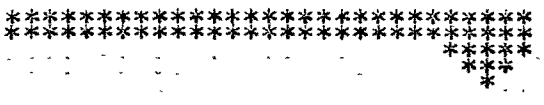
CHAPTER V

PLAN AND PROCEDURE



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METHOD

Primary approach to the analysis of crime is the exploration of the forces and circumstances that lead to crimes. These may be traced to the working of his mental endowments against his family background and his physical and social environments. Conduct may be said to consist of the result of interplay between innate constitution and environmental forces.

Every delinquent or criminal act has its origin in multiplicity of causes, often interwoven and confused. But still there is some cause which is dominating or accelerating the result in a particular case. In order to arrive at the clearest causation of crime, comparison is a fundamental method. The true value of any phenomenon disclosed by search in human behaviour cannot be reliably determined without comparing its incidence in an experimental group with that in the control group. Therefore, delinquents and non-delinquents formed respectively the experimental and control groups for the purpose of this inquiry. Accordingly, a number of delinquents have been compared with an equal number of non-delinquents,

and their similarities and differences have been observed and studied here. Such an experimental method by comparison requires the investigator to keep constant or to control some of the factors in order to study other factors which are manipulated, i.e. it needs to match the experimental and control groups with respect to the control or constant variables while studying the differences between the two groups in other respects. But the most subtle question is to decide which factors should remain constant. And thereto, it is very difficult to define and obtain an adequate control in the field of human personality and behaviour. The factors that should govern the matching process may be open to difference of opinion. Different research workers are guided by different aims, pertaining to the nature of their work and place of investigation, about the factors to be controlled and to be manipulated. Most of other studies have vaguely or in general terms enlisted a number of incidental or accidental factors as causes of delinquent behaviour. The author feels that these may not be necessarily the causes but concomitant variables. Secondly, some of the off-quoted major factors often interact with others and

obscure the main effects of others. Only an adequate experimental design manipulating the needed variables and controlling other ones can bring out the true effects of the factors to be studied. In view of this, the author has tried to keep some of the commonest variables constant in both groups and manipulated the rest. Delinquency has been mostly observed to be incidental to the level of age, intelligence and economic status of the family and these mostly obscure the effect of other factors associated with delinquency. To study the latter the author has carefully introduced an experimental control by keeping the former three viz. - age, intelligence and economic status constant in both the groups of delinquents and non-delinquents, so that delinquency may be traced to the points of differences, leaving off the similarities. The two groups were matched as described in the next section; all necessary data were obtained on special information sheet with respect to both the groups from sources such as personal interviews, interviews with parents, teachers, officers-in-charge or school and office records or case histories whatever were available. All pieces of information were summarized , adequately tabulated, statistically analysed and due inferences were drawn as discussed in later chapters.

SAMPLE

In the present investigation the data have been supplied by two groups viz. - delinquents and non-delinquents, which are termed as experimental and control groups respectively. Subjects of both groups were matched with respect to their age, intelligence and socio-economic status. Each group consisted of one hundred and fifty children. The subjects in both the groups came from the same representative areas of Gujarat, supplying experimental subjects were available, viz. - Surat, Broach and Baroda districts, where certified schools and remand homes.

Members of the experimental group were the inmates of the certified schools or remand homes which admitted and educated the juvenile offenders. While selecting delinquents from certified schools or remand homes, it has been recognised that less serious delinquents or such serious delinquents who by virtue of one reason or the other influencing factor have failed to be noticed by the police from the normal civilian population have been neglected; however, for the purpose of comparison, clear-cut groups were

inevitably a prime necessity. One hundred and fifty delinquent children from different certified schools and remand homes supplied necessary data on the experimental group. Almost in all certified schools some children of other provinces, arrested by the police under jurisdiction of each certified schools, were also admitted. In such cases their case histories could not be traced. Over and above these, there were some children whose family histories could not be traced. All such children were dropped from the present study.

Members of the control group came from the normal school-going population. For the purpose of selecting members of the control group, the author has approached nine schools including primary and secondary schools, out of which the data of only six schools were included in the present research. For getting children of matching age, both primary and secondary schools were approached. In selecting the members of the control or normal group, the rating method was used. Teachers were given rating forms (sample is attached in Appendix A) and requested to give the names of those non-delinquent children whom they knew,

and who had got no delinquency record in the conduct record of the school. The child was considered non-delinquent on the basis of opinion of three teachers for each and his school conduct record.

All these normal children were then matched with experimental children with respect to the age, economic status and level of intelligence. Age admitted was as it was entered in the school registers of each. For determining the economic status of the family, an arbitrary three-point scale, referring to the income and expenditure of the family as well as to the various common items of necessity and luxury was used. (A sample is attached in Appendix E). The child was classified as belonging to either higher, middle or lower groups of socio-economic status on the basis of the scores observed on the scale. Next, to test intelligence , all children of either group were subjected to the most commonly used and convenient test of Standard Progressive Matrices (sets A, B, C, D and E) prepared by J. C. Raven.* They were scored according to the instructions given and these scores

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* J. C. Raven : Standard Progressive Matrices, Sets A, B, C, D and E - Revised Edition, 1956, published by H.K. Lewis and Co. Ltd., London.

served as a basis for matching both groups with respect to the level of intelligence.

It may be alleged at this point that the rating forms used by teachers to stamp children as non-delinquent, as well as the observations on the socio-economic status were more less arbitrary and not objectively valid or that the intelligence scores on Progressive Matrices were not really standard for these children. However, this allegation should not prevent the present investigator from using these measures in asmuch as the purpose of the investigation was not to stamp the subjects as such for prediction, evaluation or corrective treatment; it was only for comparison, for matching the two groups, and as far as they were only matched on the same tool, it was a reliable measure satisfying completely the present purpose, though its validity which was not needed here might be questioned.

On the whole thus, three hundred and twenty-five non-delinquent children were interviewed and administered the test, out of which finally one hundred and fifty non-delinquent subjects matching the delinquent group of 150 in age, status and intelligence were

accepted for the study. Only boys served as the subjects in both the groups, since certified schools in these areas used to admit only delinquent boys. In short, one hundred and fifty male members of each group were almost individually equal in age, intelligence and economic status of the family. This design enabled the investigator to search out the other factors contributing to delinquency.

DATA

For collecting all possible data, an information sheet specially prepared for this purpose was used (sample is attached in Appendix D). It asked for information on a variety of items which were thought to influence juvenile delinquency. Items were chosen on the basis of opinions taken from the specialists in the field, such as superintendents of the certified schools, probation officers, social workers and authors in the field. Some items were also modified with experience during the interview; some of the items were added also to know the points of difference between the two groups.

Data on this sheet were obtained for the experimental group from the records in certified schools as well as from personal interviews with the child, the probation officers, superintendents of the said school, and also, if possible, with parents or guardians of the children. The data for the control group were gathered from their school records as well

as by interviewing the child and teachers and sometimes parents. In checking the data collected, almost all the available possible sources were used.

In addition, to study the adjustment problems in both groups, the investigator has also used the 'Family Relationship Questionnaire' and 'Character Evaluation Form' devised in Gujarati by Dr. A.S.Patel* and 'Adjustment Inventory' standardised in Hindi by Shri H.S. Asthana (all three attached as Appendix ~~D, E and F~~ E-1, 2, 3). The Family Relationship Questionnaire and Character Evaluation Form were originally worked out in Gujarati and as such formed reliable tools. However, Asthana's Adjustment Inventory (in Hindi) being translated in Gujarati questioned as a standardised tool. But this criticism, as noted a little earlier in case of matching tools, should not here also prevent the present investigator from using this in as much as the aim of the investigation is not prediction; it is only for comparison.

The Family Relationship Questionnaire and Adjustment Inventory were self administered. But in

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* Dr. A.S. Patel : "Family Relationship and Economic Status as related to Character Traits in Children". - a paper submitted to Indian Science Congress, at Roorkee (1961). Also published in 'Education and Psychology Review', Vol. I, No.2., April 1961.

case of illiterate members of the delinquent group the meaning of each item was explained and their responses were recorded by the investigator. The Character Evaluation Form for each children in both the groups was given to the superintendents of the certified schools in case of delinquent group and to the class teachers in case of non-delinquent group. They were asked to rate each trait in case of each child of both the groups.

The scores on these tools enabled the author to study the differences between the two groups in family adjustment, general adjustment as well as character traits.

The records of one hundred and fifty delinquent children were prepared and classified with respect to a number of items of information on the record sheet. The records of the matched one hundred and fifty non-delinquent children were also summarised with respect to the same number of items of information. All these items of information on varied factors have been tabulated and quantitatively presented in tables and graphically represented ~~with~~ ~~histograms~~, where necessary in later chapters.

STATISTICAL ANALYSIS

After collecting the data of both the groups separately, frequency of incidence of a given factor among the experimental group was compared with that of the control group and differences were tested using a suitable statistical technique, viz., the Chi-Square Test, as explained in any book on statistics (14). This test was used to find out whether the given factor was (statistically) significantly related to or was independent of incidence of delinquency observed. In each case, a contingency table was prepared showing the observed frequency of incidence in each of its cells standing for the different categories of the two variables or factors represented along the rows and columns of the table. The expected frequency of incidence in each cell was calculated on the assumption of a null hypothesis of independence (unrelatedness) of the two factors studied. The differences between observed and expected frequencies were subjected to statistical analysis by Chi-Square Test, $X^2 = \frac{(f_o - f_e)^2}{f_e}$ and the significance of

difference was tested against the required degrees of freedom from the X^2 table (An example is illustrated in Appendix H). The chapters that follow discuss the results and findings based on the application of this statistical analysis.

Besides this test, the other statistical tool used was a t - test, $t = \frac{D}{D}$ as described in any book on statistics (14). This test was applied to the scores on adjustment inventories and character traits, in order to study the significant difference between delinquent and non-delinquent groups in their adjustment as well as character traits. (An example is illustrated in Appendix H). These findings are also discussed in the concluding chapters.