CHAPTER-VII

GENERAL CONCLUSIONS, EDUCATIONAL IMPLICATIONS AND SUGGESTIONS FOR FURTHER RESEARCH

VII.1 GENERAL CONCLUSIONS

In the light of the interpretations of the results made in the previous chapter, the investigator derived the following conclusions:

I FOURTEEN PERSONALITY FACTORS OF HSPQ

Factor-A: (Reserved, Detached, Critical, Aloof, Stiff Vs Warm hearted, Outgoing, Easygoing, Participating)

I (a1) Inferences based on the F-ratio values with Factor-A, as criterion:

1. F-ratio value for the first main factor i.e. ‘Sociometric categories’ is found significant with Factor-A, taken as criterion. The students belonging to different sociometric categories differ significantly from each other on this dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found significant with Factor-A, taken as criterion. The girls in comparison to boys scored high on this factor. They are found more warm hearted, outgoing, easygoing and participating than the boys who seem to show reserved, detached, critical, aloof and stiff behavior.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found significant with Factor-A, taken as criterion. The students of arts stream in comparison to science stream scored high on this factor. They are found
more warm hearted, outgoing, easygoing and participating than the students of science stream who seem to show reserved, detached, critical, aloof and stiff behaviour.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’ is found insignificant with Factor-A, taken as criterion. It means that the boys and girls belonging to different sociometric categories are alike on this dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and Academic streams’ is found insignificant with Factor-A, taken as criterion. It means that the students of arts and science streams belonging to different sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is found insignificant with Factor-A, taken as criterion. It means that the boys and girls belonging to arts and science streams are alike on this dimension of personality.

7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-A, taken as criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

I (a2) **Inferences based on the t-ratio values with Factor-A, as criterion among the students belonging to different sociometric categories:**

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-A. The students of
neglected category in comparison to rejected category scored high on this factor. They are found more warm hearted, outgoing, easygoing and participating than the students of rejected category who seem to be reserved, detached, critical, aloof and stiff.

2. There is found no significant difference in the mean values between the students of neglected and isolate categories on this dimension of personality.

3. There is found significant difference in the mean values between the rejected and isolate category of students on the Factor-A. The students of isolate category in comparison to rejected category scored high on this factor. They are found more warm hearted, outgoing, easygoing and participating than the students of rejected category who seem to be reserved, detached, critical, aloof and stiff.

**Factor-B: (Less intelligent, Concrete thinking, Of Lower scholastic mental capacity Vs More intelligent, Abstract thinking, Bright, Of Higher scholastic mental capacity)**

I (b1) **Inferences based on the F-ratio values with Factor-B, as criterion:**

1. F-ratio value for the first main factor i.e. ‘Sociometric categories’ is found significant with Factor-B, taken as criterion. The students belonging to different sociometric categories differ significantly from each other on this dimension of personality.
2. F-ratio value for another main factor i.e. ‘Sex’ is found insignificant with Factor-B, taken as criterion. It means that the boys and girls are alike on this dimension of personality.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found significant with Factor-B, taken as criterion. The students of science stream in comparison to arts stream scored high on this factor. They are found more intelligent, with abstract thinking, bright and of higher scholastic mental capacity than the students of arts stream who seem to show less intelligence, concrete thinking and lower scholastic mental capacity.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’ is found insignificant with Factor-B, taken as criterion. It means that the boys and girls belonging to different sociometric categories are alike on this dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and Academic streams’ is found insignificant with Factor-B, taken as criterion. It means that the students of arts and science streams belonging to different sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is found insignificant with Factor-B, taken as criterion. It means that the boys and girls belonging to arts and science streams are alike on this dimension of personality.

7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-B, taken as
criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

I (b2) Inferences based on the t-ratio values with Factor-B, as criterion among the students belonging to different sociometric categories:

1. There is found significant difference between neglected and rejected category of students on the Factor-B. The students of neglected category in comparison to rejected category scored high on this factor. They are found more intelligent, with abstract thinking, bright and of higher scholastic mental capacity than the students of rejected category who seem to be less intelligent, with concrete thinking and of lower scholastic mental capacity.

2. There is found significant difference between the neglected and isolate category of students on the Factor-B. The students of neglected category in comparison to isolate category scored high on this factor. They are found more intelligent, with abstract thinking, bright and of higher scholastic mental capacity than the students of isolate category who seem to be less intelligent, with concrete thinking and of lower scholastic mental capacity.

3. There is found significant difference between the rejected and isolate category of students on the Factor-B. The students of rejected category in comparison to isolate category scored high on this factor. They are found more intelligent, with abstract thinking, bright and of higher scholastic mental capacity than the students of isolate category who seem to be less intelligent, with concrete thinking, bright and of lower scholastic mental capacity.
Factor-C: (Affected by feelings, Emotionally less stable, Easily upset, Changeable, Of lower ego strength Vs Emotionally stable, Mature, Faces reality, Calm, Of higher ego strength)

I (c₁) Inferences based on the F-ratio values with Factor-C, as criterion:

1. F-ratio value for the main factor i.e. ‘Sociometric categories’ is found significant with Factor-C, taken as criterion. The students belonging to different sociometric categories differ significantly from each other on this dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found insignificant with Factor-C, taken as criterion. It means that the boys and girls are alike on this dimension of personality.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found significant with Factor-C, taken as criterion. The students of science stream in comparison to arts stream scored high on this factor. They are found emotionally more stable, mature, face reality, calm, of higher ego strength than the students of arts stream who are affected by feelings, emotionally less stable, easily upset, changeable and of lower ego strength.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’ is found insignificant with Factor-C, taken as criterion. It means that the boys and girls belonging to different sociometric categories are alike on this dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and Academic streams’ is found insignificant with Factor-C, taken as criterion.
It means that the students of arts and science streams belonging to different sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is found insignificant with Factor-C, taken as criterion. It means that the boys and girls belonging to arts and science streams are alike on this dimension of personality.

7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-C, taken as criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

\( I (c_2) \) Inferences based on the t-ratio values with Factor-C, as criterion among the students belonging to different sociometric categories:

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-C. The students of neglected category in comparison to rejected category scored high on this factor. They are found emotionally more stable, mature, face reality, calm, of higher ego strength than the students of rejected category who seem to be affected by feelings, emotionally less stable, easily upset, changeable and of lower ego strength.

2. There is found significant difference in the mean values between the neglected and isolate category of students on the Factor-C. The students of neglected category in comparison to isolate category scored high on this factor. They are found emotionally more stable, mature, face reality, calm,
of higher ego strength than the students of isolate category who seem to be affected by feelings, emotionally less stable, easily upset, changeable and of lower ego strength.

3. There is found no significant difference in the mean values between the students of rejected and isolate categories on this dimension of personality.

**Factor-D: (Undemonstrative, Deliberate, Inactive, Stodgy, Phlegmatic Vs Excitable, Impatient, Demanding, Overactive, Unrestrained)**

**I (d₁) Inferences based on the F-ratio values with Factor-D, as criterion:**

1. F-ratio value for the main factor i.e. ‘Sociometric categories’ is found significant with Factor-D, taken as criterion. The students belonging to different sociometric categories differ significantly from each other on this dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found insignificant with Factor-D, taken as criterion. It means that the boys and girls are alike on this dimension of personality.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found significant with Factor-D, taken as criterion. The students of science stream in comparison to arts stream scored high on this factor. They are found more excitable, impatient, demanding, overactive and unrestrained than the students of arts stream who seem to show undemonstrative, deliberate, inactive, stodgy and phlegmatic type of behaviors.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’ is found insignificant with Factor-D, taken as criterion. It means that
boys and girls belonging to different sociometric categories are alike on this dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and Academic streams’ is found insignificant with Factor-D, taken as criterion. It means that the students of arts and science streams belonging to different sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is found significant with Factor-D, taken as criterion. It means that the boys and girls belonging to arts and science streams differ significantly from each other on this dimension of personality.

7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-D, taken as criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

I \((d_2)\) Inferences based on the t-ratio values with Factor-D, as criterion among the students belonging to different sociometric categories:

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-D. The students of rejected category in comparison to neglected category scored high on this factor. They are found more excitable, impatient, demanding, overactive and unrestrained than the students of neglected category who seem to show undemonstrative, deliberate, inactive, stodgy and phlegmatic type of behaviors.
2. There is found no significant difference in the mean values between the students of neglected and isolate categories on this dimension of personality.

3. There is found no significant difference in the mean values between the students of rejected and isolate categories on this dimension of personality.

**Factor-E: (Obedient, Mild, Easily led, Accommodating, Submissive Vs Assertive, Competitive, Aggressive, Stubborn, Dominant)**

**I (e₁) Inferences based on the F-ratio values with Factor-E, as criterion:**

1. F-ratio value for the main factor i.e. ‘Sociometric categories’ is found significant with Factor-E, taken as criterion. The students belonging to different sociometric categories differ significantly from each other on this dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found significant with Factor-E, taken as criterion. The boys in comparison to girls scored high on this factor. They are found more assertive, competitive, aggressive, stubborn and dominant than the girls who seem to be obedient, mild, easily led, accommodating and submissive.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found significant with Factor-E, taken as criterion. The students of science stream in comparison to arts stream scored high on this factor. They are found more assertive, competitive, aggressive, stubborn and dominant than the students of arts stream who seem to be obedient, mild, easily led, accommodating and submissive.
4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’ is found insignificant with Factor-E, taken as criterion. It means that the boys and girls belonging to different sociometric categories are alike on this dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and Academic streams’ is found insignificant with Factor-E, taken as criterion. It means that the students of arts and science streams belonging to different sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is found insignificant with Factor-E, taken as criterion. It means that the boys and girls belonging to arts and science streams are alike on this dimension of personality.

7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-E, taken as criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

I (e2) Inferences based on the t-ratio values with Factor-E, as criterion among the students belonging to different sociometric categories:

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-E. The students of rejected category in comparison to neglected category scored high on this factor. They are found more assertive, competitive, aggressive, stubborn and dominant than the students of neglected category who seem to be obedient, mild, easily led, accommodating and submissive.
2. There is found significant difference in the mean values between the neglected and isolate category of students on the Factor-E. The students of isolate category in comparison to neglected category scored high on this factor. They are found more assertive, competitive, aggressive, stubborn and dominant than the students of neglected category who seem to be obedient, mild, easily led, accommodating and submissive.

3. There is found significant difference in the mean values between the rejected and isolate category of students on the Factor-E. The students of rejected category in comparison to isolate category scored high on this factor. They are found more assertive, competitive, aggressive, stubborn and dominant than the students of isolate category who seem to be obedient, mild, easily led, accommodating and submissive.

Factor-F: (Sober, Taciturn, Serious Vs Enthusiastic, Heedless, Happy-go-lucky)

I (f1) Inferences based on the F-ratio values with Factor-F, as criterion:

1. F-ratio value for the main factor i.e. ‘Sociometric categories’ is found significant with Factor-F, taken as criterion. The students belonging to different sociometric categories differ significantly from each other on this dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found significant with Factor-F, taken as criterion. The boys in comparison to girls scored high on this factor. They are found more enthusiastic, heedless and happy-go-lucky than the girls who seem to be sober, taciturn and serious.
3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found significant with Factor-E, taken as criterion. The students of arts stream in comparison to science stream scored high on this factor. They are found more enthusiastic, heedless and happy-go-lucky than the students of science stream who seem to be sober, taciturn and serious.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’ is found insignificant with Factor-F, taken as criterion. It means that the boys and girls belonging to different sociometric categories are alike on this dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and Academic streams’ is found insignificant with Factor-F, taken as criterion. It means that the students of arts and science streams belonging to different sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is found insignificant with Factor-F, taken as criterion. It means that the boys and girls belonging to arts and science streams are alike on this dimension of personality.

7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-F, taken as criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.
I (f1) Inferences based on the t-ratio values with Factor-F, as criterion among the students belonging to different sociometric categories:

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-F. The students of rejected category in comparison to neglected category scored high on this factor. They are found more enthusiastic, heedless and happy-go-lucky than the students of neglected category who seem to be sober, taciturn and serious.

2. There is found no significant difference in the mean values between the students of neglected and isolate categories on this dimension of personality.

3. There is found significant difference in the mean values between the rejected and isolate category of students on the Factor-F. The students of rejected category in comparison to isolate category scored high on this factor. They are found more enthusiastic, heedless and happy-go-lucky than the students of isolate category who seem to be sober, taciturn and serious.

Factor-G: (Disregarded rules, Expedient, Has weaker super ego strength Vs Conscientious, Persistent, Moralistic, Staid, Has stronger super ego strength)

I (g1) Inferences based on the F-ratio values with Factor-G, as criterion:

1. F-ratio value for the main factor i.e. ‘Sociometric categories’ is found significant with Factor-G, taken as criterion. The students belonging to
different sociometric categories differ significantly from each other on this
dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found insignificant with
   Factor-G, taken as criterion. It means that the boys and girls are alike on this
dimension of personality.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found
   significant with Factor-G, taken as criterion. The students of science stream
   in comparison to arts stream scored high on this factor. They are found more
   conscientious, persistent, moralistic, staid and have stronger super ego
   strength than the students of arts stream who seem to disregard rules, are
   expedient and have weaker super ego strength.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’
   is found insignificant with Factor-G, taken as criterion. It means that the
   boys and girls belonging to different sociometric categories are alike on this
   dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and
   Academic streams’ is found insignificant with Factor-G, taken as criterion. It
   means that the students of arts and science streams belonging to different
   sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is
   found insignificant with Factor-G, taken as criterion. It means that the boys
   and girls belonging to arts and science streams are alike on this dimension of
   personality.
7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-G, taken as criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

**I (g2) Inferences based on the t-ratio values with Factor-G, as criterion among the students belonging to different sociometric categories:**

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-G. The students of neglected category in comparison to rejected category scored high on this factor. They are found more conscientious, persistent, moralistic, staid and have stronger super ego strength than the students of rejected category who seem to disregard rules, are expedient and have weaker super ego strength.

2. There is found significant difference in the mean values between the neglected and isolate category of students on the Factor-G. The students of neglected category in comparison to isolate category scored high on this factor. They are found more conscientious, persistent, moralistic, staid and have stronger super ego strength than the students of isolate category who seem to disregard rules, are expedient and have weaker super ego strength.

3. There is found significant difference in the mean values between the rejected and isolate category of students on the Factor-G. The students of isolate category in comparison to rejected category scored high on this factor. They are found more conscientious, persistent, moralistic, staid and have stronger super ego strength than the students of rejected category who seem to disregard rules, are expedient and have weaker super ego strength.
Factor-H: (Shy, Timid, Threat sensitive Vs Adventurous, Thick-skinned, Socially bold)

I (h₁) Inferences based on the F-ratio values with Factor-H, as criterion:

1. F-ratio value for the main factor i.e. ‘Sociometric categories’ is found significant with Factor-H, taken as criterion. The students belonging to different sociometric categories differ significantly from each other on this dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found significant with Factor-H, taken as criterion. The boys in comparison to girls scored high on this factor. They are found more adventurous, thick-skinned and socially bold than the girls who seem to be shy, timid and threat sensitive.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found significant with Factor-H, taken as criterion. The students of science stream in comparison to arts stream scored high on this factor. They are found more adventurous, thick-skinned and socially bold than the students of arts stream who seem to be shy, timid and threat sensitive.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’ is found insignificant with Factor-H, taken as criterion. It means that the boys and girls belonging to different sociometric categories are alike on this dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and Academic streams’ is found insignificant with Factor-H, taken as criterion. It
means that the students of arts and science streams belonging to different sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is found insignificant with Factor-H, taken as criterion. It means that the boys and girls belonging to arts and science streams are alike on this dimension of personality.

7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-H, taken as criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

I (h2) Inferences based on the t-ratio values with Factor-H, as criterion among the students belonging to different sociometric categories:

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-H. The students of rejected category in comparison to neglected category scored high on this factor. They are found more adventurous, thick-skinned and socially bold than the students of neglected category who seem to be shy, timid and threat sensitive.

2. There is found no significant difference in the mean values between the students of neglected and isolate categories on this dimension of personality.

3. There is found significant difference in the mean values between the rejected and isolate category of students on the Factor-H. The students of rejected category in comparison to isolate category scored high on this factor. They
are found more adventurous, thick-skinned and socially bold than the students of isolate category who seem to be shy, timid and threat sensitive.

**Factor-I: (Tough-minded, Rejects illusions Vs Tender minded, Sensitive, Clinging, Over protected)**

I (i₁) **Inferences based on the F-ratio values with Factor-I, as criterion:**

1. F-ratio value for the main factor i.e. ‘Sociometric categories’ is found significant with Factor-I, taken as criterion. The students belonging to different sociometric categories differ significantly from each other on this dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found significant with Factor-I, taken as criterion. The girls in comparison to boys scored high on this factor. They are found more tender minded, sensitive, clinging and over protected than the boys who seem to be tough minded and reject illusions.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found significant with Factor-I, taken as criterion. The students of arts stream in comparison to science stream scored high on this factor. They are found more tender minded, sensitive, clinging and over protected than the students of science stream who seem to be tough minded and reject illusions.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’ is found insignificant with Factor-I, taken as criterion. It means that the boys and girls belonging to different sociometric categories are alike on this dimension of personality.
5. F-ratio value for the interactional effect of ‘Sociometric categories and Academic streams’ is found insignificant with Factor-I, taken as criterion. It means that the students of arts and science streams belonging to different sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is found insignificant with Factor-I, taken as criterion. It means that the boys and girls belonging to arts and science streams are alike on this dimension of personality.

7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-I, taken as criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

I (i₂) **Inferences based on the t-ratio values with Factor-I, as criterion among the students belonging to different sociometric categories:**

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-I. The students of neglected category in comparison to rejected category scored high on this factor. They are found more tender minded, sensitive, clinging and over protected than the students of rejected category who seem to be tough minded and reject illusions.

2. There is found significant difference in the mean values between the neglected and isolate category of students on the Factor-I. The students of neglected category in comparison to isolate category scored high on this
factor. They are found more tender minded, sensitive, clinging and over protected than the students of isolate category who seem to be tough minded and reject illusions.

3. There is found significant difference in the mean values between the rejected and isolate category of students on the Factor-I. The students of isolate category in comparison to rejected category scored high on this factor. They are found more tender minded, sensitive, clinging and over protected than the students of rejected category who seem to be tough minded and reject illusions.

Factor-J: (Zestful, Likes group actions Vs Circumspect individualism, Reflective, Internally restrained)

I (j1) Inferences based on the F-ratio values with Factor-J, as criterion:

1. F-ratio value for the main factor i.e. ‘Sociometric categories’ is found significant with Factor-J, taken as criterion. The students belonging to different sociometric categories differ significantly from each other on this dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found insignificant with Factor-J, taken as criterion. It means that the boys and girls are alike on this dimension of personality.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found significant with Factor-J, taken as criterion. The students of arts stream in comparison to science stream scored high on this factor. They have more circumspect individualism, reflective and internally restrained behavior than
the students of science stream who seem to be zestful and like group actions.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’ is found insignificant with Factor-J, taken as criterion. It means that the boys and girls belonging to different sociometric categories are alike on this dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and Academic streams’ is found insignificant with Factor-J, taken as criterion. It means that the students of arts and science streams belonging to different sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is found insignificant with Factor-J, taken as criterion. It means that the boys and girls belonging to arts and science streams are alike on this dimension of personality.

7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-J, taken as criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

I (j2) Inferences based on the t-ratio values with Factor-J, as criterion among the students belonging to different sociometric categories:

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-J. The students of neglected category in comparison to rejected category scored high on this
factor. They have more circumspect individualism, reflective and internally restrained behavior than the students of rejected category who seem to be zestful and like group actions.

2. There is found no significant difference in the mean values between the students of neglected and isolate categories on this dimension of personality.

3. There is found significant difference in the mean values between the rejected and isolate category of students on the Factor-J. The students of isolate category in comparison to rejected category scored high on this factor. They have more circumspect individualism, reflective and internally restrained behavior than the students of rejected category who seem to be zestful and like group actions.

**Factor-O:** (Self-assured, Placid, Secure, Complacent, Untroubled Vs Apprehensive, Self-reproaching, Insecure, Worrying, Guilt prone)

**I (k1) Inferences based on the F-ratio values with Factor-O, as criterion:**

1. F-ratio value for the main factor i.e. ‘Sociometric categories’ is found significant with Factor-O, taken as criterion. The students belonging to different sociometric categories differ significantly from each other on this dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found significant with Factor-O, taken as criterion. The boys in comparison to girls scored high on this factor. They are found more apprehensive, self-reproaching, insecure,
worrying and guilt prone than the girls who seem to be self-assured, placid, secure, complacent and untroubled.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found significant with Factor-O, taken as criterion. The students of arts stream in comparison to science stream scored high on this factor. They are found more apprehensive, self-reproaching, insecure, worrying and guilt prone than the students of science stream who seem to be self-assured, placid, secure, complacent and untroubled.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’ is found insignificant with Factor-O, taken as criterion. It means that the boys and girls belonging to different sociometric categories are alike on this dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and Academic streams’ is found insignificant with Factor-O, taken as criterion. It means that the students of arts and science streams belonging to different sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is found insignificant with Factor-O, taken as criterion. It means that the boys and girls belonging to arts and science streams are alike on this dimension of personality.

7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-O, taken as
criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

I (k²) Inferences based on the t-ratio values with Factor-O, as criterion among the students belonging to different sociometric categories:

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-O. The students of rejected category in comparison to neglected category scored high on this factor. They are found more apprehensive, self-reproaching, insecure, worrying and guilt prone than the students of neglected category who seem to be self-assured, placid, secure, complacent and untroubled.

2. There is found no significant difference in the mean values between the neglected and isolate category of students on this dimension of personality.

3. There is found significant difference in the mean values between the rejected and isolate category of students on the Factor-O. The students of rejected category in comparison to isolate category scored high on this factor. They are found more apprehensive, self-reproaching, insecure, worrying and guilt prone than the students of isolate category who seem to be self-assured, placid, secure, complacent and untroubled.

Factor-Q₂: (Socially group dependent, A joiner and sound follower Vs Self-sufficient, Prefers own decisions, Resourceful)

I (l₁) Inferences based on the F-ratio values with Factor-Q₂, as criterion:

1. F-ratio value for the main factor i.e. ‘Sociometric categories’ is found significant with Factor-Q₂, taken as criterion. The students belonging to
different sociometric categories differ significantly from each other on this
dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found insignificant with
Factor-Q₂, taken as criterion. It means that the boys and girls are alike on
this dimension of personality.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found
significant with Factor-Q₂, taken as criterion. The students of arts stream in
comparison to science stream scored high on this factor. They are more
self-sufficient, prefer own decisions and are resourceful than the students of
science stream who seem to be socially group dependent, joiner and sound
follower.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’
is found insignificant with Factor-Q₂, taken as criterion. It means that the
boys and girls belonging to different sociometric categories are alike on this
dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and
Academic streams’ is found insignificant with Factor-Q₂, taken as criterion.
It means that the students of arts and science streams belonging to different
sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is
found insignificant with Factor-Q₂, taken as criterion. It means that the boys
and girls belonging to arts and science streams are alike on this dimension
of personality.
7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-$Q_2$, taken as criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

I (l2) Inferences based on the t-ratio values with Factor-$Q_2$, as criterion among the students belonging to different Sociometric categories:

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-$Q_2$. The students of rejected category in comparison to neglected category scored high on this factor. They are found more self-sufficient, prefer own decisions and are resourceful than the students of neglected category who seem to be socially group dependent, joiner and sound followers.

2. There is found no significant difference in the mean values between the students of neglected and isolate categories on this dimension of personality.

3. There is found significant difference in the mean values between the rejected and isolate category of students on the Factor-$Q_2$. The students of rejected category in comparison to isolate category scored high on this factor. They are found more self-sufficient, prefer own decisions and are resourceful than the students of isolate category who seem to be socially group dependent, joiner and sound followers.
Factor-Q3: (Uncontrolled, Lax, Follows own urges, Careless of social rules, Has low integration Vs Controlled, Socially precise, Self-disciplined, Compulsive, Has high self-concept control)

I (m1) Inferences based on the F-ratio values with Factor-Q3, as criterion:

1. F-ratio value for the main factor i.e. ‘Sociometric categories’ is found significant with Factor-Q3, taken as criterion. The students belonging to different sociometric categories differ significantly from each other on this dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found insignificant with Factor-Q3, taken as criterion. It means that the boys and girls are alike on this dimension of personality.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found significant with Factor-Q3, taken as criterion. The students of science stream in comparison to arts stream scored high on this factor. They are found more controlled, socially precise, self-disciplined, compulsive, with high self-concept control than the students of arts stream who seem to be uncontrolled, lax, follow own urges, careless of social rules and with low integration.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’ is found insignificant with Factor-Q3, taken as criterion. It means that the boys and girls belonging to different sociometric categories are alike on this dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and Academic streams’ is found insignificant with Factor-Q3, taken as criterion.
It means that the students of arts and science streams belonging to different sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is found insignificant with Factor-Q₃, taken as criterion. It means that the boys and girls belonging to arts and science streams are alike on this dimension of personality.

7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-Q₃, taken as criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

I (m₂) Inferences based on the t-ratio values with Factor-Q₃, as criterion among the students belonging to different sociometric categories:

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-Q₃. The students of neglected category in comparison to rejected category scored high on this factor. They are found more controlled, socially precise, self-disciplined, compulsive, with high self-concept control than the students of rejected category who seem to be uncontrolled, lax, follow own urges, careless of social rules and with low integration.

2. There is found significant difference in the mean values between the neglected and isolate category of students on the Factor-Q₃. The students of neglected category in comparison to isolate category scored high on this factor. They are found more controlled, socially precise, self-disciplined,
compulsive, with high self-concept control than the students of isolate category who seem to be uncontrolled, lax, follow own urges, careless of social rules and with low integration.

3. There is found significant difference in the mean values between the rejected and isolate category of students on the Factor-Q3. The students of isolate category in comparison to rejected category scored high on this factor. They are found more controlled, socially precise, self-disciplined, compulsive, with high self-concept control than the students of rejected category who seem to be uncontrolled, lax, follow own urges, careless of social rules and with low integration.

Factor-Q4: (Relaxed, Tranquil, Torpid, Unfrustrated, Composed Vs Tense, Driven, Overwrought, Frustrated, Fretful)

I (n1) Inferences based on the F-ratio values with Factor-Q4, as criterion:

1. F-ratio value for the main factor i.e. ‘Sociometric categories’ is found significant with Factor-Q4, taken as criterion. The students belonging to different sociometric categories differ significantly from each other on this dimension of personality.

2. F-ratio value for another main factor i.e. ‘Sex’ is found insignificant with Factor-Q4, taken as criterion. It means that the boys and girls are alike on this dimension of personality.

3. F-ratio value for the third main factor i.e. ‘Academic streams’ is found significant with Factor-Q4, taken as criterion. The students of science stream in comparison to arts stream scored high on this factor. They are found more
tense, driven, overwrought, frustrated and fretful than the arts stream students who seem to be relaxed, tranquil, torpid and unfrustrated.

4. F-ratio value for the interactional effect of ‘Sociometric categories and Sex’ is found insignificant with Factor-Q4, taken as criterion. It means that the boys and girls belonging to different sociometric categories are alike on this dimension of personality.

5. F-ratio value for the interactional effect of ‘Sociometric categories and Academic streams’ is found insignificant with Factor-Q4, taken as criterion. It means that the students of arts and science streams belonging to different sociometric categories are alike on this dimension of personality.

6. F-ratio value for the interactional effect of ‘Sex and Academic streams’ is found insignificant with Factor-Q4, taken as criterion. It means that the boys and girls belonging to arts and science streams are alike on this dimension of personality.

7. F-ratio value for the triple interactional effect of ‘Sociometric categories, Sex and Academic streams’ is found insignificant with Factor-Q4, taken as criterion. It means that there is found no cumulative effect of these variables on this dimension of personality.

I (n2) Inferences based on the t-ratio values with Factor-Q4, as criterion among the students belonging to different sociometric categories:

1. There is found significant difference in the mean values between the neglected and rejected category of students on the Factor-Q4. The students of rejected category in comparison to neglected category scored high on this
factor. They are found more tense, driven, overwrought, frustrated and fretful than the students of neglected category who seem to be relaxed, tranquil, torpid and unfrustrated.

2. There is found no significant difference in the mean values between the students of neglected and isolate categories on this dimension of personality.

3. There is found significant difference in the mean values between the rejected and isolate category of students on the Factor-Q_4. The students of rejected category in comparison to isolate category scored high on this factor. They are found more tense, driven, overwrought, frustrated and fretful than the students of isolate category who seem to be relaxed, tranquil, torpid and unfrustrated.

II  INFERENCES BASED ON ELEVEN SCORING FACTORS OF ROSENZWEIG P.F STUDY

(a_1)  Sociometric category-wise differences:

(i)  Extrapeditive - The presence of the frustrating obstacle is insistently pointed out.

1. There is found significant difference in the mean values between neglected and rejected groups of students on the Extrapeditive factor. The rejected group of students show high Extrapeditive pattern of reaction to frustration than their counterparts.

2. There is found significant difference in the mean values between neglected and isolate groups of students on the Extrapeditive factor. The isolate group
of students show high Extrapeditive pattern of reaction to frustration than their counterparts.

3. There is found significant difference in the mean values between rejected and isolate groups of students on the Extrapeditive factor. The rejected group of students show high Extrapeditive pattern of reaction to frustration than their counterparts.

(ii) Intropeditive - The frustrating obstacle is construed as not frustrating.

1. There is found significant difference in the mean values between neglected and rejected groups of students on the Intropeditive factor. The neglected group of students show high Intropeditive pattern of reaction to frustration than their counterparts.

2. There is found significant difference in the mean values between neglected and isolate groups of students on the Intropeditive factor. The neglected group of students show high Intropeditive pattern of reaction to frustration than their counterparts.

3. There is found significant difference in the mean values between rejected and isolate groups of students on the Intropeditive factor. The isolate group of students show high Intropeditive pattern of reaction to frustration than their counterparts.

(iii) Impeditive - The obstacle in the frustrating situation is minimized almost to the point of denying its presence.

1. There is found significant difference in the mean values between neglected and rejected groups of students on the Impeditive factor. The neglected
group of students show high Impeditive pattern of reaction to frustration than their counterparts.

2. No significant difference exists in the mean values between neglected and isolate groups of students on the Impeditive pattern of reaction to frustration.

3. There is found significant difference in the mean values between rejected and isolate groups of students on the Impeditive factor. The isolate group of students show high Impeditive pattern of reaction to frustration than their counterparts.

(iv) **Extrapunitive** - Blame, hostility etc. are turned against some person or thing in the environment.

1. There is found significant difference in the mean values between neglected and rejected groups of students on the Extrapunitive factor. The rejected group of students show high Extrapunitive pattern of reaction to frustration than their counterparts.

2. There is found significant difference in the mean values between neglected and isolate groups of students on the Extrapunitive factor. The isolate group of students show high Extrapunitive pattern of reaction to frustration than their counterparts.

3. There is found significant difference in the mean values between rejected and isolate groups of students on the Extrapunitive factor. The rejected group of students show high Extrapunitive pattern of reaction to frustration than their counterparts.
(v) Variant of Extrapunitive - The subject aggressively denies that he is responsible for some offence with which he is charged.

1. There is found significant difference in the mean values between neglected and rejected groups of students on the denial Variant of Extrapunitive factor. The rejected group of students show high denial Variant of Extrapunitive pattern of reaction to frustration than their counterparts.

2. There is found significant difference in the mean values between neglected and isolate groups of students on the denial Variant of Extrapunitive factor. The isolate group of students show high denial Variant of Extrapunitive pattern of reaction to frustration than their counterparts.

3. There is found significant difference in the mean values between rejected and isolate groups of students on the denial Variant of Extrapunitive factor. The isolate group of students show high denial Variant of Extrapunitive pattern of reaction to frustration than their counterparts.

(vi) Intropunitive - Blame, censure etc. directed by the subject on himself.

1. There is found significant difference in the mean values between neglected and rejected groups of students on the Intropunitive factor. The neglected group of students show high Intropunitive pattern of reaction to frustration than their counterparts.

2. There is found significant difference in the mean values between neglected and isolate groups of students on the Intropunitive factor. The neglected group of students show high Intropunitive pattern of reaction to frustration than their counterparts.
3. There is found significant difference in the mean values between rejected and isolate groups of students on the Intropunitive factor. The isolate group of students show high Intropunitive pattern of reaction to frustration than their counterparts.

(vii) **Variant of Intropunitive - The subject admits his guilt, but denies any essential fault by referring to unavoidable circumstance.**

1. There is found significant difference in the mean values between neglected and rejected groups of students on the denial Variant of Intropunitive factor. The neglected group of students show high denial Variant of Intropunitive pattern of reaction to frustration than their counterparts.

2. There is found significant difference in the mean values between neglected and isolate groups of students on the denial Variant of Intropunitive factor. The neglected group of students show high denial Variant of Intropunitive pattern of reaction to frustration than their counterparts.

3. There is found significant difference in the mean values between rejected and isolate groups of students on the denial Variant of Intropunitive factor. The isolate group of students show high denial Variant of Intropunitive pattern of reaction to frustration than their counterparts.

(viii) **(Impunitive - Blame for the frustration is evaded altogether, the situation being regarded as unavoidable.**

1. There is found significant difference in the mean values between neglected and rejected groups of students on the Impunitive factor. The rejected group
of students show high Impunitive pattern of reaction to frustration than their counterparts.

2. No significant difference exists in the mean values between neglected and isolate groups of students on the Impunitive pattern of reaction to frustration.

3. There is found significant difference in the mean values between rejected and isolate groups of students on the Impunitive factor. The rejected group of students show high Impunitive pattern of reaction to frustration than their counterparts.

(ix) Extrapersistive - A solution for the frustrating situation is emphatically expected of someone else.

1. There is found significant difference in the mean values between neglected and rejected groups of students on the Extrapersistive factor. The rejected group of students show high Extrapersistive pattern of reaction to frustration than their counterparts.

2. There is found significant difference in the mean values between neglected and isolate groups of students on the Extrapersistive factor. The isolate group of students show high Extrapersistive pattern of reaction to frustration than their counterparts.

3. There is found significant difference in the mean values between rejected and isolate groups of students on the Extrapersistive factor. The rejected group of students show high Extrapersistive pattern of reaction to frustration than their counterparts.
(x) **Intropersistive -** Amends are offered by the subject usually from a sense of guilt, to solve the problem.

1. There is found significant difference in the mean values between neglected and rejected groups of students on the Intropersistive factor. The neglected group of students show high Intropersistive pattern of reaction to frustration than their counterparts.

2. There is found significant difference in the mean values between neglected and isolate groups of students on the Intropersistive factor. The neglected group of students show high Intropersistive pattern of reaction to frustration than their counterparts.

3. There is found significant difference in the mean values between rejected and isolate groups of students on the Intropersistive factor. The isolate group of students show high Intropersistive pattern of reaction to frustration than their counterparts.

(xii) **Impersistive -** Expression is given to the hope that time will bring about a solution of problem; patience and conformity are characteristics.

1. There is found significant difference in the mean values between neglected and rejected groups of students on the Impersistive factor. The neglected group of students show high Impersistive pattern of reaction to frustration than their counterparts.

2. There is found significant difference in the mean values between neglected and isolate groups of students on the Impersistive factor. The neglected
group of students show high Impersistive pattern of reaction to frustration than their counterparts.

3. No significant difference exists in the mean values between rejected and isolate group of students on the Impersistive pattern of reaction to frustration.

(a2) Sex-wise differences in different sociometric categories:

(Extrapeditive)

There are found significant differences between the mean values of boys and girls respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the Extrapeditive factor. The boys show high Extrapeditive pattern of reaction to frustration than the girls in all the three sociometric groups.

(Intropeditive)

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the Intropeditive factor.

(Impeditive)

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the Impeditive factor.
(Extrapunitive)

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the Extrapunitive factor.

(Variant of Extrapunitive)

1. There is found significant difference between the mean values of boys and girls belonging to neglected group on the denial Variant of Extrapunitive factor. The girls show high denial Variant of Extrapunitive pattern of reaction to frustration than the boys.

2. No significant differences exist between the mean values of boys and girls respectively belonging to rejected and isolate groups on the denial Variant of Extrapunitive factor.

(Intropunitive)

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the Intropunitive factor.

(Variant of Intropunitive)

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the denial Variant of Intropunitive factor.
(Impunitive)

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the Impunitive factor.

(Extrapersistive)

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the Extrapersistive factor.

(Intropersistive)

There are found significant differences between the mean values of boys and girls respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the Intropersistive factor. The girls show high Intropersistive pattern of reaction to frustration than the boys in all the three sociometric groups.

(Impersistive)

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the Impersistive factor.

(a3) Academic stream-wise differences in different sociometric categories:

(Extrapeditive)

There are found significant differences between the mean values of arts and science stream students respectively belonging to different sociometric
groups viz. neglected, rejected and isolate on the Extrapeditive factor. The students of arts stream show high Extrapeditive pattern of reaction to frustration than the students of science stream in all the three sociometric groups.

(Intropeditive)

1. No significant difference exists between the mean values of arts and science stream students belonging to neglected group on the Intropeditive factor.

2. There is found significant difference between the mean values of arts and science stream students belonging to rejected group on the Intropeditive factor. The science stream students show high Intropeditive pattern of reaction to frustration than their counterparts.

3. No significant difference exists between the mean values of arts and science stream students belonging to isolate group on the Intropeditive factor.

(Impeditive)

1. There is found significant difference between the mean values of arts and science stream students belonging to neglected group on the Impeditive factor. The arts stream students show high Impeditive pattern of reaction to frustration than their counterparts.

2. No significant differences exist between the mean values of arts and science stream students respectively belonging to rejected and isolate groups on the Impeditive factor.
(Extrapunitive)

There are found significant differences between the mean values of arts and science stream students respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the Extrapunitive factor. The students of science stream show high Extrapunitive pattern of reaction to frustration than the students of arts stream in all the three sociometric groups.

(Variant of Extrapunitive)

There are found significant differences between the mean values of arts and science stream students respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the denial Variant of Extrapunitive factor. The students of science stream show high denial Variant of Extrapunitive pattern of reaction to frustration than the students of arts stream in all the three sociometric groups.

(Intropunitive)

No significant differences exist between the mean values of arts and science stream students respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the Intropunitive factor.

(Variant of Intropunitive)

1. There is found significant difference between the mean values of arts and science stream students belonging to neglected group on the denial Variant
of Intropunitive factor. The arts stream students show high denial Variant of Intropunitive pattern of reaction to frustration than their counterparts.

2. No significant differences exist between the mean values of arts and science stream students respectively belonging to rejected and isolate groups on the denial Variant of Intropunitive factor.

(Impunitive)

1. No significant differences exist between the mean values of arts and science stream students belonging to neglected group on the Impunitive factor.

2. There is found significant difference between the mean values of arts and science stream students belonging to rejected group on the Impunitive factor. The arts stream students show high Impunitive pattern of reaction to frustration than their counterparts.

3. No significant difference exists between the mean values of arts and science stream students respectively belonging to isolate group on the Impunitive factor.

(Extrapersistive)

There are found significant differences between the mean values of arts and science stream students respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the Extrapersistive factor. The students of science stream show high Extrapersistive pattern of reaction to frustration than the students of arts stream in all the three sociometric groups.
There are found significant differences between the mean values of arts and science stream students respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the Intropersistive factor. The students of science stream show high Intropersistive pattern of reaction to frustration than the students of arts stream in all the three sociometric groups.

There are found significant differences between the mean values of arts and science stream students respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the Impersistive factor. The students of arts stream show high Impersistive pattern of reaction to frustration than the students of science stream in all the three sociometric groups.

III INFERENCES BASED ON ELEVEN PROBLEM AREAS OF THE PROBLEM CHECK-LIST

(a1) Sociometric category-wise differences:

(i) Health and Physical Development area

1. There is found significant difference between the mean values of neglected and rejected groups of students on the Health and Physical Development area. The students of rejected group depict problems related to health and physical development area more than the students of neglected group.
2. No significant difference exists between the mean values of neglected and isolate groups of students on the area of Health and Physical Development.

3. There is found significant difference between the mean values of rejected and isolate groups of students on the Health and Physical Development area. The students of rejected group depict problems related to this area more than the students of isolate group.

(ii) Finance, Living conditions and Employment area

1. There is found significant difference between the mean values of neglected and rejected groups of students on the Finance, Living conditions and Employment area. The students of rejected group depict problems related to this area more than the students of neglected group.

2. No significant difference exists between the mean values of neglected and isolate groups of students on the area of Finance, Living conditions and Employment.

3. There is found significant difference between the mean values of rejected and isolate groups of students on the Finance, Living conditions and Employment area. The students of rejected group depict problems related to this area more than the students of isolate group.

(iii) Social and Recreational Activities area

1. There is found significant difference between the mean values of neglected and rejected groups of students on the Social and Recreational Activities area. The students of rejected group depict problems related to this area more than the students of neglected group.
2. No significant difference exists between the mean values of neglected and isolate groups of students on the area of Social and Recreational Activities.

3. There is found significant difference between the mean values of rejected and isolate groups of students on the Social and Recreational Activities area. The students of rejected group depict problems related to this area more than the students of isolate group.

(iv) Courtship-Sex and Marriage area

1. There is found significant difference between the mean values of neglected and rejected groups of students on the Courtship-Sex and Marriage area. The students of rejected group depict problems related to this area more than the students of neglected group.

2. No significant difference exists between the mean values of neglected and isolate groups of students on the area of Courtship-Sex and Marriage.

3. There is found significant difference between the mean values of rejected and isolate groups of students on the Courtship-Sex and Marriage area. The students of rejected group depict problems related to this area more than the students of isolate group.

(v) Social-Psychological Relations area

1. There is found significant difference between the mean values of neglected and rejected groups of students on the Social-Psychological Relations area. The students of rejected group depict problems related to this area more than the students of neglected group.
2. No significant difference exists between the mean values of neglected and isolate groups of students on the area of Social-Psychological Relations.

3. There is found significant difference between the mean values of rejected and isolate groups of students on the Social-Psychological Relations area. The students of rejected group depict problems related to this area more than the students of isolate group.

**(vi) Personal-Psychological Relations area**

1. There is found significant difference between the mean values of neglected and rejected groups of students on the Personal-Psychological Relations area. The students of rejected group depict problems related to this area more than the students of neglected group.

2. No significant difference exists between the mean values of neglected and isolate groups of students on the area of Personal-Psychological Relations.

3. There is found significant difference between the mean values of rejected and isolate groups of students on the Personal-Psychological Relations area. The students of rejected group depict problems related to this area more than the students of isolate group.

**(vii) Moral and Religion area**

1. There is found significant difference between the mean values of neglected and rejected groups of students on the Moral and Religion area. The students of rejected group depict problems related to this area more than the students of neglected group.

2. No significant difference exists between the mean values of neglected and isolate groups of students on the area of Moral and Religion.
3. There is found significant difference between the mean values of rejected and isolate groups of students on the Moral and Religion area. The students of rejected group depict problems related to this area more than the students of isolate group.

(viii) **Home and Family area**

1. There is found significant difference between the mean values of neglected and rejected groups of students on the Home and Family area. The students of rejected group depict problems related to this area more than the students of neglected group.

2. There is found significant difference between the mean values of neglected and isolate groups of students on the Home and Family area. The students of neglected group depict problems related to this area more than the students of isolate group.

3. There is found significant difference between the mean values of rejected and isolate groups of students on the Home and Family area. The students of rejected group depict problems related to this area more than the students of isolate group.

(ix) **The Future: Vocational and Educational area**

1. There is found significant difference between the mean values of neglected and rejected groups of students on The Future: Vocational and Educational area. The students of rejected group depict problems related to this area more than the students of neglected group.
2. There is found significant difference between the mean values of neglected and isolate groups of students on The Future: Vocational and Educational area. The students of neglected group depict problems related to this area more than the students of isolate group.

3. There is found significant difference between the mean values of rejected and isolate groups of students on The Future: Vocational and Educational area. The students of rejected group depict problems related to this area more than the students of isolate group.

(x) Adjustment to School Work area

1. There is found significant difference between the mean values of neglected and rejected groups of students on the Adjustment to school work area. The students of rejected group depict problems related to this area more than the students of neglected group.

2. No significant difference exists between the mean values of neglected and isolate groups of students on the area of Adjustment to school work.

3. There is found significant difference between the mean values of rejected and isolate groups of students on the Adjustment to school work area. The students of rejected group depict problems related to this area more than the students of isolate group.

(xi) Curriculum and Teaching Procedure area

1. There is found significant difference between the mean values of neglected and rejected groups of students on the Curriculum and Teaching procedure
area. The students of rejected group depict problems related to this area more than the students of neglected group.

2. There is found significant difference between the mean values of neglected and isolate groups of students on the Curriculum and Teaching procedure area. The students of neglected group depict problems related to this area more than the students of isolate group.

3. There is found significant difference between the mean values of rejected and isolate groups of students on the Curriculum and Teaching procedure area. The students of rejected group depict problems related to this area more than the students of isolate group.

(a2) **Sex-wise differences in different sociometric categories:**

(i) **Health and Physical Development area**

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the problems related to the area of Health and Physical Development.

(ii) **Finance, Living conditions and Employment area**

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the problems related to the area of Finance, Living conditions and Employment.
(iii) **Social and Recreational Activities area**

There are found significant differences between the mean values of boys and girls respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the Social and Recreational Activities area. The girls depict problems related to this area more than the boys in all the three sociometric groups.

(iv) **Courtship-Sex and Marriage area**

1. There is found significant difference between the mean values of boys and girls belonging to neglected group on the Courtship-Sex and Marriage area. The girls depict problems related to this area more than the boys.

2. No significant difference exists between the mean values of boys and girls belonging to rejected group on the problems related to the area of Courtship-Sex and Marriage.

3. There is found significant difference between the mean values of boys and girls belonging to isolate group on the Courtship-Sex and Marriage area. The girls depict problems related to this area more than the boys.

(v) **Social-Psychological Relations area**

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the problems related to the area of Social-Psychological relations.
(vi) Personal-Psychological Relations area

There are found significant differences between the mean values of boys and girls respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the Personal-Psychological relations area. The girls depict problems related to this area more than the boys in all the three sociometric groups.

(vii) Moral and Religion area

There are found significant differences between the mean values of boys and girls respectively belonging to different sociometric groups neglected, rejected and isolate group on the Moral and Religion area. The girls depict problems related to this area more than the boys in all the three sociometric groups.

(viii) Home and Family area

1. There is found significant difference between the mean values of boys and girls belonging to neglected group on the Home and Family area. The girls depict problems related to this area more than the boys.

2. No significant differences exist between the mean values of boys and girls respectively belonging to rejected and isolate groups on the problems related to the area of Home and Family.

(ix) The Future: Vocational and Educational area

1. No significant differences exist between the mean values of boys and girls respectively belonging to neglected and rejected groups on the problems related to the area of The Future: Vocational and Educational.
2. There is found significant difference between the mean values of boys and girls belonging to isolate group on The Future: Vocational and Educational area. The girls depict problems related to this area more than the boys.

(x) **Adjustment to School Work area**

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the problems related to the area of Adjustment to school work.

(xi) **Curriculum and Teaching Procedure area**

No significant differences exist between the mean values of boys and girls respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the problems related to the area of Curriculum and Teaching procedure.

(a₃) **Academic stream-wise differences in different sociometric categories:**

(i) **Health and Physical Development area**

1. There is found significant difference between the mean values of arts and science stream students belonging to neglected group on the Health and Physical Development area. The arts stream students depict problems related to this area more than the science stream students.

2. There is found significant difference between the mean values of arts and science stream students belonging to rejected group of students on the Health and Physical Development area. The arts stream students depict problems related to this area more than the science stream students.
3. No significant difference exists between the mean values of arts and science stream students belonging to isolate group on the problems related to the area of Health and Physical Development.

(ii) Finance, Living conditions and Employment area

There are found significant differences between the mean values of arts and science stream students respectively belonging to three sociometric groups viz. neglected, rejected and isolate on the Finance, Living conditions and Employment area. The students of arts stream depict problems related to this area more than the students of science stream in all the three sociometric groups.

(iii) Social and Recreational Activities area

No significant differences exist between the mean values of arts and science stream students respectively belonging to different sociometric categories viz. neglected, rejected and isolate on the problems related to the area of Social and Recreational Activities.

(iv) Courtship-Sex and Marriage area

There are found significant differences between the mean values of arts and science stream students respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the Courtship-Sex and Marriage area. The students of arts stream depict problems related to this area more than the students of science stream in all the three sociometric groups.
(v) **Social-Psychological Relations area**

1. There is found significant difference between the mean values of arts and science stream students belonging to neglected group on the Social-Psychological Relations area. The arts stream students depict problems related to this area more than the science stream students.

2. There is found significant difference between the mean values of arts and science stream students belonging to rejected group on the Social-Psychological Relations area. The arts stream students depict problems related to this area more than the science stream students.

3. No significant difference exists between the mean values of arts and science stream students belonging to isolate group on the problems related to the area of Social-Psychological Relations.

(vi) **Personal-Psychological Relations area**

There are found significant differences between the mean values of arts and science stream students respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the Personal-Psychological Relations area. The students of arts stream depict problems related to this area more than the students of science stream in all the three sociometric groups.

(vii) **Moral and Religion area**

There are found significant differences between the mean values of arts and science stream students respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the Moral and Religion area.
The students of arts stream depict problems related to this area more than the students of science stream in all the three sociometric groups.

(viii) **Home and Family area**

1. There is found significant difference between the mean values of arts and science stream students belonging to neglected group on the Home and Family area. The arts stream students depict problems related to Home and Family more than the science stream students.

2. There is found significant difference between the mean values of arts and science stream students belonging to rejected group of students on the Home and Family area. The arts stream students depict problems related to this area more than the science stream students.

3. No significant difference exists between the mean values of arts and science stream students belonging to isolate group on the Home and Family area.

(ix) **The Future: Vocational and Educational area**

There are found significant differences between the mean values of arts and science stream students respectively belonging to different sociometric groups viz. neglected, rejected and isolate on The Future: Vocational and Educational area. The students of arts stream depict problems related to this area more than the students of science stream in all the three sociometric groups.

(x) **Adjustment to School Work area**

There are found significant differences between the mean values of arts and science stream students respectively belonging to different sociometric
groups viz. neglected, rejected and isolate on the Adjustment to School Work area. The students of arts stream depict problems related to this area more than the students of science stream in all the three sociometric groups.

(xi) Curriculum and Teaching Procedure area

There are found significant differences between the mean values of arts and science stream students respectively belonging to different sociometric groups viz. neglected, rejected and isolate on the Curriculum and Teaching Procedure area. The students of arts stream depict problems related to this area more than the students of science stream in all the three sociometric groups.

IV INFERENCES BASED ON THE MOST AND LEAST PRESSING PROBLEM AREAS

(a) Sociometric category-wise (General picture):

1. “Social & Recreational Activities” is the most pressing problem area and “Health & Physical Development” is the least pressing problem area among the students of neglected sociometric category.

2. “Social & Recreational Activities” is the most pressing problem area and “Health & Physical Development” is the least pressing problem area among the students of rejected sociometric category.

3. “Adjustment to school work” is the most pressing problem area and “Home & Family” is the least pressing problem area among the students of isolate sociometric category.
(b) Sex-wise picture in each category:

1. The boys in the neglected category depict “Adjustment to school work” as the most pressing problem area and “Home & Family” as the least pressing problem area. On the other hand, the girls depict “Social & Recreational Activities” as the most pressing problem area and “Health & Physical Development” as the least pressing problem area.

2. The boys in the rejected category depict “Adjustment to school work” as the most pressing problem area and “Moral & Religion” as the least pressing problem area. On the other hand, the girls depict “Social & Recreational Activities” as the most pressing problem area and “Health & Physical Development” as the least pressing problem area.

3. The boys in the isolate category depict “Adjustment to school work” as the most pressing problem area and “Home & Family” as the least pressing problem area. On the other hand, the girls depict “Social & Recreational Activities” as the most pressing problem area and “Home & Family” as the least pressing problem area.

(c) Academic stream-wise picture in each category:

1. The students of arts stream belonging to the neglected category depict “Adjustment to school work” as the most pressing problem area and “Health & Physical Development” as the least pressing problem area. On the other hand, the students of science stream depict “Social & Recreational Activities” as the most pressing problem area and “Health & Physical Development” as the least pressing problem area in the same category.

2. The students of arts stream belonging to the rejected category depict “Adjustment to school work” as the most pressing problem area and “Health
& Physical Development” as the least pressing problem area. On the other hand, the students of science stream depict “Social & Recreational Activities” as the most pressing problem area and “Health & Physical Development” as the least pressing problem area in the same category.

3. The students of arts stream belonging to the isolate category depict “Finance, Living conditions & Employment” as the most pressing problem area and “Home & Family” as the least pressing problem area. On the other hand, the students of science stream depict “Social & Recreational Activities” as the most pressing problem area and “Courtship-Sex & Marriage” as the least pressing problem area in the same category.

V INFERENCES BASED ON THE ASSOCIATION OF DIFFERENT SOCIOMETRIC CATEGORIES WITH SEX AND ACADEMIC STREAMS

1. There is found no significant association of different sociometric categories with sex.

2. There is found no significant association of different sociometric categories with academic streams.

VII.2 EDUCATIONAL IMPLICATIONS

The following educational implications emanate from the findings of the present study:

In the present study, the students of rejected and isolate groups depicted more negative traits of personality than the students of neglected group. The adolescent boys in comparison to the girls and arts stream students in comparison
to the science stream students depicted more negative traits of personality in different sociometric categories. Hence the teachers, parents, counselors and administrators should deal with these adolescents cautiously so that they develop positive personality characteristics, group feelings etc. Further the authorities should keep close watch at them and try to recognize their true nature. They should help them to change their way of life and thinking pattern. Change in the outlook would prove good for them, otherwise it would affect their normal growth and development. To help rejected and isolate groups of students, teachers may have to work with the peer group as well as the students themselves. Private conferences with peers might lead to better treatment of these students, especially those who are being rejected because of their own antisocial behavior.

Teachers can help isolates by arming them with better social understandings and skills. Although these students are usually painfully aware of their unpopularity, yet they are not always clear about the reasons for it. Teachers can help these students develop social skills such as introducing themselves to others, initiating conversations, listening and responding appropriately to what peers have to say and joining ongoing group activities.

On the other hand, the students who are rejected by their peers are more difficult to work with because they are hostile, aggressive, uncontrolled, tense, emotionally less stable and disregard rules. It is important for teachers to make it clear to these students that aggressive behavior is not acceptable and will not be tolerated. Such teachers should have confidence in their ability to change these students. They should be assertive, instructive and controlling and not punitive in
curbing aggression. They should be more effective teachers in showing effective ways for handling frustration, controlling their temper and solving conflicts through communication and discussion.

As was found from the findings of present study, the rejected group of students reflected more aggressive and negative patterns of reactions to frustration than the isolate and neglected group of students. The adolescent boys and students of science stream also depicted similar behavior more than their counterparts. In order to reduce the aggressiveness and minimize certain patterns of reactions to frustration among these students, the parents, teachers, counselors and administrators should deal with them patiently and sympathetically. They can help these students in a rational and sympathetic manner to control their emotions and provide them healthy and constructive channels for sublimating the heightened emotional energy, thereby directing hostile energy into constructive outlets. The teachers should provide necessary emotional warmth, friendliness and companionship to the adolescent that is favourable to his/her proper mental health. Praise, sympathy, encouragement and hope rather than ridicule, humiliation, discouragement and threats can be emphasized while handling the adolescent. Strong will, self confidence and feeling of superiority must be instilled among the adolescent girls; arts stream students and neglected category of students. The teachers and counselors should help in the development of positive emotional health of the unaccepted students especially the rejected and isolate ones in their classrooms and reduce their maladjustment to a large extent. They can help them in learning friend making skill properly at the adolescent stage so that their future life would be rewarding and they may become acceptable individuals. Further the teachers should accept the rejected and isolate
student as an individual and communicate this acceptance through warm and affectionate interactions.

The teachers should help rejected category of students by listening to them sympathetically, resocialize their beliefs and attitudes through modeling and persuasion and teaching them more effective ways of interacting with peers and solving conflicts. Such students may benefit from being made more aware of their own behavior, how it is perceived by others and the effects that it has on them. Finally they need counseling to be done by an expert, experienced and practically trained psychologist who will help them in handling frustration, controlling their tempers, solving conflicts through communication and negotiation rather than aggression and expressing anger verbally rather than physically.

It was also found in the present study that the students of rejected category experienced more problems followed by the neglected and isolate students. The adolescent girls in comparison to boys and arts stream students in comparison to their science stream counterparts also experienced more problems. It is a real fact that when students suffer from problems in different spheres of life, they develop negative attitude towards themselves and others. They suffer from inferiority complexes. The adolescent may be facing numerous types of problems such as those concerning his physical health, mental health, family adjustment, financial handicaps and social adjustment. Psychological guidance must be given to the rejected and isolate groups of students which will make them emotionally stable. The psychological guidance at this stage will comprise of talks, discussions, sympathetic advice, assistance in understanding the problems, engaging the pupil
in manifold activities, redirecting and sublimating his emotions and lastly adjusting the curriculum to the school situations.

Moreover the parents should also remain vigilant in ensuring that their grown up children develop the right attitudes towards the peer group around them. The adolescent girls should be guided by the parents and the teachers to develop certain desirable mental traits viz. cheerfulness, perseverance and problem solving outlook and temper. They should be safeguarded against the development of undesirable traits in them like temper tantrums, impulsiveness etc. They should be guided in such a way so as to enable them to develop into mentally adjusted and healthy adults. As the morals acquire heightened significance at adolescent stage, proper moral education and religious theory and practice can mould the thought and behavior of these adolescent girls, students of arts stream and the students of rejected sociometric category. If they are taught moral values as justice, truthfulness, righteousness, patience etc., they are less likely to deviate into maladjustment. These values can enable them to fight against frustrating situations in everyday life.

An adequate guidance programme caters for the guidance of the adolescents at class XII level by surveying and meeting the whole range of his needs and problems. An adequate educational and vocational guidance programme at the school level will be the right step for the students of rejected & isolate categories, arts stream students and adolescent girls to some extent. The most organized way of providing services at the school is by establishing a child guidance clinic in its campus. It can provide timely guidance to the adolescents especially the rejected
and isolate categories in meeting the problems of their adjustment at school, home and in general life.

The guidance programme attempts to discover and eliminate the sources of tension, frustration and irritation. The emotional climate in the classroom with high morale is conducive for the positive emotional energy, stability and effective learning. Individual attention and help should be provided by the teachers to such students who suffer from various types of problems. Both parents and teachers should provide democratic and friendly atmosphere to these grown up adolescents so that they do not face any problem or experience any kind of difficulty either at home or in the school. The teachers can help such students to construct positive social self-concepts, become aware of and develop their strong points to gain confidence and improve in areas of weakness and to accept limitations that cannot be changed. Some students may also need guidance in accepting their gender or their physical attributes or in developing empathy towards others. In this manner teachers can stimulate real change in students’ self-concepts.

Moreover it was also found that “Social & Recreational Activities” is the most pressing problem area among the students of neglected and rejected categories; adolescent girls and science stream students of all the three sociometric categories. Hence it is advised to involve these students in different social and recreational activities like participation in various games, sports, cultural activities, debates and discussions, visits to historical and geographical places, organizing picnics, educational tours, community programmes etc. on
priority basis. This can be organized by the school authorities for such students and also encouraged by the parents as well.

Further it was found that isolate group of students, adolescent boys of different sociometric categories and arts stream students of neglected and rejected categories felt “Adjustment to School work” as the most pressing problem area. Hence the school authorities should provide conducive school atmosphere. The teachers should not overburden such students, instead they should help them in understanding themselves i.e. their interests, aptitude, abilities, weaknesses and limitations also. A school programme should be designed to encourage mental health which will provide these students strengthening experiences that stimulate learning, develop critical thinking and link thought and feeling in the development of a strong self-identity.

Cooperative learning which is an instructional strategy can be initiated by the teachers among the students in the class as a heterogeneous group. When implemented properly, it can have dramatic effects on the student’s achievement. It is a way of enhancing academic engagement and fostering positive relations among the students of different sociometric categories and diverse backgrounds. In cooperative settings, group efforts can be rewarded, thus such students will have an incentive to resolve differences and work together. Conflict in the classroom can be constructive if it occurs within a structured learning environment in which problem solving, rather than personal attack, is the goal. It is desirable that the teachers must know the sociometric structure of the classroom group which will give them a comprehensive picture of the social relations existing among the students. The teachers must discover the isolates and
try to push them up to make greater participation in group activities to smoothen their temperamental angularities. The students must be given ample opportunities in various social and co-curricular activities which will give them boost bolster to become a part and parcel of the group they belong to.

If the teachers can incorporate cooperative learning methods, it will bring peers together in pairs or small groups to collaborate in working toward learning goals. These cooperative learning experiences can lead to positive peer relationships. As found in the present study, the different groups of students comprising of adolescent boys & girls, rejected & isolates and students of arts stream can be paired or grouped with friendly and socially skillful students who can provide modeling as well as opportunities to develop friendships. Teachers will need to be prepared to help students learn to function productively together in pairs or small groups otherwise the experience might lead to hostility or victimization. An atmosphere of emotional at-homeness at school is bound to turn these adolescents into cheerful students and well adjusted otherwise there is a great danger for such students to develop into introverts and maladjusted persons. Affection and security are their basic emotional needs.

**VII.3 SUGGESTIONS FOR FURTHER STUDIES**

1. The present study was confined to class XII\textsuperscript{th} students of higher secondary schools only. Same study can also be conducted at various other levels viz. college and university.

2. The present study was confined to the students studying in arts and science streams only. It can also be extended to the commerce or other streams of professional and technical education.
3. The present study was confined to the schools under the control of the Directorate of School Education, Jammu and schools affiliated to the J&K State Board of School Education, Jammu. It can be extended to the schools affiliated to CBSE also.

4. The present study was confined to an initial sample of 1881 students. It can be further conducted on a large sample by extending to other districts of Jammu province also.

5. The students in different sociometric categories were identified with the help of sociometric questionnaire comprising of three positive criteria-three choices and one negative criterion-one choice using Bronfenbrenner’s Fixed Frame of References. However, in future studies the number of choices and rejections can be made unrestricted.

6. In the present study neglected, rejected and isolate students were studied. The other sociometric categories comprising popular, above average, average and below average can be further studied so as to make the results more comprehensive in nature.

7. Family size, sibling age and mother’s employment status as related to certain aspects of adjustment among the different sociometric groups of adolescents can also be undertaken.

8. The study can also be conducted by investigating into other socio-psychological variables i.e. self-concept, aggression, emotional & social maturity, different components of anxiety and school climate among different sociometric groups of students at school, college and university levels.
9. A comparative study of social skills and activities of students in different sociometric categories can be undertaken in different types of schools viz. Government, Private and Public.

10. A study of psychological needs of adolescents belonging to the different sociometric groups and their bearing on adjustment can be undertaken.

11. In the present study eleven scoring factors including two variants of Rosenzweig P.F. Study were independently studied. Another study based on composite factors such as O-D, E-D, N-P depicting type of aggression and E-A, I-A & M-A depicting direction of aggression can be undertaken on the students of different sociometric groups.

12. Classroom learning behavior of accepted and unaccepted students of different socio-economic strata, locality, sex and their achievement in different academic streams can be undertaken.