METHOD AND PROCEDURE
RESEARCH DESIGN AND METHODOLOGY:

The scientific endeavour of man, while dealing with novel situations, is to develop a systematic and step-wise approach, from where he starts till he reaches the goal. Research in any discipline demands a scientific approach with all objectives in a simplified manner. Any confusion in determining the importance of the variables under investigation or the intervening detractors, will lead the whole operation to an exercise in futility.

Accordingly, any researcher, who addresses himself to any study of cause and effect relationship, is bound to detour unless his enunciations, hypothesis and the role of independent and dependent variables is not spelt-out. In view of these observations, the present investigator made some preliminary exercise (pilot study) for building-up a scientific rationale for the proposed investigation which intends to study the impact of frustration on subjects with a tendency towards extraversion/introversion, neuroticism and deviancy. On the other hand, the investigator is also interested in watching the relationship of adjustment with level of extraversion/introversion, neuroticism and deviancy. From a common man's view point, the assumption is that a well-adjusted person is
well poised as far his social, emotional and mental state are concerned. But, psychologists like Allport (1961), Sheldon (1954) are at variance with a common man and argue that personality which is in constant change because of biological and environmental changes, cannot be predicted in terms of behaviour and reaction to situations, which stimulate different emotions and sentiments. However, these authors agree that if psychology is a science, based on firm cause and effect relationship, than it should be able to forecast the behaviour of an organism in a given situation. It is with this understanding that research in personality has enabled behavioural psychologists to predict and control behaviour. Experts in the field of research methodology like Kerlinger (1973) and Van Dalen (1973) have also observed that prediction of behaviour, under experimentally controlled conditions, can be more nearer to consistency and exactness, provided that the steps followed in eliciting behaviour are based on some organised and logical chain. The authors state:

(i) Kerlinger (1973):

"......Research design sets up the frame work of 'adequate' tests of the relations among variables. Design tells up, in a sense, what observations to make, how to make them and how to analyze the quantitative representation of the
observations. A design tells us what type of statistical analysis to use. Finally, an adequate design outlines possible conclusions to be drawn from the statistical analysis." (p-301)

(ii) In the same vein, Van Dalen (1973), while supporting the strict screening of variables under observation states:

"An investigator does not tackle one step at a time, complete that process and then move on to the next step. He may tackle the steps out of order, shuffle back and forth between steps or work on two steps more-or-less simultaneously." (p-14)

The survey of literature on research methodology helped the investigator in framing the desired procedure for the present investigation.
PROCEDURE:

In view of related studies, given in Chapter-II, the investigator considered a few important rudiments for the selection of sample, selection of tools, procedure and finally the analysis of information. The first important factor under procedure was to pin-point the age group of subjects on whom the proposed research was intended. After that the area and locale, wherefrom the subjects would be selected was the second important factor. For this purpose, the pilot study conducted by the investigator at M.Phil level came as a handy guide.
It was decided that this study will be conducted on higher secondary students of 1st year T.D.C. class, studying in various schools in the District of Srinagar. Obviously the subjects studying in T.D.C. Part 1st fall in the age-range of 17-19 years. There are sixteen higher secondary schools in Srinagar District, of which some are located in the heart of the city and cater to the children who come from educated and socially above-average and middle class families. The other schools cater to the children of semi-rural population with little or no educational background. However, the children who attend the Government schools are mostly from the families whose income ranges between Rs. 900/- and Rs. 1500/- per month. These are the families that are on the cross-roads, as they struggle to shun their economic and educational backwardness and join the economically and socially advanced social class. The subjects who were selected for the present study were studying in the Higher Secondary Schools.

As shown in the map given in Appendix-I, the total number of students studying in T.D.C. Part-I in the above-mentioned study was about 1800 and the attempt of the investigator was to include all the students in his study. Therefore, no specific sampling design has been adopted, except of course, the purposive random sampling, as all subjects studying in T.D.C. Part-I in the Srinagar District were included.
After the selection of subjects, the investigator looked for the tools which are available and could be suitable for the present investigation. It may be mentioned that, by and large, students in Kashmir can read and write English and Urdu. This limitation had to be considered while selecting the tools for data collection. Accordingly, an attempt was made to choose such tools as are non-verbal or verbal with English or Urdu medium. The survey of tests as given in Long & Mehta (1966) and Udai Pareek's Survey of Tests (1971) was consulted and it was decided that the following tools will be used for collection of data in different areas:

(1) For measurement of frustration, Rosenzweig's Picture Frustration Test with Udai Pareek's (1968) adaptation was considered.

(2) For measurement of extraversion/introversion & neuroticism Eysenck's (1964) Personality Inventory (EPI) was used.

(3) For measurement of proneness to delinquency Lidhoo's (1970) Delinquency Proneness Scale was used.
The Rosenzweig's Picture Frustration Study may be said to be a controlled projective technique primarily intended to measure reactions to frustrating situations. Originally the adult form was introduced (Rosenzweig, 1945) which was later revised (Rosenzweig, 1950).

The original childrens' form of the Rosenzweig P.F. study was standardised for use in India by (Pareek, 1959). Encouraged with the results of the childrens' form, the adult form was also adapted and standardised. While preparing the Indian adaptation, care was taken to retain the original situation with a little modification as necessary to make the situations acceptable in the Indian culture. However, many more changes had to be made in the adult form than were made in the childrens' form. In addition to changes in the paraphernalia of the pictures, e.g., clothing and furniture, changes were made in the captions of the same pictures. Moreover, some situations had to be completely changed.

Like the original study, the Indian adaptation consists of 24 situations depicted in cartoon-like pictures, each depicting two persons who are involved in a mildly frustrating situation of common occurrence.
The figure at the left of each picture is shown saying certain words which either help to describe the frustration of the other individual or which are themselves actually frustrating to him. The person on the right is always shown with a blank caption box above. Facial features and other expressions of personality are purposely omitted from all the pictures. The subject is instructed to examine the situations one at a time and write in the blank box the first appropriate reply which enters his mind.

The situations are both ego-blocking and super-ego-blocking type. Ego blocking situations are those in which some obstacle, personal or impersonal, interrupts, disappoints, deprives or otherwise directly frustrates the subject. Super ego-blocking represents some accusation, change or incrimination of the subject by someone else.

It is assumed as a basis for the P.F. Study that the subject unconsciously or consciously identifies himself with the frustrated individual in each pictured situation and projects his own bias in the replies given. To determine this bias, scores are assigned to each response as to direction of aggression and type of aggression. Under directions are included extra-aggression or E-A in which aggression is turned on to the environment; introgression or I-A in which it is turned by the subject
upon himself; and imgression or M-A in which aggression is evaded in an attempt to gloss over the frustration. Under type of aggression fall obstacle-dominance or O-D in which the barrier occasioning the frustration stands out in the responses, ego-defence or E-D in which the ego of the subject predominates and need-persistence or N-P in which the solution of the frustrating problem is emphasized. From the combination of the three categories in each of the two chief dimensions there result for each item, nine possible scoring factors (and two variants E & I) for scoring purposes; the letters E, I and M are employed to signify the three directions, extra aggressive, introaggressive and imgressive responses of aggression, respectively, in whatever combination with type of aggression. To indicate obstacle dominance an apostrophe (') is written after the capital letter E, I or M. The ego-defensive type of extraggressive, introgressive and imgressive responses are signified by the capital letter E, I and M, used alone. To indicate need-persistence small e, i and m are employed. The convention has been adopted by writing obstacle dominance first, ego-defence second and need persistence third in a three-columnar arrangement: O-D/E-D/N-P.

For example a response requiring a score for imgressive obstacle dominance and introgressive ego-defence is indicated by M'/I/. Similarly, if only one scoring
factor is involved say extragressive need persistence
that score is written //e. When, as occasionally
happens, it is necessary to score for two factors within
a given column, a semi-colon is used to separate the
symbols, e.g., /E;M/. The super-ego deviants of
extrapunitive (E) and intropunitive (I) may be
designated as D-E and D-I, implying that these are
'devial variants' of the two factors.

- Brief definitions of the 11 scoring factors
including the two variants follows:

**Extrapeditive or E'**

The presence of the frustrating obstacle is insistently pointed out.

**Intropeditive or I'**

The frustrating obstacle is construed as not frustrating or as in some way beneficial, or in some instances the subject emphasises the extent of his embarrassment at being involved in instigating another's frustration.
Impeditive or M'  The obstacle in the frustrating situation is minimized almost to the point of denying its presence.

Extrapunitive or E  Blame hostility, etc. are turned against some person or thing in the environment.

D-E or E  In this variant of E the subject aggressively denies that he is responsible for some offence with which he is charged (most often applicable to super-ego situations).

Intropunitive or I  Blame, censure, etc., are directed by the subject upon himself.

D-I or I  Variant of I in which the subject admits his guilt but denies any essential fault by referring to unavoidable circumstances (More often employed in super ego situations).
Impunitive or M

Blame for the frustration is evaded altogether, the situation being regarded as unavoidable; in particular the 'frustrating' individual is absolved.

Extrapersistive or e

A solution for the frustrating situation is emphatically expected to some one else.

Intropersistive or i

Amends are offered by the subjects usually from a sense of guilt, to solve the problem.

Impersistive or m

Expression is given to the hope that time or normally expected circumstances will bring about a solution of the problem; patience and conformity are characteristic.
In order to facilitate scoring of responses, scoring samples for each situation are reproduced in the manual. These samples are based on the records of 800 adults of both sexes. All the responses on the P-F study booklets are scored. These should be compiled for the purpose of interpretation. The score sheet is the main basis of interpretation. It shows frequencies and percentages of various factors, the significance of which is interpreted with reference to norm values appearing in the manual. G.C.R. trends and the general patterns are also taken into consideration.

Group conformity rating (G.C.R.) is a measure of conformity of an individual score to the modal responses of his group. The criterion scores for the G.C.R. are designed to reflect the model responses to the item given by a normal sample of the population. The total E-D. score may be said to represent the strength or weakness of the ego, while the N-P. score shows adaptive adequacy. Low figures of N-P and M-A indicate that the subject tends to submit himself/herself passively to the frustration, with not much expectation or effort towards solving the frustrating situation.
RELIABILITY & VALIDITY :

Reliability of P-F study was tested by psychologists from time to time, such as Taylor (1952), Sutcliffe (1955), Lake, Miles & Barle, (1973), Rosenzweig (1956), Mirmow (1952), Rosenzweig (1975), Rosenzweig (1977). In conclusion, the authors advanced a scheme for assessing the validity of semi-projective techniques in which two provinces are delineated: (i) Primary, consisting of construct and criterion-related validity (ii) Secondary, consisting of pragmatic validity.

For measurement of extraversion/introversion, neuroticism Eysenck's E.P.I. was considered. At this stage investigator had to choose one out of the three tests i.e., (1) Maudsley Personality Inventory (M.P.I.) (2) Eysenck's Personality Inventory (E.P.I.) (3) Eysenck's Personality Questionnaire (E.P.Q.) Out of these three only Eysenck's Personality Inventory (E.P.I.) was selected, because of the fact that there was a lie scale attached to the inventory, due to which it was considered superior to M.P.I. On the other hand (E.P.Q.) was carrying another scale measuring psychoticism which was not relevant to the present study. Hence for the measurement of extraversion/introversion, neuroticism, Eysenck's Personality Inventory (E.P.I.) was selected for the present study.
E. P. I.  FORM - A :

Eysenck's Personality Inventory was developed by H.J. Eysenck. This inventory contains 57 questions of which 24 measure extraversion, an equal number measure neuroticism and the remaining 9 constitute a lie scale.

Subjects are instructed to answer the questions given in the inventory either in 'Yes' or 'No' form. Out of 24 questions measuring extraversion, 15 'Yes' answers are scored as +1 and 9 'No' answers are also scored as +1. In all the 24 questions measuring neuroticism all 'Yes' answers are to be scored as +1 and 'No' answers to be scored as 'Zero'. Of the remaining 9 questions of lie scale, 3 'Yes' responses are scored as +1 and 6 'No' responses are also scored as +1.

In short in this inventory 'Yes' as well as 'No' responses to the questions are to be scored.

Question numbers of the questions belonging to extraversion, neuroticism and lie scale are given below. Minus sign against the question number indicates that 'No' response is to be scored as +1.
<table>
<thead>
<tr>
<th>Extraversion/</th>
<th>Neuroticism</th>
<th>Lie Scale</th>
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<tbody>
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<td>introversion</td>
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</table>
Scores obtained after evaluating each booklet are categorized in Extraversion/Introversion, Neuroticism and Lie Scale. High score on extraversion indicates that the subject is an extravert. In case the subject gets low score on extraversion, then the subject is introvert. However, high score on neuroticism is indicative of the fact that the subjects are neurotic. Accordingly, the subjects are grouped as extraverts/introverts or Neurotics.

In the field of personality assessment, the usefulness of the Eysenck Personality Inventory (EPI) (Eysenck and Eysenck, 1964) has been amply demonstrated. Attempts have been made to ascertain its alternate form, estimates of reliability and retest reliability for different samples from different countries of the world. For example, Eysenck and Eysenck (1964) have provided extensive data using English samples of 2,000 normals, 210 neurotics and 90 psychotics on alternate form. The coefficients of reliability range from 0.74 to 0.91. Some data on alternate forms reliability of the EPI has also been provided with Australian and American samples (Sales and Richardson, 1968; Jensen, 1964). Similarly, Eysenck and Eysenck (1964) have reported coefficients of retest reliability.
on normal British subjects. Farley (1971) has also reported stability estimates for the EPI (form A) with 80 American University students (40 males and 40 females). In all such reported studies, the EPI has demonstrated generally high reliability for a personality measure.

Thakur & Thakur (1973) ascertained the alternate form reliability and coefficients of stability on Indian sample of 70 University students (35 males & 35 females). The stability estimates and alternate form reliability of the extraversion/introversion (E-I), neuroticism (N) and lie scale (L) ranged from 0.60 to 0.92 and 0.56 to 0.80 respectively. On the basis of results, it was concluded that the EPI has demonstrated generally high reliability on Indian sample.

For the measurement of proneness to delinquency, Lidhoo's delinquency proneness scale or L.D. Proneness Scale was considered.
Lidhoo's Delinquency Proneness Scale:

Description of the test:

Lidhoo's Delinquency Proneness Scale has been developed with a view to apprehend potential delinquents among adolescent boys within the age range of 14 to 19 years. The author developed the present scale after an intensive study of pronounced delinquents and the potential delinquents. The pronounced delinquents, in Tihar Jail Delhi, provided the basis for the framework of the inventory. On the basis of information collected from the pronounced delinquents, the author presented the expressed feelings in a number of statements in the form of 'Yes' and 'No'. These statements, which were shuffled into four different areas viz., family, dependence/independence, sex and emotionality; were administered to 60 established delinquents and 60 normal adolescents in four different schools in Delhi. These schools were strictly selected from the delinquent areas. On the basis of responses of the pronounced delinquents and the normals, the author screened the statements for item analysis. With the help of point bi-serial correlation, the statements which were found to be significant beyond one percent level were retained and in this way the total number of statements in the final inventory came to 115. Out of these statements 35 statements are in the area of 'family', 26 in the area of 'dependence/independence', 28 are in the area of 'sex' and 26 statements are in the area of 'Emotionality'; the distribution of statements in the four areas is as under:-
<table>
<thead>
<tr>
<th>Area/ Category:</th>
<th>Serial No. of questions falling under the area:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>1 5 9 13 17 21 25 29 33 37 41 45 49 53 57 61 65 69 73 77 81 85 89 93 97 101 106 108 109 110 111 112 113 114 115</td>
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<tr>
<td>Dependence/ Independence</td>
<td>2 6 10 14 18 22 26 30 34 38 42 46 50 54 58 62 66 70 74 78 82 86 90 94 98 102</td>
</tr>
<tr>
<td>Sex</td>
<td>3 7 11 15 19 23 27 31 35 39 43 47 51 55 59 63 67 71 75 79 83 87 91 95 99 103 105 107</td>
</tr>
<tr>
<td>Emotionality</td>
<td>4 8 12 16 20 24 28 32 36 40 44 48 52 56 60 64 68 72 76 80 84 88 92 96 100 104</td>
</tr>
</tbody>
</table>
The statements of each area were spread in the final inventory such that no two statements of the same area were put together, except the last eight statements in the area of family.

The final inventory was administered to 200 pronounced delinquents in Tihar Jail, Delhi and 200 non-delinquents randomly selected from delinquent prone area of Delhi i.e., Gandhinagar, Sarai Rohila, Shahdra and Selampur. After the final administration of the inventory different techniques were used for establishing reliability and validity of the inventory. Reliability was established for the total inventory by applying Mosier's (1943) formula and the reliability coefficient was found to be .919. The reliability of the sub-scales was computed by applying Kuder Rechardson formula 20. The reliability coefficients of the area viz., family, dependence/independence, sex and emotionality were established to be \( r_{tt} = .824; .719; .771 \) & .836 respectively.

Validity of the inventory was established firstly by two years follow-up study of the extreme cases from the non-delinquents, secondly by computing bi-serial 'r', thirdly by computing the significance of mean difference between delinquents and non delinquents and lastly by correlating the scores of non-delinquents with the 'Teacher Comment Check List'. With the help of bi-serial correlation the \( r_{pbi} \) was found to be .663, which is highly significant. The correlation coefficient between the inventory and the 'Teacher Comment Check List' was found to be .821, which is also highly significant.
Classification of delinquents and non-delinquents:

The cumulative results of delinquents and the non-delinquents have revealed that those subjects whose mean scores are 64.5 and above have shown emotional disturbance, lack of interest in family life, flouting the law and vulnerability towards sex offences. Such subjects need immediate attention for counselling and rehabilitation. On the other hand, subjects with a mean score of 50 points and below have shown normal social family adjustment and are emotionally well poised. These subjects have also shown their adherence to law.

Administration and scoring:

After the standard instructions are given to subjects as given on the title page of the inventory, the subjects are supposed to give their choices against each statement in the form of 'Yes' or 'No'. Subjects are not supposed to erase any choice or change their opinion. No statement is to be left. There is no fixed time for the completion of the test. However, the normal time taken by most of the subjects is three quarters of an hour. As far the scoring, the investigator will check that all the statements have been responded and the statements, the responses of which have either been erased or overwritten, are to be deleted from scoring. There is one mark for 'Yes' and zero mark for 'No'. The total score of a subject will be determined by the total number of 'Yes' responses.
Administration of the tests:

The three tests were administered in small groups at different schools at the convenience of students. The tests were administered in accordance with the instructions as given in the respective manuals.

Rosenzweig (P-F) study:

Instructions:

In each of the pictures in this booklet, two people are shown talking to each other. The words said by one person are always given. Imagine what the other person in the picture would answer and write in the blank box the very first reply that comes into your mind. Work as fast as you can. Start with picture 1 and proceed to the next picture, only after answering the previous ones. Do not leave out any picture.

Eysenck's Personality Inventory (E.P.I.)

Directions:

The procedure for answering the questions is given here. After each question there is 'Yes' and 'No'. You have to read and understand the statement and then analyse whether it is applicable to you or not. In case you are convinced that the statement in question is applicable to you, then draw a circle round 'Yes'. If the statement does not apply to you, then draw a circle round 'No'.
LoDo Proneness scale:

Directions:

This is not examination and there is nothing like right or wrong answer. In this booklet, some questions have been asked which concern all of us. If we attempt to understand these questions rightly and are honest in giving our responses, we will know a lot about ourselves.

The procedure for answering the questions is given here. After each question there is 'Yes' and 'No'. You have to read and understand the statement and then analyse whether it is applicable to you or not. In case you are convinced that the statement in question is applicable to you, then draw a circle round 'Yes' and if the statement does not apply to you, then draw a circle round 'No'. For instance the question is:

Do you lose temper very quickly? Yes/No

If you lose temper very quickly, then you will draw a circle around 'Yes' and if you don't lose temper quickly in that case you will draw a circle around 'No'. In the same way, you are directed to follow the instructions of your teacher and answer all the questions in the booklet.

Your answers will be kept strictly confidential.
After the collection of data, the investigator observed that out of 1000 subjects only 908 had responded to all the three tests; therefore, those of the subjects who had taken only one or two tests were dropped from the study. Finally, the test booklets were scored according to the directions given in the respective manuals and the data was pooled for statistical analysis, keeping in view the hypotheses which have been given in the Chapter-I. The statistical analysis of the data is given in Chapter IV.