CHAPTER 3

PERSONALITY MEASUREMENT AND ADJUSTMENT INVENTORIES
3.1. **Personality measurement and its types**

Measurement of personality constitutes a wide field of study by psychologists and educators throughout the world. This is indicated by the fact that 52.6% of the personality tests listed in *The Sixth Mental Measurement Year Book* (Buros, 1965, pp. xxxi) are new tests while only 21.4% of the achievement test listed fall in this category. In our everyday life, we spend a lot of time in assessing the personalities of others. This is an informal process of getting to know and understand people and describing them. But in scientific psychology, the term "personality measurement" refers "to the process of gathering and organising information about another person in the expectation that this will lead to better understanding of the person." (Lanyon and Goodstein, '71, pp. 31). The psychology of personality is founded on the basic fact that people behave in organised and recognizable ways (Janis, '69, pp. 577) and an assessment procedure is a way of gaining information about a person, i.e., it involves systematic observation of behaviour under specified conditions and in relation to specific stimuli (Pervin, '70, pp. 71). The aim of personality test is to measure the emotional, social, motivational and temperamental aspects of an individual's behaviour which is often referred to as the measurement of "typical behaviour". J.B. Maller (1944, pp. 170) states "Personality tests are objective psycho-
metric devices which purport to measure tendencies, habits and a variety of distinctive characteristics other than those of physique and intellectual capacity." A test of personality thus refers to any procedure aimed at discovering a person's characteristic behaviour by categorizing him with respect to some communicable dimension.

Psychologists have devised several methods of personality testing. Broadly, these methods can be identified under three distinct approaches. These are — self report techniques, projective methods and situational methods.

(i) Self report techniques - In the self report techniques "the individual describes or characterises himself" (Brown '70, pp. 370). These techniques often appear under a variety of titles such as — personality inventory, adjustment inventory, adjustment survey, tests of personality adjustments, tests of personality factors etc. but their forms and functions are similar (Thomas, '60, pp. 165). Self report or self description can be obtained in several ways but essentially they fall into two category — one is typified by interview and in the other the subject is presented with a list of questions (Sarason, '72, pp. 128). In the interview the subject is given a wide latitude in describing himself. He can describe himself in whatever ways or manners he thinks would be most effective. The responses in the interview might be called relatively unstructured or free response. The second type
of self report technique is however more restrictive and better structured. In this test, the subject is presented with a list of questions in the form of statements or in the form of direct questions, where he is asked to report his reactions to situations or to indicate his interests and values. The common element behind in these self reports is that the individual provides a description or report of his own behaviour and reactions.

The self report techniques have several advantages over the common methods of testing individual or groups. In the very first place, as a means of obtaining insight into mental characteristics of the individual or groups, the self report test can be of great value. It can magnify the field of exploring personality to an unlimited extent. Questions can be framed to cover every aspect of the individual's traits, needs, attitudes and experiences. Thus the proposing of the questions tend to focus the individual's attention and thinking on those areas which are in need of remedial treatment. Again, such personality features as defects of character, annoying mannerisms and inefficient actions may be revealed by these techniques.

Secondly, the self report techniques do not require a highly trained tester for administration and scoring. For this reason these tests have become very useful for military selection. It takes very little time of a psychologist or
a psychiatrist to obtain an overall picture of the different aspects of personality of the person tested. Moreover, it can be very easily scored by a clerk (Janis, Mahl, Kegan and Holt, '69, pp. 638-39).

Thirdly, it serves "as a psychological springboard for a personal interview." (Thomas, '60, pp. 168). During the counselling interview it saves time because it gives the counsellor a quick review of the problems of the individual on the one hand and on the other, it also gives an opportunity to have an overview of all his problems before the actual interview.

But at the same time these tests have been criticised for their inadequacies.

The first set of criticism centers round the response styles of the self report techniques. It has been pointed out that in most cases self report techniques demands a definite 'yes' or 'no' or like dislike answer and they donot allow for qualifying statements concerning an item. Therefore, the scope of expressing one's own feeling and reaction is very limited in the self report techniques. Again, Edwards (1957) has mentioned about the social desirability and shown that people respond to personality inventory items not solely in terms of their actual behaviour and characteristics but also in terms of social desirability of responses.
The second set of criticism centers round the reliability and validity of the self report technique. A major problem with personality inventories has been the establishment of their validity. It has been criticised that most of the inventories have been published without sufficient evidence that it either has predictive validity with respect to some future behavioural criterion or has concurrent validity in terms external correlates. In a review about the earlier work on this problem, Ellis (1946, pp. 385-440) has concluded that personality questionnaires are of dubious value because they fail to correlate with either practical criteria or independent measures. The internal consistency or reliability of the self report techniques also has been questioned at the same time. Evidence shows that their consistency, stability, equivalence or even internal consistency are generally lower than that of other types of measures (Brown, '70, pp. 404, Jalota, '49, pp. 47-51).

The difficulty of obtaining a large representative sampling of item is another limitation of the self report techniques. There is every possibility that the test may fail to uncover the problem of even the conscientious person, who does not try to fake it. It may happen that none of the questions on the test may touch the person's specific area of disturbance (Janis, Mahl, Kegan & Holt, '69, pp. 638). Of course, it is true that the person who
are maladjusted are commonly disturbed, not in only one area, but in several areas of life and so at least some of these areas are generally covered in the test.

(ii) Projective technique - In the projective techniques, the individual's task is quite different from that of the self-report techniques. Instead of describing himself, the individual has to react to an ambiguous stimulus situation presented to him. The main hypothesis behind these tests is that an individual reveals his own characteristics unknowingly through his reactions to the materials provided for the purpose. A projective test, then, "is one that provides the subject with a stimulus situation, giving him an opportunity to impose upon it his own private needs and his particular perceptions and interpretations."

(Freeman, '65, pp. 612). These techniques are relatively unstructured and subtle, because the examinee, not knowing what is a good answer, is less able to distort his responses deliberately to make a favourable impression. The Rorschach test is the most popular and most widely used projective method. This technique was first described by Hermann Rorschach in 1921. This test consists of ten cards, each of which contains some inkblots of different shapes and colours on white background. It is a test of perception, to which a person responds by reporting what he sees in the inkblots. As a psychometric instrument, Rorschach's
method has proved its usefulness in clinical situations, in personality description and diagnosis (Rabin, '59, pp. 124). Rorschach specialists have found that results obtained by several methods indicate that the test is useful in revealing threatening or unwholesome personality trends in personality development before serious difficulties actually appear. If this predictive power of the instrument can be definitely established, the Rorschach test will become specially valuable in mental hygiene and preventive psychological treatment (Freeman, '65, pp.635).

Another widely used projective technique is Themetic Apperception test, which consist of a series of standard-ized pictures. This test can be said "to be an appropriate aid in the study of any system of human interaction that has a substratum of dynamically related emotions and a consistent social life-space." (Henry, '59, pp. 235). Themetic Apperception test is particularly useful for those studies in social behaviour that attempt to take account of psychological factors and the relevance of social modes to personal behaviour. Much productive research have been done on the use of Themetic Apperception test in diagnosis of the individual behaviour. In studying various groups also such as — racial, economic, religious and cultural, the test has proved to be specially useful (Ibid, pp. 230-77).
Besides these there are several other projective techniques in use. One of these is the Word Association technique, where the examiner reads a list of words and the subject has to respond with the first word that comes into his mind. Another well known projective technique is Sentence Completion Test - consisting of sentence stems where the subject's task is to complete them in his own words. Some other techniques are figure drawings, expressive methods etc. (Sarason, '72, pp. 193-97)

The projective techniques also have been criticized on several grounds. Eysenck (1959, pp. 276-278). Criticises projective techniques on the following grounds:

(a) There is no consistent and meaningful and testable theory underlying modern projective tests.

(b) There are contradictions among the experts of projective tests regarding hypotheses concerning the tests.

(c) The scoring procedures of Rorschach test does not represent any approved statistical fashion into a scale.

(d) Projective techniques also lack projective power with respect to success or failure in a wide variety of fields where personality qualities play an important part.

(e) Again regarding the diagnosis of conscious or unconscious conflict, attitudes, fears and fantasies in patients, there is no evidence by which the psychiatrists can assess them independently.
(f) Finally projective tests are inadequately designed and have serious statistical errors in the analysis of data.

(iii) **Situational tests** - The term "situational test" was popularised during the world war II, but the tests of this type are developed prior to that time. In order to determine how a person will behave in anticipated situations, psychologists may create similar situations and place in them persons they are studying. Thus "a situational test is one that places the examinee in a situation closely resembling or simulating a "real-life" criterion situation." (Anastasi, '68, pp. 520). This type of test was largely employed in the selection and training of special type of troops during the world war II. One of this type of test is OSS Assessment. For selection of persons for OSS assignments, a three day assessment procedure was developed, where groups of candidates were brought to a center and they were assessed with a wide variety of techniques — such as paper-pencil test of intellectual and personality characteristics, interviews, problem solving exercises etc. Performance in this task was rated by the Assessment Staff and on the basis of these ratings a formulation of the personality structure of each individual was developed and a prognosis of his success on OSS assignments was made (Brown, '70, pp. 419). Another common type of situational test is that
it utilizes a "leaderless group" as a method for apprising certain characteristics as cooperation, teamwork, resourcefulness, initiative and leadership. In this test a task is given that requires cooperative efforts of a group of examinees, none of whom is designated as a leader of the group or given specific responsibilities (Anastasi, '68, pp. 524). Sociometric method is another type of situational test which owes its origin to J.L. Moreno, as its innovator and may be defined as "a technique for revealing and evaluating social structure of a group through the measurement of frequency of acceptance or non-acceptance among the individuals who constitute the group" (Freeman, '65, pp. 538). This method studies interpersonal relationships and analyse each person's position and status within the group with respect to a particular criterion. Again, some situational tests require an individual to play spontaneously an assigned role in a specified situation. This technique is known as psychodrama, the central point of which is spontaniety and defined by Moreno as "the ability of the subject to meet each new situation with adequacy as the most important vitalizer of living" (Ibid, pp. 545).

The main disadvantage of the situational test is that it involves a number of persons, i.e., candidates and trained rater or examiner to rate the performance of the subjects. Another limitation of this type of test is
that it mostly rely on rating for scores and it is well
known that rating scores are neither reliable nor valid.
Finally, there is another problem of synthesizing and
expressing the results of the test. Situational tests
involve assessment in several dimensions and therefore
scores must be combined to produce an integrated picture
of the individual. But if the scores express a global
personality description, prediction regarding specific
behaviour may not be possible. Again if the data are
expressed as a series of predictions, an integrated picture
of the person will not be available. Moreover, the problem
of combining scores are further complicated by the fact
that the scores often have undesirable statistical proper-
ties (Brown, '70, pp. 421).

The main types of personality tests have been discus-
sed above. But it would, however, be worthwhile to mention
here that, as has been stated earlier, the fundamental
purpose of this investigation is to construct an Adjustment
Inventory for school going adolescent girls, and the
investigator would, therefore, restrict herself in discuss-
ing the points related to mainly personality adjustment
inventories.
3.2. Development of personality adjustment inventories

The development of personality adjustment inventories does not have a very long history. It is just about half a century old. The construction of the first personality inventory had its inception in 1917 during the world war I. At that time a method was needed to diagnose the ability of the soldiers to adjust satisfactorily to the stresses and strains of military life. R.S. Woodworth, then Chairman of the Committee on Emotional Fitness, after studying the symptoms of psychological disturbances, constructed the first self report inventory entitled "personal data sheet", which was later named as "the Woodworth psychoneurotic inventory" in the psychological literature (Symonds, '31, pp. 174).

In the later stage, on the basis of the experiments with the Woodworth psychoneurotic inventory, the inventory was revised by a number of psychologists like Ellen Mathews in 1921, V.M. Candy in 1923, D.L. Laird in 1925, S.D. House in 1927 and also by some other psychologists (Ibid, pp. 178-180). The success of this type of personality testing during the World War I encouraged a mass development of these tests and civilian form of the inventory were prepared for general use.

Two inventories achieved widespread use in 1930's:
The Bernreuter personality inventory in 1933 and the Bell adjustment inventory, published in 1934 (Cottle, '68, pp. 78). The Bernreuter scale includes scales on neuroticism,
introversion, dominance, self confidence and solitariness and the Bell's inventory contains scales for home adjustment, social adjustment, health adjustment and emotional adjustment. This inventory was revised in 1962. Another inventory published in 1934 was Humm-Wadsworth Temperament scale and the last of the inventories in 1930's now in much use is the California tests of personality available in forms extending from Kindergarten through college and adult levels (Ibid, pp. 78).

The decade of 1940 can be called a "banner period" for personality inventories because various personality inventories mushroomed during this period and received wide application and impetus by the psychologists throughout the whole world. Mooney problem checklist was first appeared in 1941 and was revised in 1960 (Kleinmuntz, '67, pp. 157). Another checklist named SRA Youth Inventory intended to measure adjustment in the area of school, future, self, getting along with others, sex, health, general and basic difficulty score was also published in 1949. Again during this period a number of psychologists turned their attention to factor analysis in the development of personality inventories in order to arrive at a systematic classification of personality traits. J.P. Guildford, R.B. Cattel and Thurstone were among the best known psychologists who followed with others personality inventories constructed by the aid of factor analysis (Janis, (69, pp. 638).
Guildford and his co-workers (Guildford, '59, pp. 183-187), after factor analysing of many sets of self report inventories, developed three separate inventories — Inventory of factors STDGR, Inventory of factors GAMIN and the personal inventory. After that in 1949 Guildford Zimmerman Temperament Survey was constructed, which covered in a single test 10 of the 13 traits of the original inventories. Thurstone developed Thurstone Temperament schedule by performing his factor analysis on Guildford's original data in 1949 and was revised in 1951 (Lanyon and Goodstein '71, pp. 87). R.B. Cattel's sixteen personality factor questionnaire was also first published in 1949 and revised in 1963. The Kuder Preference Record (Personal) was also made available in 1948 and revised in 1960, which contains scores on group activity, stable situation, working with ideas, avoiding conflict, directing others and verification.

In 1942 again the most popular and most involved personality inventory namely the Minnesota Multiphasic Personality Inventory appeared and publication of MMPI has been regarded by Jackson (1973, pp. 779) as the beginning of a new era in personality assessment. MMPI was originally devised to provide psychiatric diagnosis and continues to be the most widely used personality inventory. It is composed of 10 clinical scales namely Hypochondriasis, Depression, Hysteria, Psychopathic deviate, Masculinity, Femininity, Paranoia, Schizophrenia, Mania and Social
introversion (Ibid, pp. 780). Since the MMPI originally came out in 1942, more than 200 scales have been developed for various other test situation and for personality research purposes (Kleinmuntz, '67, pp. 217-229). Many recent inventories which have gained wide popularity and acceptance nowadays are derived from MMPI mainly for use with the normal groups and for research purposes. These are California psychological inventory by Gough in 1956, Minnesota counselling inventory in 1953-57 and Taylor's Manifest anxiety scale in 1953.

Another recent inventory based on intensive research on the quantitative and experimental analysis of personality is Maudsley Personality Inventory developed by Eysenck in 1959 to measure neuroticism and extroversion. Modified version of this inventory appear as Eysenck Personality Inventory in 1963 (Holt, '71, pp. 174). The modern era of personality inventories are, however, marked by widely cited papers on the importance of improving response sets and also reliability and validity of the inventories. Edwards ('62, pp. 91-108) for eg— has shown that personality items can be ranked with a high reliability along a dimension that indicates whether the statement is considered socially desirable or undesirable. Edwards orientation was that many people respond to items not solely on terms of their actual behaviour but also in terms of social desirability of the item. He constructed Edwards Personal
Preference Schedule in 1953, where items were paired on the basis of their similar social desirability scale values. In 1966 Edwards published another comprehensive assessment device, the Edward's Personality Inventory, which provides score on 53 personality characteristics and is intended to use with normal population (Sarason, '72, pp. 167). Jackson constructed Personality Research Form in 1967, which aims to achieve measures of theoretically defined personality characteristics (Ibid, pp. 168). A total number of 53 personality adjustment inventories, checklists and questionnaires have been included in the Sixth Mental Measurement Yearbook (Buros, '65, pp. 57-202). Besides the above mentioned personality inventories, several others have been developed by the psychologists throughout the world for various purposes. The naming of all the inventories, however, is not possible to include in this discussion. It can be hoped that various others will come out in recent years with a high degree of reliability and validity and also overcome all the limitations cited against personality inventories.

3.3. **Personality adjustment inventories developed and adapted in India:**

Though the origin of the study of the subject psychology in our country goes back to ancient times, the foundation of scientific psychology, however, was laid only in
the present century with the establishment of a psychological laboratory in the Calcutta University in 1915 (Sastry, '55, pp. 25-33). Researches in psychology began soon thereafter but no such impressive advancement was made during the period before independence. It is only after 1950, 90% of the publications in each field appeared and three areas namely clinical, personality and social psychology account 50% of the publication since 1950. In the book "A Survey of Research in Psychology", Mitra (1972, pp. xxi) records a total of 2981 papers published during the period 1951-1966 in different areas among which 17% of these papers categorised under personality area. Different scholars in different parts of the country have constructed different types of tools for the measurement of different intellectual abilities, aptitude and personal social attitudes. A large variety of adjustment inventories have been developed and adopted by the psychologists in Hindi and other regional languages. The pioneering work in this direction was done in the University of Calcutta (Bose, '64, pp. 113). At the same time attempts also have been made by different psychologists to collect different personality inventories developed and adapted in Indian conditions. In the book "First Mental Measurement Handbook of India" edited by Long and Mehta, a list of 23 personality questionnaires, inventories and checklists have been mentioned under the heading of personality along with other
20 projective and 3 sociometric tests (1966, pp. 359-413). Shanmugam (1972, pp. 247-71) also has made an attempt to collect questionnaires and inventories developed and adapted in Indian conditions. It is not possible, however, to include in this discussion all the inventories developed and adapted in India, still a number of such inventories are discussed below.

According to Bisi (1960, pp. 95-98), Dr. G. Bose was the first person to develop a neurotic questionnaire test from his psycho-analytical experience and findings and the test was in use in the department of psychology, Calcutta University since 1939. For the purpose of detecting psycho-neurotic tendency among school and college students Asthana (1968) developed an adjustment inventory. In the same line Kundu (1962, pp. 171-74, 1963, pp. 103-108, 1964, pp. 33-43) constructed his neurotic inventory to detect neuroticism at the early stage of a child's development which can be of help to counsellors in their task of selection, experimentation and diagnosis. Another inventory for the study of maladjustment among adolescents was developed by Pasricha and her associates in 1964. Palsane (1963, pp. 245-46) developed another personality inventory to measure introversion-extroversion, neuroticism and psychotism among college students. R.P. Singh also constructed a personality inventory for college students in 1967 (pp. 257). In 1969 (pp. 232-33) Dasgupta prepared and
validated a battery of inventories for quantitative measurement of certain personality traits as love seeking, love giving, self love, self aggression, object aggression, assertion and submission and happiness. In Gujarati Badami (1968, pp. 124-30) developed a student problem inventory for the Gujarati speaking college and post-graduate students. Reddy (1964, pp. 68-76) also developed an adjustment inventory for use with adolescents. For the assessment of school adjustment of pupils Bhagia (1966, pp. 143-44) constructed another adjustment inventory. Shanmugam (1972, pp. 269-72) mentioned several other inventories developed by several psychologists such as Parameswaram in 1958, Shanmugam in 1953, Mittal in 1962 and Krishnan in 1969.

Recently, T.V. Rao (1975, pp. 243-51) has constructed an inventory to measure medical student's perceptions of his college environment.

Among the adapted inventories, Hindi adaptation of Bell's adjustment inventory was done by Saxena in 1959 (pp. 252-53). Another Hindi adaptation of Bell's inventory was made by Hussain in 1969 (pp. 237) and provides percentile norms for the males and females separately for different educational levels. Gupta (1962, pp. 51-54, 1968, pp. 37-44) adapted Guildford Zimmerman Temperamental Survey to Indian Population and has also developed norms for it. Cattel's 16PF questionnaire has been adapted by different psychologists such as Mohan (1964, pp. 14-20),
Rao (1961, pp. 93-102) and Kapoor (1966, pp. 27-30), who suggested fresh stannia norms for both the forms of 16 P.F. by comparing two sets of previously obtained data by Jalota and Kapoor. Mohan Singh and Karla (1968, pp. 7-14) have adapted Eysenck's junior personality inventory to Indian samples. The same also has been adapted by in Bengali by Kundu (1976, pp. 17-21). Kundu (1967, pp. 107-13) also adapted Bernreuter personality inventory in Bengali. In Hindi Jamuar and Singh (1973, pp. 5-9) have adapted Maslow's security-insecurity inventory.

Minnesota Multiphasic Personality Inventory also has been adapted by Sing (1965a, pp. 61-66, 1965b, pp. 69-73), who found some of the scales of MMPI are valid in Indian setting. In a number of studies the Maudsley Personality Inventory has been used and adapted in several Indian languages such as Oriya by Das (1961, pp. 1-14), in Bengali by Banerjee and Mallick (1962, pp. 23-26), De. and Sinh in Hindi (1968, pp. 50-52). Dutt ('67, pp. 66-69) also adapted MPI on Indian Population. The Eysenck personality inventory, which is the revised version of MPI, also has been increasingly used in recent years in various studies.

Besides these several other inventories and questionnaires have been used in original or in translated forms. Some of these are Cattel's Neuroticism scale questionnaire by Kapoor (1965, pp. 51-59), Maudsley Medical
Questionnaire by Singh (1966, pp. 71-77) and Agrawal (1957, pp. 77-79) and Bell's adjustment inventory by Nataraj (1968, pp. 60-64). Although it is not a full report of all adjustment inventories developed and adapted in India, still it appears from the above discussion that a large number of inventories have been developed and adapted in India. Our progress in this field, of course, cannot be regarded as satisfactory, still, as Verma (1965, pp. 87) points out "if the present progress in test production is maintained the more original and brilliant workers will soon be making their own contribution to the world's already formidable array of tests."

3.4. Personality testing in Assam:

Assam is one of the state of the Indian Union situated in the North Eastern region with its population of 14.6 million according to 1971 census. Assamese is the main spoken language of Assam, which is one of the major Indian languages of the country. Assamese speaking people constitute 57.14 percent of the population and the remaining population is represented by speakers of other language such as Bengali 17.60%, Hindi 4.41%, and several other tribal languages (pp. 262, Census of India 1971, Language handbook on mother tongues in census). Although the progress of psychological testing in most of the states of India are rapid and encouraging, it is not so in the state of Assam.
Although a few works have been done in the field of intelligence testing (Bora, 1969, Trivedi, 1968), personality testing still remains unknown to people. Neither development nor adaption of any personality test has been attempted in this state until now and so no reference can be made to any published work in this field.
Chapter 3

In the first section of this chapter the advantages and limitations of various techniques of personality measurement are discussed. In the second section a brief history of personality adjustment inventories is traced out and in the third section Indian attempts for developing and adapting adjustment inventories are narrated summarily. Finally a brief section has been added to bring out the lack of interest and activity with regard to personality testing among school students in the region of Assam and north-east India.