the learning climate of the secondary institutions. If this happens, there is strong possibility of the students to make their academic achievements commensurate to their intelligence, creativity, interest, aptitude, level of aspiration and self-concept.

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