



Chapter 3

Methodology

- 3.1 Introduction
- 3.2 Research problem
- 3.3 Objectives of the research / Aims / Purpose
- 3.4 Hypothesis
- 3.5 Variables
- 3.6 Methodology definition of various concepts used in present research
- 3.7 Samples
- 3.8 Tools
- 3.9 Data Collection
- 3.10 Research Design
- 3.11 Statistical analysis
- 3.12 Conclusion**

Chapter 3

Methodology

3.1 Introduction

Research is not always an invention of novel things but sometime it also done to correlates two different facts with each others. Curiosity about new facts is the base of research. CC Cross ford (1983) has stated that Research is the organized and clean thinking done with the help of research methodology. In which, any problem is studied to get multiple answers of any problem. In all field, research is done to explore the facts behind the nature. In past there are so many reports describing the aggression, insecurity and personality traits in existing knowledge body. However, in context of community and cast, we feel the scarcity of reports. Present study describes the aggression, insecurity and personality traits of Hindu and Muslim, arts or sciences college girls and boys. Some understanding regarding the clarification of how the study was exhibited is very necessary before going inside the work.

3.2 Research Problem

“A comparative study of Aggression, Insecurity and Personality trait among Hindu and Muslim college students”

3.3 Objectives of the research / Aims / Purpose

Every research problem is with some fruitful outcome. Generally researcher exhibits his study to either compare two or more facts and this defines the aim of study. Research is not only to solve any puzzle but it is done to give the answer of any genuine problem. Thus, research is done to give the answer of social, economical, political and scientific questions which will give some fruitful outcome to the society. In this way, the aim

of research is to find out the solutions of aforementioned questions by exhibiting the rational scientific and research methodology. The aim of present study is as listed follow.

The main aims of this study area:

1. To measure the degree of Aggression in Hindu and Muslim community
2. To measure the degree of Aggression in Arts and Science students
3. To measure the degree of Aggression in Boys and Girls
4. To compare the degree of Aggression in Hindu and Muslim community
5. To compare the degree of Aggression in Arts and Science students
6. To compare the degree of Aggression in Boys and Girls
7. To measure the degree of Insecurity in Hindu and Muslim community
8. To measure the degree of Insecurity in Arts and Science students
9. To measure the degree of Insecurity in Boys and Girls
10. To compare the degree of Insecurity in Hindu and Muslim community
11. To compare the degree of Insecurity in Arts and Science students
12. To compare the degree of Insecurity in Boys and Girls

- 13.To measure the Personality-trait in Hindu and Muslim community
- 14.To measure the Personality-trait in Arts and Science students
- 15.To measure the Personality-trait in Boys and Girls
- 16.To compare the Personality-trait in Hindu and Muslim community
- 17.To compare the Personality-trait in Arts and Science students
- 18.To compare the Personality-trait in Boys and Girls

3.4 Hypothesis

After defining the research problem, researcher creates the hypothesis for the outcome of research. Research presumes about the possible outcomes of research. These types of guesses are designed as ‘Hypothesis’. We defined the null hypothesis for present research is as following:

Null hypothesis

There is no significant difference in the degree of aggression, insecurity and personality traits among hindu and muslim, arts and science students, girls and boys.

Hypothesis of the present research are:

Ho1: ‘There is no significant difference between the mean of aggression among the Hindu and Muslim community students

Ho2: ‘There is no significant difference between the mean of aggression among the science and arts student.

Ho3. There is no significant difference in the mean of Aggression among Boys and Girls.

- Ho4:** Interaction of community and education stream has no significant effect on the Aggression.
- Ho5:** Interaction of community and Gender has no significant effect on the Aggression..
- Ho6:** Interaction of Education and Gender has no significant effect on the Aggression.
- Ho7:** Interaction of Community, Education stream and Gender has no significant effect on the Aggression
- Ho8:** There is no significant difference between the mean of physical aggression among the Hindu and Muslim community students
- Ho9:** There is no significant difference between the mean of physical aggression among the science and arts student
- Ho10:** There is no significant difference between the mean of physical aggression among the girls and boys student
- Ho11:** Interaction of community and education stream has no significant effect on the Physical aggression.
- Ho12:** Interaction of community and Gender has no significant effect on the Physical aggression.
- Ho13:** Interaction of Education and Gender has no significant effect on the Physical aggression.
- Ho14:** Interaction of Community, Education stream and Gender has no significant effect on the Physical aggression.
- Ho15:** There is no significant difference between the mean of verbal aggression among the Hindu and Muslim community students
- Ho16:** There is no significant difference between the mean of verbal aggression among the science and arts student

- Ho17:** ‘There is no significant difference between the mean of verbal aggression among the girls and boys student
- Ho18:** Interaction of community and education stream has no significant effect on the Verbal aggression
- Ho19:** Interaction of community and Gender has no significant effect on the Verbal aggression.
- Ho20:** Interaction of Education and Gender has no significant effect on the Verbal aggression.
- Ho21:** Interaction of Community, Education stream and Gender has no significant effect on the Verbal aggression.
- Ho22:** ‘There is no significant difference between the mean of angriness-aggression among the Hindu and Muslim community students
- Ho23:** ‘There is no significant difference between the mean of angriness-aggression among the science and arts student
- Ho24:** ‘There is no significant difference between the mean of angriness-aggression among the girls and boys student
- Ho25:** Interaction of community and education stream has no significant effect on the Angriness- aggression.
- Ho26:** Interaction of community and Gender has no significant effect on the Angriness- aggression
- Ho27:** Interaction of Education and Gender has no significant effect on the Angriness- aggression.
- Ho28:** Interaction of Community, Education stream and Gender has no significant effect on the Angriness- aggression.

- Ho29:** ‘There is no significant difference between the mean of enemy context- aggression among the Hindu and Muslim community students
- Ho30:** ‘There is no significant difference between the mean of enemy context- aggression among the science and arts student
- Ho31:** ‘There is no significant difference between the mean of enemy context- aggression among the girls and boys student
- Ho32:** Interaction of community and education stream has no significant effect on the Enemy context- aggression.
- Ho33:** Interaction of community and Gender has no significant effect on the Enemy context- aggression.
- HO34:** Interaction of Education and Gender has no significant effect on the Enemy context- aggression.
- Ho35:** Interaction of Community, Education stream and Gender has no significant effect on the Enemy context- aggression.
- Ho36:** ‘There is no significant difference between the mean of insecurity among the Hindu and Muslim community students
- Ho37:** ‘There is no significant difference between the mean of insecurity among the science and arts student
- Ho38:** ‘There is no significant difference between the mean of insecurity among the girls and boys student
- Ho39:** Interaction of community and education stream has no significant effect on the insecurity.
- Ho40:** Interaction of community and Gender has no significant effect on the insecurity.

Ho41: Interaction of Education and Gender has no significant effect on the insecurity.

Ho42: Interaction of Community, Education stream and Gender has no significant effect on the insecurity.

Ho43: ‘There is no significant difference between the mean of family context insecurity among the Hindu and Muslim community students

Ho44: ‘There is no significant difference between the mean of family context insecurity among the science and arts student

Ho45: ‘There is no significant difference between the mean of family context insecurity among the girls and boys student

Ho46: Interaction of community and education stream has no significant effect on the family context insecurity.

Ho47: Interaction of community and Gender has no significant effect on the family context insecurity

Ho48: Interaction of Education and Gender has no significant effect on the family context insecurity.

Ho49: Interaction of Community, Education stream and Gender has no significant effect on the family context insecurity.

Ho50: ‘There is no significant difference between the mean of school context insecurity among the Hindu and Muslim community students

Ho51: ‘There is no significant difference between the mean of school context insecurity among the science and arts student

Ho52: ‘There is no significant difference between the mean of school context insecurity among the girls and boys student

- Ho53:** Interaction of community and education stream has no significant effect on the school context insecurity.
- Ho54:** Interaction of community and Gender has no significant effect on the school context insecurity.
- Ho55:** Interaction of Education and Gender has no significant effect on the school context insecurity.
- Ho56:** Interaction of Community, Education stream and Gender has no significant effect on the school context insecurity.
- Ho57:** ‘There is no significant difference between the mean of peer group context insecurity among the Hindu and Muslim community students
- Ho58:** ‘There is no significant difference between the mean of peer group context insecurity among the science and arts student
- Ho59:** ‘There is no significant difference between the mean of peer group context insecurity among the girls and boys student
- Ho 60:** Interaction of community and education stream has no significant effect on the peer group context insecurity.
- Ho61:** Interaction of community and Gender has no significant effect on the peer group context insecurity.
- Ho62:** Interaction of Education and Gender has no significant effect on the peer group context insecurity.
- Ho63:** Interaction of Community, Education stream and Gender has no significant effect on the peer group context insecurity.
- Ho64:** ‘There is no significant difference between the mean of study context insecurity among the Hindu and Muslim community students

- Ho65:** ‘There is no significant difference between the mean of study context insecurity among the science and arts student
- Ho66:** ‘There is no significant difference between the mean of study context insecurity among the girls and boys student
- Ho67:** Interaction of community and education stream has no significant effect on the study context insecurity.
- Ho68:** Interaction of community and Gender has no significant effect on the study context insecurity.
- Ho69:** Interaction of Education and Gender has no significant effect on the study context insecurity.
- Ho70:** Interaction of Community, Education stream and Gender has no significant effect on the study context insecurity.
- Ho71:** ‘There is no significant difference between the mean of future context insecurity among the Hindu and Muslim community students
- Ho72:** ‘There is no significant difference between the mean of future context insecurity among the science and arts student
- Ho73:** ‘There is no significant difference between the mean of future context insecurity among the girls and boys student
- Ho74:** Interaction of community and education stream has no significant effect on the future context insecurity.
- Ho75:** Interaction of community and Gender has no significant effect on the future context insecurity.
- Ho76:** Interaction of Education and Gender has no significant effect on the future context insecurity.

- Ho77:** Interaction of Community, Education stream and Gender has no significant effect on the future context insecurity.
- Ho78:** ‘There is no significant difference between the mean of exam context insecurity among the Hindu and Muslim community students
- Ho79:** ‘There is no significant difference between the mean of exam context insecurity among the science and arts student
- Ho80:** ‘There is no significant difference between the mean of exam context insecurity among the girls and boys student
- Ho81:** Interaction of community and education stream has no significant effect on the exam context insecurity.
- Ho82:** Interaction of community and Gender has no significant effect on the exam context insecurity.
- Ho83:** Interaction of Education and Gender has no significant effect on the exam context insecurity.
- Ho84:** Interaction of Community, Education stream and Gender has no significant effect on the exam context insecurity.
- Ho85:** ‘There is no significant difference between the mean of self context insecurity among the Hindu and Muslim community students
- Ho86:** ‘There is no significant difference between the mean of self context insecurity among the science and arts student
- Ho87:** ‘There is no significant difference between the mean of self context insecurity among the girls and boys student
- Ho88:** Interaction of community and education stream has no significant effect on the self context insecurity.

- Ho89:** Interaction of community and Gender has no significant effect on the self context insecurity.
- Ho90:** Interaction of Education and Gender has no significant effect on the self context insecurity.
- Ho91:** Interaction of Community, Education stream and Gender has no significant effect on the self context insecurity.
- Ho92:** ‘There is no significant difference between the mean of existence context insecurity among the Hindu and Muslim community students
- Ho93:** ‘There is no significant difference between the mean of existence context insecurity among the science and arts student
- Ho94:** ‘There is no significant difference between the mean of existence context insecurity among the girls and boys student
- Ho95:** Interaction of community and education stream has no significant effect on the existence context insecurity.
- Ho96:** Interaction of community and Gender has no significant effect on the existence context insecurity.
- Ho97:** Interaction of Education and Gender has no significant effect on the existence context insecurity.
- Ho98:** Interaction of Community, Education stream and Gender has no significant effect on the existence context insecurity.
- Ho99:** ‘There is no significant difference between the mean of personality trait among the Hindu and Muslim community students
- Ho100:** ‘There is no significant difference between the mean of personality trait among the science and arts student

- Ho101:** ‘There is no significant difference between the mean of personality trait among the girls and boys student
- Ho102:** Interaction of community and education stream has no significant effect on the personality trait.
- Ho103:** Interaction of community and Gender has no significant effect on the personality trait.
- Ho104:** Interaction of Education and Gender has no significant effect on the personality trait.
- Ho105:** Interaction of Community, Education stream and Gender has no significant effect on the personality trait.
- Ho106:** ‘There is no significant difference between the mean of out-going against reserved among the Hindu and Muslim community students
- Ho107:** ‘There is no significant difference between the mean of out-going against reserved among the science and arts student
- Ho108:** ‘There is no significant difference between the mean of out-going against reserved among the girls and boys student
- Ho109:** Interaction of community and education stream has no significant effect on the out-going against reserved.
- Ho110:** Interaction of community and Gender has no significant effect on the out-going against reserved.
- Ho111:** Interaction of Education and Gender has no significant effect on the out-going against reserved.
- Ho112:** Interaction of Community, Education stream and Gender has no significant effect on the ou-going against reserved.

- Ho113:** ‘There is no significant difference between the mean of More against less intelligent among the Hindu and Muslim community students
- HO114:** ‘There is no significant difference between the mean of More against less intelligent among the science and arts student
- Ho115:** ‘There is no significant difference between the mean of More against less intelligent among the girls and boys student
- Ho116:** Interaction of community and education stream has no significant effect on the More against less intelligent.
- Ho117:** Interaction of community and Gender has no significant effect on the More against less intelligent.
- Ho118:** Interaction of Education and Gender has no significant effect on the More against less intelligent.
- Ho119:** Interaction of Community, Education stream and Gender has no significant effect on the More against less intelligent.
- Ho120:** ‘There is no significant difference between the mean of Emotionally stable against emotional among the Hindu and Muslim community students
- Ho121:** ‘There is no significant difference between the mean of Emotionally stable against emotional among the science and arts student
- Ho122:** ‘There is no significant difference between the mean of Emotionally stable against emotional among the girls and boys student
- Ho123:** Interaction of community and education stream has no significant effect on the emotionally stable against emotional.

- Ho124:** Interaction of community and Gender has no significant effect on the emotionally stable against emotional.
- Ho125:** Interaction of Education and Gender has no significant effect on the emotionally stable against emotional.
- Ho126:** Interaction of Community, Education stream and Gender has no significant effect on the Emotionally stable against emotional.
- Ho127:** ‘There is no significant difference between the mean of Assertive against humble among the Hindu and Muslim community students
- Ho128:** ‘There is no significant difference between the mean of Assertive against humble among the science and arts student
- Ho129:** ‘There is no significant difference between the mean of Assertive against humble among the girls and boys student
- Ho130:** Interaction of community and education stream has no significant effect on the Assertive against humble.
- Ho131:** Interaction of community and Gender has no significant effect on the Assertive against humble.
- Ho132:** Interaction of Education and Gender has no significant effect on the Assertive against humble.
- Ho133:** Interaction of Community, Education stream and Gender has no significant effect on the Assertive against humble.
- Ho134:** ‘There is no significant difference between the mean of Happy-go-lucky against sober among the Hindu and Muslim community students
- Ho135:** ‘There is no significant difference between the mean of Happy-go-lucky against sober among the science and arts student

- Ho136:** ‘There is no significant difference between the mean of Happy-go-lucky against sober among the girls and boys student
- Ho137:** Interaction of community and education stream has no significant effect on the Happy-go-lucky against sober.
- Ho138:** Interaction of community and Gender has no significant effect on the Happy-go-lucky against sober.
- Ho139:** Interaction of Education and Gender has no significant effect on the Happy-go-lucky against sober.
- Ho140:** Interaction of Community, Education stream and Gender has no significant effect on the Happy-go-lucky against sober.
- Ho141:** ‘There is no significant difference between the mean of Conspicuous against expedient among the Hindu and Muslim community students
- Ho142:** ‘There is no significant difference between the mean of Conspicuous against expedient among the science and arts student
- Ho143:** ‘There is no significant difference between the mean of Conspicuous against expedient among the girls and boys student
- Ho144:** Interaction of community and education stream has no significant effect on the Conspicuous against expedient.
- Ho145:** Interaction of community and Gender has no significant effect on the Conspicuous against expedient.
- Ho146:** Interaction of Education and Gender has no significant effect on the Conspicuous against expedient.
- Ho147:** Interaction of Community, Education stream and Gender has no significant effect on the Conspicuous against expedient.

- Ho148:** ‘There is no significant difference between the mean of Bold against shy among the Hindu and Muslim community students
- Ho149:** ‘There is no significant difference between the mean of Bold against shy among the science and arts student
- Ho150:** ‘There is no significant difference between the mean of Bold against shy among the girls and boys student
- Ho151:** Interaction of community and education stream has no significant effect on the Bold against shy.
- Ho152:** Interaction community and Gender has no significant effect on the Bold against shy.
- Ho153:** Interaction of Education and Gender has no significant effect on the Bold against shy.
- Ho154:** Interaction of Community, Education stream and Gender has no significant effect on the Bold against shy.
- Ho155:** ‘There is no significant difference between the mean of Tender minded against though minded among the Hindu and Muslim community students
- Ho156:** ‘There is no significant difference between the mean of Tender minded against though minded among the science and arts student
- Ho157:** ‘There is no significant difference between the mean of Tender minded against though minded among the girls and boys student
- Ho158:** Interaction of community and education stream has no significant effect on the Tender minded against though minded.
- Ho159:** Interaction of community and Gender has no significant effect on the Tender minded against though minded.

Ho160: Interaction of Education and Gender has no significant effect on the Tenderminded against though minded.

Ho161: Interaction of Community, Education stream and Gender has no significant effect on the Tender minded against though minded.

Ho162: ‘There is no significant difference between the mean of Suspicious against trusting among the Hindu and Muslim community students

Ho163: ‘There is no significant difference between the mean of Suspicious against trusting among the science and arts student

Ho164: ‘There is no significant difference between the mean of Suspicious against trusting among the girls and boys student

Ho165: Interaction of community and education stream has no significant effect on the Suspicious against trusting.

Ho166: Interaction of community and Gender has no significant effect on the Suspicious against trusting.

Ho167: Interaction of Education and Gender has no significant effect on the Suspicious against trusting.

Ho168: Interaction of Community, Education stream and Gender has no significant effect on the Suspicious against trusting.

Ho169: ‘There is no significant difference between the mean of Imaginative against practical among the Hindu and Muslim community students

Ho170: ‘There is no significant difference between the mean of Imaginative against practical among the science and arts student

Ho171: ‘There is no significant difference between the mean of Imaginative against practical among the girls and boys student

Ho172: Interaction of community and education stream has no significant effect on the Imaginative against practical.

Ho173: Interaction of community and Gender has no significant effect on the Imaginative against practical.

Ho174: Interaction of Education and Gender has no significant effect on the Imaginative against practical.

Ho175: Interaction of Community, Education stream and Gender has no significant effect on the Imaginative against practical

Ho176: ‘There is no significant difference between the mean of Shrewd against forthright among the Hindu and Muslim community students

Ho177: ‘There is no significant difference between the mean of Shrewd against forthright among the science and arts student

Ho178: ‘There is no significant difference between the mean of Shrewd against forthright among the girls and boys student

Ho179: Interaction of community and education stream has no significant effect on the Shrewd against forthright.

Ho180: Interaction of community and Gender has no significant effect on the Shrewd against forthright.

Ho181: Interaction of Education and Gender has no significant effect on the Shrewd against forthright.

Ho182: Interaction of Community, Education stream and Gender has no significant effect on the Shrewd against forthright.

Ho183: ‘There is no significant difference between the mean of Apprehensive against plaoid among the Hindu and Muslim community students

- Ho184:** ‘There is no significant difference between the mean of Apprehensive against plaoid among the science and arts student
- Ho185:** ‘There is no significant difference between the mean of Apprehensive against plaoid among the girls and boys student
- Ho186:** Interaction of community and education stream has no significant effect on the Apprehensive against plaoid.
- Ho187:** Interaction of community and Gender has no significant effect on the Apprehensive against plaoid.
- Ho188:** Interaction of Education and Gender has no significant effect on the Apprehensive against plaoid.
- Ho189:** Interaction of Community, Education stream and Gender has no significant effect on the Apprehensive against plaoid.
- Ho190:** ‘There is no significant difference between the mean of Experimenting against traditional among the Hindu and Muslim community students
- Ho191:** ‘There is no significant difference between the mean of Experimenting against traditional among the science and arts student
- Ho192:** ‘There is no significant difference between the mean of Experimenting against traditional among the girls and boys student
- Ho193:** Interaction of community and education stream has no significant effect on the Experimenting against traditional.
- Ho194:** Interaction of community and Gender has no significant effect on the Experimenting against traditional.
- Ho195:** Interaction of Education and Gender has no significant effect on the Experimenting against traditional.

- Ho196:** Interaction of Community, Education stream and Gender has no significant effect on the Experimenting against traditional.
- Ho197:** ‘There is no significant difference between the mean of Self-sufficient against group-tied among the Hindu and Muslim community students
- Ho198:** ‘There is no significant difference between the mean of Self-sufficient against group-tied among the science and arts student
- Ho199:** ‘There is no significant difference between the mean of Self-sufficient against group-tied among the girls and boys student
- Ho200:** Interaction of community and education stream has no significant effect on the Self-sufficient against group-tied.
- Ho201:** Interaction of community and Gender has no significant effect on the Self-sufficient against group-tied.
- Ho202:** Interaction of Education and Gender has no significant effect on the Self-sufficient against group-tied.
- Ho203:** Interaction of Community, Education stream and Gender has no significant effect on the Self-sufficient against group-tied.
- Ho204:** ‘There is no significant difference between the mean of Controlled against causal among the Hindu and Muslim community students
- Ho205:** ‘There is no significant difference between the mean of Controlled against causal among the science and arts student
- Ho206:** ‘There is no significant difference between the mean of Controlled against causal among the girls and boys student
- Ho207:** Interaction of community and education stream has no significant effect on the Controlled against causal.

Ho208: Interaction of community and Gender has no significant effect on the Controlled against causal.

Ho209: Interaction of Education and Gender has no significant effect on the Controlled against causal.

Ho210: Interaction of Community, Education stream and Gender has no significant effect on the Controlled against causal.

Ho211: ‘There is no significant difference between the mean of Tense against relaxed among the Hindu and Muslim community students

Ho212: ‘There is no significant difference between the mean of Tense against relaxed among the science and arts student

Ho213: ‘There is no significant difference between the mean of Tense against relaxed among the girls and boys student

Ho214: Interaction of community and education stream has no significant effect on the Tense against relaxed.

Ho215: Interaction of community and Gender has no significant effect on the Tense against relaxed.

Ho216: Interaction of Education and Gender has no significant effect on the Tense against relaxed.

Ho217: Interaction of Community, Education stream and Gender has no significant effect on the Tense against relaxed.

3.5 Variables

Variables have very great importance in the psychological research. As its name suggested Variables means the moiety whose value keeps changing. In psychology, variables are the characteristic, virtue or any other mental measurement. According to the views of D. Ameto, variables are the moiety of animal, situation and other things which can be measured.

In research, three main variables are always well defined. A-Dependent variables B-Independent variables and C-Contolled variables. In present study, followings are the major variables.

A. Independent Variables

- I. Community** : Hindu and Muslim
- II. Educational Stream** : Arts and Science stream.
- III. Gender** : Boys and Girls

B. Dependent Variables

- I. Aggression**
- II. Insecurity**
- III. Personality trait**

C. Control Variables

- I. Equal numbers of gender**
- II. Same time for all experiments (Teat time)**
- III. Same test will be given to all students**
- IV. Same method will be used for data analysis**
- V. Age limit taken: 18-25 years**
- VI. Only undergraduate (UG) students will be taken in account**

Table 3.1

Dependent and independent variables used in present study.

Sr. No.	Variables	Types of variable	No. of Variables	Levels of Variables
1	Caste	Independent	2	1. Hindu 2. Muslim
2	Educational Stream	Independent	2	1. Arts 2. Science

3	Gender	Independent	2	1. Boys
				2. Girls
4	Aggression	Dependent	3	1. Low
				2. Medium
				3. High
5	Insecurity	Dependent	3	1. Low
				2. Medium
				3. High
6	Personality trait	Dependent	3	1. Low
				2. Medium
				3. High

3.6 Methodological definition of various concepts used in present research

3.6.1 Hindu and Muslim community

Every society is based on different religion. Different people follow different types of religion according to their birth or by choice. The major religions of the world are Hinduism, Islam, Christianity, Sikhism, Buddhism, and Judaism. Each religion is similar and different from one another in terms of festivals, practices and beliefs. Apart from Christianity, Hinduism and Islam are the two most widely practiced religions in the world today. They have their own traditions, beliefs and practices. These two religions are similar to some extent and differ in terms of the God they worship, religious text and the place where they offer their prayers and also in terms of they believe in their gods and way of treat. The major difference between Hinduism and Islam is the God they worship. Hinduism is based on polytheism whereas Islam is based on monotheism. The different forms of gods that Hindus worship are Brahma, Vishnu, Maheshwor, Ganesh, Laxmi, Saraswati, and Durga. Hindus worship these gods because each of these gods represents the creator, preserver, destroyer, first god, goddess of wealth, goddess of knowledge and goddess of victory respectively. Therefore, by offering

prayers to each of these gods individually they believe they will be successful in these areas. On the other hand, Islamic people worship Allah. They believe that Allah is the creator of heaven and the earth. According to them Allah is the supreme being, and there is no one above Allah.

Likewise, both Hindus and Muslims have faith in their religious text. However, Hindus have numerous religious texts whereas Islam has only one. "Hinduism is based on the accumulated treasury of spiritual laws discovered by different persons in different times". The different types of religious text that the Hindu religion believes in are The Vedas, The Mahabharat, The Ramayan, The Bhagwad Gita, and The Puranas.

3.6.2 Education

In present study, bachelors of arts and science boys and girls are selected as samples.

A. Faculty of Arts

Generally, after H.S.C., the first three years of college is known as the 'Bachelor course'. In arts, student study psychology, sociology, economics, geography, political science and other article subjects. Besides these articles subjects, they also study the literature and languages like Gujarati, English, Hindi and sanskrit etc. Moreover, student also takes part in the extra curriculam activity like NCC, NSS, sports and cultural program. Here we include these types of student in our sampling.

B. Faculty of sciences

Generally, after H.S.C., the first three years of college is known as the 'Bachelor course'. In science, student study biology, mathematics, chemistry, physics, laboratory practical and many other scientific

subjects. Besides these articles subjects, they also study the computer sciences and other socio-ecological subjects. Moreover, student also takes part in the extra curriculam activity like NCC, NSS, sports and cultural program. Here we include these types of student in our sampling.

3.6.3 Gender

Psychologist has been divided whole life in 10 divisions on the basis of embryology. **1. Prenatal period:** From fertilization to birth. **2. Infancy:** From birth to first 10-14 days. **3. Babyhood:** From 2 weeks to 2 years post-birth. **4 Childhood:** From 2 years to 10-12 years post-birth. **5. Puberty:** In girl 11-13 years and in boys 12-14 years. **6. Early adolescence:** 13-14 years to 17 years. **7. Later adolescence:** 17 to 20 years. **8. Early adulthood:** 21 to 40 years. **9. Middle age:** 40 to 60 years. **10. Old age:** 60 years to death.

In present study, we have taken 18- 25 years girls and boys. In this group, the physical and mental and biotic changes are occurring very likely. Besides these all changes; physical, social, sexual, mental developments in this age is extremely fast. With all this, in this age, an individual also experiences the anxiety regarding their study, economical stability and social adjustment. In present study, we studied the aggression, insecurity and personality traits with in 18-25 year age groups.

3.7 Sample

‘Probability sampling is the only approach that makes possible representative sampling plan’- **Isisor Chein**

Sample is the part of population. The aim of sampling is to get an idea about particular characteristics of whole population by analyzing the small part of population- the sample. In present study, sampling is done from various arts and science college affiliated to Sardar Patel University.

Arts colleges from where sampling was done

1. Nalini, arvind and T.V. Patel arts college Vallbh Vidyanagar (Sardar Patel University)
2. Anand arts college, Anand (Sardar Patel University)
3. N. S. Patel Arts college, Anand. (Sardar Patel University)
4. Bhikhabhai Arts college, Anand (Sardar Patel University)

Sciences colleges from where sampling was done

1. V. P. and R.P.T.P. science college, Vallabh Vidyanagar (Sardar Patel University)
2. N. V. Patel Science College Vallabh Vidyanagar (Sardar Patel University)
3. M. B. Patel science college, Anand (Sardar Patel University)
4. P. M. Patel science college, Anand (Sardar Patel University)

Sample is selected from the aforementioned colleges if Sardar Patel University. We have visited the colleges after taking the permission from principal or any other higher authority. We have also collected the information regarding the total number of students, their subjects and their class distribution. We have made student to fill the provided questionnaire containing various measure.

As per factorial design we will select total 320 youngsters, out of which 160 from Hindu and 160 from Muslim. These 160 will be further divided in 80-80; 80 from Arts stream and 80 from science stream. These 80 will be further divided in 40-40; 40 are girls and 40 are Boys.

Table. 3.2

Sample selection procedure of the subjects as per the given

Hindu	Arts	Boys	40	80	160	320
		Girls	40			
	Science	Boys	40	80		
		Girls	40			
Muslim	Arts	Boys	40	80	160	
		Girls	40			
	Science	Boys	40	80		
		Girls	40			

3.8 Tools

Researchers take various useful tools to measure psychological functions. The right tool is selected to validate the created hypothesis. Sometime researchers use more than one tools for solving/measuring complex phenomenon, ultimately give very accurate results. In present study, following listed tools are used to measure different psychological moiety.

3.8.1 Personal information sheet

In present study, we have prepared Personal information sheet on the basis of independent variables. In which the name, educational qualification, community, religion, age etc are included.

3.8.2 Scale of Aggression

Author- Dr. Buzz and Pari (1961)

No. of question in questionnaires – total 29 questions

No. of negative questions- total 1 (Question 9 and 16)

Types of reaction – Every question have five options. (1. Fully agree; 2. Agree; 3. Uncertain; 4. dis-agree; 5. Totally dis-agree)

Parts of test: Present test is divided in 4 factors.

1. Physical aggression
2. Verbal aggression
3. Anger
4. Revenge related aggression

Number of questions according to the parts of test

- a. Physical aggression – question no. 2, 5, 8, 11, 13, 22 and 29 (total 9)
- b. Verbal aggression- question no. 4, 6, 14, 21 and 27 (total 5)
- c. Anger- question no. 1, 9, 12, 18, 19, 23 and 28 (total 7)
- d. Revenge related aggression- question no. 3, 7, 10, 13, 17, 20, 24 and 26 (total 8)

The measurement of aggression in Hindu-Muslim, arts-sciences and boys-girls .

Scoring method

1. Fully agree – 5 points
2. Agree - 4 points
3. Uncertain- 3 points
4. dis-agree- 2 points
5. Totally dis-agree- 1 points

3.8.3 Scale of Insecurity

Author- Dr. Beena Shah

No. of total question in questionnaires – total 75 questions

No. of positive and negative questions- total 16, 27, 30, 32, 39, 41 and 43 are positive and rest all are negative questions

Types of reaction – Every question have three options. (1. always; 2. Sometimes; 3. never)

Parts of test: Present test is divided in 8

1. Family context Insecurity,
2. School context Insecurity,
3. Peer Group context Insecurity,
4. Study context Insecurity,
5. Future context Insecurity,
6. Exam context Insecurity,
7. Self context Insecurity,
8. Existence context Insecurity

Area of test. The measurement of aggression in Hindu-Muslim, arts-sciences and boys-girls

Scoring method

Insecurity scoring method is made up or three point measurement. These three points are given in always, sometimes, never. It contains total 75 sentences. 16, 27, 30, 32, 39, 41 and 43 sentences are positive whereas rest of all is negative.

For positive sentences

1. Always – 2 points
2. Sometimes - 1 points
3. Never - 0 points

For negative sentences

1. Always – 0 points
2. Sometimes - 1 points
3. Never - 2 points

3.8.4 Scale of personality traits

❖ A BRIEF ORIENTATION TO THE 16 PF TEST

The *Sixteen Personality Factor Questionnaire* (16 PF) is an objectively scorable test devised by basic research in psychology to give the most complete coverage of personality possible in a brief time. The test was designed for use with individuals aged sixteen and above. Forms A, B, C, and D, which "are the subject of this *Manual*, are most appropriate for literate individuals whose educational level is roughly equivalent to that of the normal high school student. Two other forms of the test, E, which is presently available, and F, in preparation, are designed for individuals with marked educational and reading deficits. The test can be scored by hand or by machine and various types of answer sheets are available for this reason. Additionally, a computer interpretation service, described in Section 4 below, is available through IP AT.

A more intensive description of the scientific and statistical properties of the test is given in the *Handbook for the 16 PF*. * The present *Manual* is a brief, practical guide, handy for those actually giving and scoring the test.

Comprehensive coverage of personality rests upon measurement of sixteen functionally independent and psychologically meaningful dimensions isolated and replicated in more than thirty years of factor-analytic research on normal and clinical groups. The test user may need a

little practice to get used to handling as many as sixteen traits, but the expanded possibilities for understanding and predicting behavior will more than compensate him for the effort involved.

The personality factors measured by the 16 PF are not just unique to the test but instead rest within the context of a general theory of personality. Nearly ten years of empirical, factor-analytic research preceded the first commercial publication of the test in 1949.

For convenience, these dimensions are set out briefly below in Table 1.1. Each factor is listed with its alphabetic designation and brief descriptions of low and high scores. A more detailed description of each scale is given in Section 6 of this *Manual* and in Chapter 9 of the *Handbook*.

These sixteen dimensions or scales are essentially independent. Any item in the test contributes to the score on one and only one factor so that no dependencies were introduced at the level of scale construction. Moreover, the experimentally obtained correlations among

1 It is difficult in a *Manual* of this size to fully document all of the research findings that are briefly reported here. This documentation will be found in the *Handbook*. Similarly, a number of important issues are not discussed in this *Manual* but are treated in the *Handbook*. These include: (1) selection of particular test Forms A, B, C, D, E, and F appropriate to the examinee and purpose; (2) the design of the test in relation to research evidence; (3) the derivation of norms, with age, sex, and status relations; (4) formulas and devices for using scores for educational and industrial prediction and clinical diagnosis; (5) fuller discussion of the meanings of first- and second-order factors; and (6) a comprehensive summary of research findings with the test in the areas of industrial, educational, social, and clinical psychology.

TABLE 3.3
THE PRIMARY SOURCE TRAITS
COVERED BY THE 16 PF TEST

Low Sten Score Factor Description (1-3)	High Sten Score Description (8-10)
Factor	
A <i>Reserved, detached, critical, aloof, stiff</i> Sizothymia ⁰	<i>Outgoing, warmhearted, easygoing, participating</i> Affectothymia
B <i>Dull</i> Low intelligence	<i>Bright</i> High Intelligence
C <i>Affected by feelings, emotionally less stable, easily upset, changeable</i> Lower ego strength	<i>Emotionally stable, mature, faces reality, calm</i> Higher ego strength
E <i>Humble, mild, easily led, docile, accommodating</i> Submissiveness	<i>Assertive, aggressive, competitive, stubborn</i> Dominance
F <i>Sober, taciturn, serious</i> Desurgency	<i>Happy-go-lucky, enthusiastic</i> Surgency
G <i>Expedient, disregards rules</i> Weaker superego strength	<i>Conscientious, persistent, moralistic, staid</i> Stronger superego strength
H <i>Shy, timid, threat-sensitive</i> Threctia	<i>Venturesome, uninhibited, socially bold</i> Parmia
I <i>Tough-minded, self-reliant, realistic</i> Harria	<i>Tender-minded, sensitive, clinging, overprotected</i> Premsia
L <i>Trusting, accepting conditions</i> Alaxia	<i>Suspicious, hard to fool</i> Protension
M <i>Practical, "down-to-earth"</i>	<i>Imaginative, bohemian.</i>

	concerns Praxernia	absent-minded Autia
N	<i>Forthright</i> , unpretentious, genuine but socially clumsy Artlessness	<i>Astute</i> , polished, socially aware Shrewdness
0	<i>Self-assured</i> , placid, secure, complacent, serene Untroubled adequacy	<i>Apprehensive</i> , self- reproaching, insecure, worrying, troubled Guilt proneness
Q ₁	<i>Conservative</i> , respecting traditional ideas Conservativism of temperament	<i>Experimenting</i> , liberal, free- thinking Radicalism
0 ₂	<i>Group dependent</i> , a "joiner" and sound follower Group adherence	<i>Self-sufficient</i> , resourceful, prefer* own decisions Self-sufficiency
0 ₃	<i>Undisciplined self-conflict</i> , lax, follows own urges, careless of social rules Low self-sentiment integration	<i>Controlled</i> , exacting will power, socially precise, compulsive, following self-imi High strength of self- sentiment
0 ₄	<i>Relaxed</i> , tranquil, torpid, unfrustrated, composed Low ergic tension	<i>Tense</i> , frustrated, driven, overwrought High ergic tension

"Titles in roman type are the technical names for the factors and are explained more fully in the *Handbook*.

Addition to the sixteen primary factor? the test can be used as a measure of eight secondary dimensions which, as mentioned above, are broader traits, e arable from die component primary factors in ways described in Section 7.

Of course, each psychologist must determine for himself the applicability of any instrument to the solution of problems which he faces.

In evaluating the test, the essential elements he will

have to consider are:

- 1) that the test is embedded within the broader fabric or network of general psychological theory;
- 2) that in its present form the test rests upon an empirical foundation of more than ten factor-analytic investigations across a pool of several thousand items;
- 3) that the psychometric properties of the scales (e.g., reliabilities, validities, etc.) have been explored and reported for a variety of samples and conditions; and,
- 4) that research findings involving the test (reported in numerous books and articles) provide the test user with a rich base of criterion evidence in industrial, clinical, social, and educational psychology.

Some of these issues are treated briefly in this *Manual*. More comprehensive discussions of these and other important issues will be found in the *Handbook* and in Cattell (1973). It is hoped that the test user will consult these additional sources so that his decision to use the test in a particular situation will be based upon an informed, individual evaluation of the evidence presented. If, at first glance, this seems an unreasonable demand upon the test user, he is reminded that this is one of the main reasons why psychological tests are restricted in use to qualified professionals. No test can be applied uncritically to the wide variety of behavioral experiences which "have and will continue to intrigue psychologists over the years.

The general theory of personality from which the 16 PF was developed, however, anticipated their demands along certain major dimensions. Thus, for example, related scales are available to measure primary source traits below the adult age range for which the 16 PF is intended. Special purpose tests have been devised to measure only one secondary trait, such as anxiety and extra- version, when the psychologist wishes to focus and intensify his measurement in this fashion. Similarly, the *Clinical Analysis Questionnaire* was developed to augment the power of the 16 PF in/ clinical usage by adding 12 scales, sub-/ stantially pathological in nature, to the 16 normal scales. Translations of the 16 PF into 24 languages and adaptations for 5 other English-speaking cultures exist to facilitate international comparisons.

With this brief statement of design and purpose as a background, the test user can proceed to the remaining sections of this *Manual* which deal directly with administration, scoring, and interpretation of test results.

❖ **Design and construction of the test**

Arrangement of Question Ten to thirteen items are provided for each scale in Form A and Form B. In Form C and Form D, there are eight items for the Factor B scale, seven items for the motivational distortion scale, and six items for each of the remaining scales. The questions are arranged in a roughly cyclic order determined by a plan to give maximum convenience in scoring by stencil and to insure variety and interest for the examinee.

Method of Answering Three-alternative answers are provided for each of the questions, since the two-alternative "forced-choice" situation, forbidding any "middle of the road" compromise, tends to force a distorted distribution and may produce aversion to the test on the part of the examinee. This is particularly the case with adults of average or

higher intelligence for whom Forms A, B, C, and D are designed. With children, or with less intelligent, less competent, or culturally deprived adults, a two-choice design appears better, and such a design is used in the "low literate" scales of the 16 PF constructed for use with such populations (Forms E and F).

Avoidance of Motivational Distortion Effects Questionnaires are often, justifiably, considered susceptible to distortion and deliberate faking. Test construction is aimed to minimize this; but it is also the responsibility of the examiner to neutralize such tendencies as far as possible. It is important to develop good rapport, and to let the client see that the test can best contribute to his own benefit if he cooperates, with frank reports. Actually, items have been chosen to be as "neutral" in value as possible, to emphasize both desirable and undesirable aspects at both ends of each factor scale. Furthermore, items which are not "valid," i.e., which do not obviously refer to the trait but which correlation ally are known to measure it, have been chosen wherever possible, as a "built-in" protection against distortion. In any case, this questionnaire problem is probably not so serious as its frequent discussion might seem to indicate, since the psychologist or counselor likely to use the test in those situations where the client fully realizes that accurate results will contribute to his own welfare. If time is taken to make sure that the person tested understands the importance of careful and truthful response, a long step toward achieving good measures has been taken.

Because Forms C and D are very frequently used in occupational selection work, an additional safeguard has been built into these tests, in the form of a special motivational distortion (MD) scale. The nature of this scale and its application are discussed fully in the *Handbook* and in *Tabular Supplement No. 2* (which contains norms for Forms C and D).

Intended Applications of the Various Forms The primary difference between Forms A and B, on the one hand, and Forms C and D, on the other, is in their length and, therefore, the time required for administration. Form A or Form B will generally require about 45-60 minutes each for administration, while Form C and Form D require only about 25-35 minutes each. However, it is urged that, wherever possible, at least two forms be used (e.g., A + B or C + D), particularly in research situations and in all cases where maximum precision is needed. On the other hand, where time is limited, modern psychometric understanding clearly supports the use of shorter, perhaps less reliable, measures of all sixteen factors, rather than expenditure of the same total available time in longer (and therefore more valid) measures of fewer factors.

Beyond the time differences, the reading level required for Forms C and D is slightly lower than that required for Forms A and B. This difference is not great, however, and when the test administrator feels he will encounter substantial reading problems he would be well advised to consider using Form E which was specifically designed for persons well below the "normal" (6th grade) educational level.

❖ **Validities**

The items in these final forms are the survivors from several thousands of items originally tried, and constitute only those which continue to have significant validity against the factors after ten successive factor analyses (Cattell, 1973) on different samples. These analyses have both verified the existence and natural structure of the sixteen factors, *and* cross-validated the test items in their correlation with the factors on different adult population samples.

The validity of the test itself is meant to be a *concept* (or "construct") *validity*. That is to say, the test questions (or items), as stated above, are

chosen as being good measures of the personality factors, as these factors are represented ¹ in research analysis. This concept validity of the scales can be evaluated directly by correlating the scale score with the pure factor it was designed to measure. Table 2.4 gives these concept validity values for single forms and for various combinations of the forms. As with consistency, it is evident that substantial overall increases in validity are possible by using more than one form of the test.

Still, even for the relatively brief (6-item) scales of Forms C and D, the validity coefficients are exceptionally high.

Table 3.4

DIRECT CONCEPT VALIDITIES OF THE 16 PF SCALES

Source Trait																
Form	N	A	B	C	E	F	G	H	I	L	M	N	O	Q1	Q2	Q3
A + B	958	86	53	77	71	88	77	94	80	67	71	64	86	68	80	80
C + D	794	87	91	63	82	90	54	90	45	65	85	74	71	68	82	70
A	958	79	35	70	63	83	67	92	70	49	44	41	71	62	70	68
B	958	78	44	66	64	79	69	87	75	63	73	60	81	51	70	69 !

The concept validity may also be evaluated indirectly by determining how well the test scale's correlations with a representative sample of diverse psychological variables agree with those the conceptual criterion (pure factor) is expected to have. (For further details, see the *Handbook*, pp. 38-39.) presents these concept validities, indirectly evaluated, for the full 16 PF (Forms A + B + C + D).

It will be seen that direct and indirect estimates of validity agree quite well. Both approaches place A and F, for example, among the highest, and M, N, I and Q1 among the lowest.

The direct *concrete* validities of the scales (i.e., their correlations with specific, external criteria) cannot be neatly tabulated as the concept validities have been above. This is simply because the number of external criteria again

Table 3.5

INDIRECT CONCEPT VALIDITIES OF THE FULL 16 PF

Source Trait															
A	B	C	E	F	G	H	I	L	M.	N	0	Qi	Q ₂	Q ₃	04
96	95	95	91	96	94	95	96	91	74	63	84	'83	90	93	93

which the 16 PF has been validated is extremely large. The reader will want to examine the *Handbook* on this point, particularly Chapters 12, 13, and 14, where much of this information is summarized. Additionally, the *Handbook* bibliography and the supplementary references in Section 8 of this *Manual* will guide the reader to the vast number of research studies conducted with the test, wherein these validities are reported in greater detail.

❖ **Principles and mechanics of scoring**

Each answer scores 0, 1, or 2 points, except the Factor B (intelligence) answers which score 0 (incorrect) or 1 (correct). The score of each item *contributes to only one factor total*. Tests can be either hand scored, with a stencil key, or machine scored.

Hand scoring is accomplished by key, easily, rapidly, and in a standard manner. The answers appear as pencil marks in the boxes on the given answer sheet. Two cardboard stencil scoring keys are used; one covers Factors (traits) A, C, F, H, L, N, Qi, and Q₃, and the other, Factors B, E, G, I, M, 0, Q₂, and Q₄. Simply fit stencil 1 over the answer sheet and count the marks visible through the holes for Factor A, allowing either 2 or 1, as indicated by the number prin adjacent to the hole. Sum these scor and enter the total in the space indica by the arrow on the stencil for Factoi (raw score); but note that Factor B (int ligence) is peculiar in that each corn mark visible in a hole gives *a score 1 only*.

Before using the scoring stencils, I technician should take a quick look each answer sheet to make sure tl there are no odd, unscorable respons< e.g., marking two out of three alteri tives, or entirely omitting any respon to an item. If such misunderstanding instructions has occurred, the examin must go back and do the affected correctly.

Machine Scoring. Computer scoring of 16 PF answer sheets is available through IPAT's Test Services Division and through National Computer Systems in Minneapolis. IPAT's Test Catalog identifies the types of answer sheets that should be used with the various services, which provide the test user with raw scores and standard scores on each of the sixteen scales, plus scores on four second-order factors and three additional criteria (neuroticism, leadership, and creativity).

Also available, through IPAT, for users of the 16 PF is a computer interpretation service. This service provides a narrative report from an individual pro- , file which gives projections on a number of important, real-life criteria useful in industrial, clinical, and educational decisions.

Name.....Age.....Sex..... Grade in School..... Date.....

	Raw Score				Sten Score	Low Score Description	Standard Ten Score (STEN)										High Score Description			
	Form A		Form B				Average													
	Part A ₁	Total A ₂	Part B ₁	Total B ₂			1	2	3	4	5	6	7	8	9	10				
A						Reserved, Detached, Critical, Cool (Sizothymia)	•	•	•	•	•	•	•	•	•	•	•	•	•	Outgoing, Participating (Cyclothymia)
B						Less Intelligent, Concrete-Thinking (Lower scholastic mental capacity)	•	•	•	•	•	•	•	•	•	•	•	•	•	More Intelligent, Abstract-Thinking Bright (higher scholastic mental capacity)
C						Affected by Feelings, Emotionally less stable, Easily Upset, Changeable (Lower ego strength)	•	•	•	•	•	•	•	•	•	•	•	•	•	Emotionally stable, Faces Reality Calm (higher ego strength)
E						Obedient, Mild, Conforming (Submissiveness)	•	•	•	•	•	•	•	•	•	•	•	•	•	Assertive, Independent, Aggressive Stubborn (Dominance)
F						Sober, Prudent, Serious, Taciturn (Desurgency)	•	•	•	•	•	•	•	•	•	•	•	•	•	Happy-Go-Lucky (Needless, Gay, Enthusiastic (Survency))
G						Disregards Rules, Undependable, By-Passes Obligations (Weaker superego strength)	•	•	•	•	•	•	•	•	•	•	•	•	•	Conscientious, Perservering, Staid, Rule-Bound (Stronger Superego strength)
H						Shy, Restrained, Diffident, Timid (Threctic)	•	•	•	•	•	•	•	•	•	•	•	•	•	Venturesome, Socially Bold, Uninhibited, Spontaneous (parmia)
I						Tough-Minded, Self-Reliant, Realistic No-Nonsense (herzia)	•	•	•	•	•	•	•	•	•	•	•	•	•	Tender Minded, Dependent, Over-protected Sensitive (Premisia)
L						Suspicious	•	•	•	•	•	•	•	•	•	•	•	•	•	Trusting
M						Imaginative	•	•	•	•	•	•	•	•	•	•	•	•	•	Practical
N						Fortright Natural Artless Sentimental (Artlessness)	•	•	•	•	•	•	•	•	•	•	•	•	•	Shrewd, Calculating, Wordly, Penetrating (Shrewdness)
O						Self-Assured, Placid, Secure, Serene (Untroubled adequacy)	•	•	•	•	•	•	•	•	•	•	•	•	•	Apprehensive, Worrying Depressive Troubled (Guilt proneness)
Q ₁						Experimenting	•	•	•	•	•	•	•	•	•	•	•	•	•	Traditional
Q ₂						Self-sufficient	•	•	•	•	•	•	•	•	•	•	•	•	•	Group tied
Q ₃						Casual, Careless of Social Rules, Unity, Follows own urges (Low integration)	•	•	•	•	•	•	•	•	•	•	•	•	•	Controlled, Socially Precise Self-Disciplined, Compulsive (High self concept control)
Q ₄						Relaxed, Tranquil, Torpid, Unfrustrated (Low ergic tension)	•	•	•	•	•	•	•	•	•	•	•	•	•	Tense, Driven Overwrought Fretful (High ergic tension)
Second-Order Factors (Optional): Extraversion <input type="text"/> Anxiety <input type="text"/>							A Sten of 1 2 3 4 5 6 7 8 9 10 by about 2.3% 4.4% 9.2% 15.0% 19.1% 19.4% 15.0% 9.2% 4.4% 2.3% of children													

3.9 Collection of Data

Data was collected by using the tools of Dr. Buzz and peri, Dr. Beena Shah and Dr. R.B. cattle for the aggression, insecurity and personality traits, respectively.

Data collected during July, august, September and October 2014 from the sample of arts and sciences colleges' girls and boys. Sample size was 320 students.

We have gone to colleges with prior permission of higher authorities. Student were pre-informed that the given information sheet is only for study purpose. They were also guided at the place where they feel difficulties in filling form.

3.10 Research design

“Research design is the plan, structure of investigations, conceived so as to research questions”

Research design is the answer of the questions of investigation. So research design is the most important in the research methodology. In this research we want to find out the comparative account of Aggression, Insecurity and Personality trait of Hindu and Muslim girls and Boys.

For that we will use the factor analysis statistical method and $2 \times 2 \times 2$ Factorial design will be applied for the data collection and data analysis purpose.

What is factorial Design?

Factorial design is applied when the research want to study the effect of two factors on any events. When two independent variables are studied than the design is called $2 \times 2 \times 2$ factorial design. Factorial design is changed according to their variables, in which one dependent variable

and two independent variable are studied together. If any research contain 3 independent factor than the design is called $2 \times 2 \times 2$ factorial design. In similar way, if 3 independent variables are studied at three different levels then the design is called $3 \times 3 \times 3$ factorial design.

In present study, we used following factorial design containing eight cell. In each cell, 40 individuals were instructed to fill up information sheet. In this research, $40 \times 8 = 320$ samples were taken. Which are classified as shown following.

Table 3.6
showing the information regarding the sample and information sheets

Source	A1		A2		Total
	B1	B2	B1	B2	
C1	40	40	40	40	160
C2	40	40	40	40	160
Total sample	80	80	80	80	320

Clarification of above classification

A. Community

A1- Hindu community

A2- Muslim community

B. Educational Stream

B1- Arts faculty

B2- Science faculty

C. Gender

C1- Girls

C2- Boys

3.11 Statistical analysis

The collected data were analyzed by 2×2×2 Factorial. F-test ANOVA was used for statistical analysis of data. The difference in mean is counted for each independent factor. The value of mean and their graphs were taken in account to analyze raw data.

3.12 Conclusion

In present study, we measure the aggression, insecurity and personality traits by using their respective tools in the sample of 320. The obtained data were processed through statistical analysis and represented in forms of values and graphs. The results and discussion will be described in next chapter.