CHAPTER XIII

RECAPITULATION

As we reach the end of our investigation we are in a position to get a panoramic view of our findings.

An evaluation of the instruments and methods employed in the assessment of personality. We have employed different methods of measuring personality and have obtained various results. We have reviewed the literature in the field. In this chapter we intend to 1) give a brief estimate of our methods of measuring personality, 2) Condense our results, 3) contrast and compare our results with the results of similar investigations.

1) A brief estimate of the methods used in measuring personality. Four tests have been employed: The Rorschach personality test (individual and group forms), the Sacks Sentence Completion test (adapted), the Raven test and a Sociometric test.

The Rorschach test is the most comprehensive of them all. It reveals to us such basic structures of human personality as introversion and extroversion, or the fundamental inclination and capacity to find and enjoy the hidden harmonies of one’s inner world and to empathise.
with the outside world. The test examined the complex tissue of the intellect. It answers many intricate problems in psychology as, for instance, does a particular intellect embrace whole concepts and visualize problems in their global aspects, or does it rather atomize them to assimilate them bit by bit? What is the quality and depth of the inner life? Has it reached its maturity or is it still at the infantile level? Is it deep flowing or superficial? What is the temperature of the emotional life? Does it burst into a continuous explosion of outgoing affective energy or is it rather the warm and controlled affective contact with the outer world?

What is behind the emotional façade of the subject? Does he possess tact, sensitivity to perceive the feeling tone of the situation and adapt himself to it without hurting anyone, or has the sensitivity degenerated into sensuality? Is the subject self-centered and selfish or is he rather moved by consideration of others?

Is the individual independent? Can he assume ultimate responsibility? Is he aggressive and competitive? Or is he compliant, yielding, in need of psychological support from others?

How is the subject adjusted? Is he spontaneous in
his reactions? Does he try to establish a two-way traffic with the outside world, profiting by experience and trying to enrich others out of his own fund of psychological resources? Or is the subject rigid, inhibited, closed to any influence from outside, repressed, anxious, neurotic? Does he present other more serious pathological tendencies?

These are samples of a rich variety of personality characteristics which the Rorschach test has revealed to us. Besides the test has taught us much about the behaviour of the subjects; for the way in which a subject carries himself during the test is a reflection of his manner of acting in actual life. He may react in the test as a shy, timid, hesitant, scrupulous, frightened, nervous, impatient individual; or he may impress one as a firm, free, reflexive, enthusiastic, self-confident person.

The group Rorschach misses a good deal of detail and refinement in personality description and bars observation of the individual behaviour during the test, but on the other hand it makes it possible to study the personality characteristics of a relatively large group with great economy of time and effort.

The sentence completion test was intended to supplement
the information about the personality of the subject gathered by the Rorschach test. The Sentence Completion test is more factual than the Rorschach test. It teaches little of the fundamental structures and the fixed contours of personality but captures the fleeting affective moment, the changing mood of the person; it also reflects the actual organization of his personality, his attitudes in various representative areas of life. It translates the general zones of disturbance marked out by the Rorschach test into living battle fields of conflict, pinpointing with great accuracy the causes of anxiety and internal tensions.

Several examples have been offered in the present study where these two projective techniques have afforded complementary information about the personality of the subjects.

The sentence completion test is an invaluable instrument to measure collective thinking and feeling. By applying this test to a large group of students we get an idea of how students in Ahmedabad feel about the opposite sex, what they think about marriage, religion, etc. When the sentence completion test is applied individually it fails at times to provide any relevant information
about the subject. One cannot be sure that the test has
not been "contaminated" or that the subject has not deli-
berately withheld the information he was expected to give.
When the collective attitudes are tested, contamination
is more difficult and though particular subjects may
succeed in withholding information, the large majority
will provide sufficient material for the examiner to infer
the collective attitudes of the group. That this is true
is borne out by the personal documents cited above which
confirm the impression created by an analysis of the tests;
another confirmation of the above statement is the observed
behaviour of the students which wholly agrees with the
conclusions arrived at through a study of the tests.

In assessing the actual dynamics of a group, its
mode of thinking and feeling, the sentence completion test
surpasses the Rorschach test.

The Raven test is one of the many intelligence
test in existence. Its scope is much more limited than
the scope of the two tests described: intelligence, though
very complex in itself, is only one facet of the infinitely
more complex personality. As a test of intelligence it is
one of the best; it does not claim to be very comprehensive
but in its simplicity.it is designed to measure that in
Which, according to the philosophers, the essence of intelligence consists, namely the capacity of abstraction, i.e., of forming universal concepts, and the ability to perceive relations.

That in this study it has proved to be an objective test, is amply demonstrated by comparing the test scores of the students with their observed academic achievement. The present writer has been teaching in the Intermediate Arts class, to which one third of the subjects tested belong, and can affirm that in most cases the test scores conform with the scholastic achievement of the subjects.

The sociometric test measures the degree of acceptance of the subject as "socius" by the other "socii". Apart from the contributions to the total study it has furnished some interesting data which have a value all their own. The sociograms have shown us that for a large number of subjects the age-old distinctions and divisions of caste, religion and community, have, at least in the sociometric plane, completely disappeared. That means that the interpersonal relationships of preference or liking, link people from different communities as often as members of the same community. To put it more simply, close interpersonal relationships are built as readily across communal
divisions as within the community; intercommunal cliques are not a rare phenomenon.

2) A summary of the results. The sociometric test.

a) The sociometric status of the students has no significant correlation with their personality; that is, the difference in sociometric status between the rich, medium and poor personality groups has no statistical significance.
b) The sociometric status of the subjects is not significantly correlated with their adjustment.
c) The sociometric status of the subjects has no significant correlation with their intelligence.
d) In a further attempt to establish relationships between the sociometric results and the results of the three other forms of appraising personality, the present investigator telescoped the four original sociometric groups into two, viz., above chance and below chance. Once again it was found that the correlation of the sociometric status with personality, adjustment and intelligence, was not statistically significant. However the correlation between sociometric status and personality approached the level of significance. The higher sociometric group showed a higher correlation with rich and medium personalities than the lower sociometric group.

The Rorschach personality test. a) Personality
and adjustment in the Rorschach test are significantly correlated factors. The difference in adjustment between the rich and the poor personality groups is not statistically significant; the difference, however, between the medium personality group and the other two groups is significant. The medium personality subjects are better adjusted, as a group, than the subjects of the rich and poor personality groups. b) There appears no significant correlation between personality and adjustment as revealed by the sentence completion test. c) Personality and Intelligence are correlated factors; comparing the rich and poor personality groups on the basis of intelligence the rich personality group appears to be the brighter of the two.

3.- The Raven test. Intelligence, as measured by the Raven test is significantly correlated with personality, as has just been mentioned. It is not significantly correlated with any other factor.

For a numerical conspectus of the correlation between the four tests, the reader is referred to Tables XV-XVII, pp. 315-317.

The preceding summary condenses the results of the tests in so far as they are correlated with one another. Apart from the relative value of these results, each test
has been studied as an independent unit, and the results obtained have an independent value.

A) The Raven test. a) The entire sample is made up of students possessing, as a group, a high index of intelligence. Nearly half the subjects (47%) belong to the highest quartile (P. 75-95). More than two thirds of the students (68%) are above the median or average and only 8% correspond to the lowest quartile (P. 5-25). b) Intermediate Science ranks significantly higher than Intermediate Arts. 55% of the students belong to the highest quartile. 74% are above the mean and only 7% fall in the lowest quartile. The corresponding figures for Intermediate Arts are 30%, 57% and 11%. c) There is no significant difference between boys and girls; the boys rank slightly higher (less than 2%) than the girls. d) In the Intermediate Arts class, the girls are significantly higher than the boys: 63% of the girls and 52% of the boys fall above the average. The results obtained are in the expected direction.

B) The Rorschach test. This test provides rich and varied information above the individuals, not so much about the group as such. Apart from pigeonholing all the subjects into the oft mentioned three personality groups, it has made clear for us that a large number of subjects
(49%) are not well adjusted. They suffer from anxiety which is the main component of neurosis.

In the pilot study the Rorschach test demonstrated that around two thirds of the subjects were introverts. From the slow average time per response and the reaction time we concluded that a number of subjects in the group suffered from strong inhibitions. This impression was confirmed by the analysis of the records. One of the relevant findings was the high percentage of pure Form responses (F), which is a sign of constriction. The average F percentage in the pilot work was 60%. This high F% is often associated with neuroses and depressive states. It is also a significant sign of an impoverished personality. The proportion M:FM in the pilot work was unfavourable. FM outnumbered M in the proportion of 5 to 3. We concluded that the group tested was still emotionally immature.

C) The sociometric test. The female group shows a more uniform sociometric texture. The large majority of subjects get around the expected number of choices. There are few overchosen and few underchosen. The subjects cluster in cliques. The density of choices is more or less uniform over the whole group. By contrast the boys choices grow in density and crystallize around several power figures.
the popular leaders. These subjects obtain a disproportionately large number of choices. On the other hand there are also many "socii" who are negatively rejected, in the sense that they receive very few or no choices at all.

Communal and religious differences are sufficiently represented. The Hindus outnumber all the other religious communities put together in the proportion of 3 to 1, which is approximately the normal proportion in the total population.

In the pilot study we concluded that the difference of communities was not a barrier to interpersonal relationships. This conclusion is not fully confirmed by ulterior findings. In the male and female group of the Arts class, the distinction of community or religion is hardly noticeable, except for a group of Parsi girls, the second largest group, who manifest a weaker expansive urge. In the Science class the female group is very small, hence it is risky to infer any conclusion. In the male group two religious provinces are easily distinguishable, the Hindu and the Christian, the two largest groups. Their frontiers are well marked. The choices of one community rarely cross the frontier of the other community. Within the Christian group, there are two sub-groups, the South Indian and the Goan. There is no
sociometric contact between them.

D) The sentence completion test. Out of the 15 attitudes represented in the test, 7 have been selected for special study:

a) Attitude toward the father and b) attitude toward the mother. The mother occupies a more central place than the father in the affections of the subjects. The woman, who ranks rather low in the appreciation of the male group, takes on a new modality when she becomes a mother. This new mode of being completely reverses the attitude of the boys toward her. Boys as well as girls appear to identify better with the mother than with the father.

b) Attitudes toward own abilities. The number of subjects whose self-concept is positive is slightly lower than those who reveal a negative attitude toward their own capacities. The male group reflects a healthier attitude than the female group as regards the capabilities of its members. This agrees with the observed behaviour of the two sexes: boys are, as a rule, more assertive and self-confident than girls.

The Science group appears better adjusted than the Arts group in this area. One probable reason is that the feeling of achievement and success in studies that Science
students experience in greater measure than Arts students, extends to, and influences this area of their personality.

d) Fears. The range of the objects of fear reported by the subjects is very wide. Some fears are superficial and stereotyped, others are more profound and reveal a much deeper disturbance, such as fear of death, fear of girls and fear of one's own inadequacy and defects. The girls, as a group, appear to be more immature, more inhibited and less personal in the expression of their fears than the boys.

e) Attitude toward religion. 62% of the students evidence a positive attitude toward religion. One can observe in their attitude a clear distinction between religion, as a personal relation with God, and religious practices as a more or less organized system of public worship. Girls, surprisingly, appear to be more indifferent to religion than boys. The least religious-minded group is the Science female group, where the negatives outnumber the positives. The Arts group appears to be more religious than the Science group.

f) Attitude toward the opposite sex and g) toward heterosexual relationships. The attitude toward the opposite sex in a large majority is one of marked opposition which at times borders on hostility. Girls are less tolerant of
the opposite sex than boys.

Various reasons are put forward to explain this phenomenon: 1. A rigid parental upbringing. 2. Social pressure. 3. The influence of tradition and cultural clichés. 4. Incompatibility of character and temperament. 5. Disagreeable experiences in the first contacts in co-educational schools or in the first affects contact later in adolescence. 6. Preconceived ideas, occasionally supported by facts, about the opposite sex.

3) Our findings as compared with the findings of related studies. Reviewing the literature of related investigations, we stated, following Lindzey and Borgata, that studies combining projective techniques and sociometric methods were extremely scarce.

The results of those investigations and our findings are not easily comparable. The methods followed by the research workers cited and by the present investigator differ in many respects. Most of the investigators compared selected Rorschach factors or variables with sociometric choices, while the present writer integrated the Rorschach variables into three personality groups, rich, medium and poor, and compared these groups with sociometric choices. 157

157 Cf. ante pp. 53-57
Fepinsky, Siegel and Vanata, using the group Rorschach, after correlating Rorschach variables with sociometric choices, found no evidence of any association between the measures. This agrees with our findings in a negative away, i.e., in the sense that in our investigation the degree of association between the Rorschach personality groups and sociometric choices was not found statistically significant. Yet when the four original sociometric groups were merged into two, viz., above chance and below chance, the degree of association between the sociometric status and personality came close to statistical significance. The higher sociometric group showed a higher correlation with rich and medium personalities than the lower sociometric group. Similar negative results were obtained by Rita R. Wertheimer: Using the group Rorschach she attempted to compare the following variables H%, P%, Fc, FC > CF and C> M with the behaviour of the sociometrically accepted and rejected. The findings showed no relationship between the said Rorschach variables and social acceptance.\footnote{Even this negative agreement between the findings of the investigators quoted and our own findings has little value in itself. The reason is that, though the terms of the comparison are similar in their work and in ours as far as the tests (Rorschach and Sociometric choices) are concerned, the aspects in one of the terms are wholly different. They have compared singular factors or variables of the Rorschach test with sociometric choices, while we have compared clusters of factors or variables with sociometric choices.}
A. V. Shanmugam found no indication of frustration or affectational anxiety or anxiety of the free-floating type either in the star or in the isolate. The present worker, however, detected a high rate of disturbance, anxiety concretely, among the sociometrically high and sociometrically low. Yet the difference in disturbance between the various sociometric groups was not statistically significant.

In the pilot study, where the individual Rorschach was administered, the present writer discovered that those who ranked low sociometrically seemed to be more seriously disturbed than those who were in the middle and upper sociometric groups.

Shanmugam also found that both the star and the isolate show a balanced intellectual approach, but differ in intellectual capacity. The present writer measuring the intelligence of the subjects with the Raven test did not detect any statistically significant difference in intelligence among the various sociometric groups.

B. T. Widgor concludes her investigation stating that those who have low sociometric scores are less able to control their emotions and seem a more egocentric, moody and impulsive group. These conclusions do not seem to fall in line with the findings of the
present worker who discovered in the pilot study that subjects with low sociometric scores are characterized by a rigid and impoverished personality, lack of self-confidence, inferiority complex, shyness and depression. Widgor further asserts that there are proportionally more seriously disturbed individuals in the high and low sociometric groups than in the middle. This statement agrees only in part with the results obtained by the present worker; as has just been mentioned, he noticed in the pilot work that the low sociometric group appeared more seriously disturbed than the middle and the upper sociometric groups. The results obtained by the present writer with the group Rorschach seem to corroborate the conclusions of the pilot investigation. There is a higher percentage of disturbed individuals in the low sociometric group than in the other groups, but the difference is not statistically significant.

The results of the present investigation coincide with those of Pepinsky, Siegel and Vanata and with those of Wertheimer in the general conclusion that there is no evidence of a significant association between Rorschach factors and sociometric choices. When coming down to more particular details, the results of the various investigators
either bear no relation or show only partial agreement.

R. A. Dentler and Bernard Mackler conclude their review of the comparative studies on the relationship between intelligence and sociometric status by stating that individual intellectual ability is positively and significantly associated with sociometric status; however with normal children, they assert, this association, though significant, is limited to the .25 to .50 range.

The results of our investigation regarding intelligence and sociometric status agree only in part with their conclusions. Our results suggest a positive association between intelligence and sociometric status, but this association fails to reach the level of statistical significance. Difference in the subjects tested and in the methods and instruments employed may account for this partial disagreement. The present writer used the Raven test to assess the intelligence of the subjects. This test is presumed to measure not individual aspects of intelligence but a more general and comprehensive aspect of intelligence, namely the ability to perceive relations. The sociometrists quoted by Dentler and Mackler have employed some of the best instruments available for assessing particular aspects of intelligence, yet the test of progressive matrices is not
mentioned. Besides those investigators have chiefly concentrated on studying extreme cases, such as very brilliant students and, as the title of the article suggests, mentally deficient or retarded children. No mention is made of College students where intelligence may play a lesser role as a contributing factor to sociometric choice. The present worker, on the other hand, has tested a rather homogeneous group of College students, in which extreme cases are necessarily few.

It may be briefly stated that the results of our investigation regarding the relationship between intelligence and sociometric status agree only in part with the results of related studies. The agreement goes as far as to point out a positive association between these two factors. The disagreement concerns the significance of this association.

**Conclusion.** The present writer hopes that his contribution has at least demonstrated the necessity of further research work with projective techniques and sociometric tests if these two methods of psychological research are to develop jointly as much as their intrinsic possibilities demand. He also believes that his investigation, helped by the kind and enthusiastic co-operation of Gujarati students principally, proves that projective
techniques and sociometric tests can be used with great advantage in psychological research with Indian and particularly with Gujarati subjects. They are a virgin soil as far as psychological testing is concerned, and their response is as spontaneous and unsophisticated as any psychologist might desire. Its fertile land has made Gujarat the garden of India. The freshness and vigour of the people's response to psychological probing might make Gujarat a little psychological paradise for the research worker.

A. M. D. G.