CHAPTER - 4

PREVIOUS STUDIES
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In order to study mental health or hygiene of individuals, many adjustment inventories have been devised in the West and also in India.

Studies in America

Several hundred inventories have been devised in the U.S.A. to study the level of mental hygiene of individuals. For adolescents' mental hygiene or adjustment level, there have been many adjustment inventories and personality inventories [1]. The chief among the personality inventories is the Minnesota Multiphasic Personality Inventory (MMPI)[2] which has also been adapted in Gujarati.

MMPI

This inventory measures:

(1) Hs : Hypochondriasis  
(2) D : Depression  
(3) Hy : Hysteria  
(4) Pd : Psychopathic Deviate  
(5) Masculinity-Femininity  
(6) Pa : Paranoia  
(7) Pt : Psychosomatics  
(8) Sc : Schizophrenia  
(9) Ma : Hypomania  
(10) Si : Social Introversion

Thus the MMPI items range widely in content, covering health, psychosomatic symptoms, neurological disorders and motor disturbances, sexual, political, religious and social attitudes, etc. [3].
The Gujarati adaptation of this long inventory was done and standardized by Smt. Shivaratnamma Jain [4] a few years ago. This inventory is more suited to abnormal personalities and less to good mental hygiene. However, it should be noted that this inventory is most comprehensive and very largely used in the U.S.A., the U.K. and many other countries of the world.

The MMPI consists of 550 self-descriptive items and are classified into 26 categories, ranging from general health through the gastro-intestinal system, habits, family, occupation, sex, phobias, and morale to items designated to show whether the test-taker is trying to describe himself in good terms. Some items such as given first below here are quite innocuous, while others like the last four are mostly offensive.

I like to read newspaper editorials.
I hate to have to rush when working.
Some one has it in for me.
Peculiar odours come to me at times.
At times, I feel like smashing things.
There is something wrong with my mind.

There is no time limit to MMPI items, but testing normally takes from 30 to 90 minutes depending on the education and adjustment of the examinee. There are two forms of the test, one consisting of a set of cards administered
individually and to be sorted into three stacks (True, False, Cannot Say), the other booklet with IBM answer sheets. The test authors recommend the individual form, the Ellis [5] has suggested that it may be superior to the booklet form. The card test is recorded on special forms, and both are scored by means of stencils or the booklet can be machine scored. Scoring is done on the ten reaction pattern described earlier. Four other scores, viz. question, lie, validity and a "suppressor variable" are also available to aid in judging in the meaning of the scores. It should be noted that although at least one of the traits may be thought of as one aspect of temperament (masculinity-femininity), two others seems to be mood-manifestations of another aspect of temperament, and still another may be the pathological extreme of a personality trait (Schizophrenia), the others are traits made up of modes of behaviour which are not normally considered as components of the normal personality, but are generally thought of as clinical syndromes or even disease entities. On logical grounds one might question the soundness of applying such measures to normally adjusted persons and drawing conclusions concerning occupational differences.

Since the publication of the MMPI in its initial form, more than 300 new scales have been developed, most of them by independent researchers who did not participate in the
construction of the original test. These scales vary widely in the nature and breadth of the criteria against which items were evaluated. Several scales were developed within normal populations to assess personality traits unrelated to pathology. Some scales have been applied to the test records of the original MMPI normal standardization sample, thus providing normative data comparable to those of the initial clinical scales. Such scales include Ego Strength (CEs), Dependency (Dy), Dominance (Do), Prejudice (Pr) and Social Status (St). Some scales are developed for highly specific purposes and are more limited in their applicability. The current basic profile form for the MMPI includes not only the ten original clinical scales, but also four of the newer scales, viz. Anxiety, Depression, Ego, Strength and the Mac Andrew Alcoholism scale.

**California Psychological Inventory**

CPI [6] includes half of its items drawn from the MMPI, but it was primarily designed for normal individuals. It consists of 462 items to be answered 'True' or 'False'. The 1987 revision of CPI yields scores on 20 scales. Out of these 20, there are validity scales for assessing test-taking attitudes. They are: Sense of well-being (Wb), Good impression (Gi) and Communality (Cm). The remaining 17 scales provide ten types of scores for Dominance, Sociability, Self-acceptance, Responsibility, Socialization,
Self-control, Achievement via-conformance, Achievement-vis-
independence, Empathy and Independence.

In the 1987 revision of CPI, the inventory was slightly
modified to improve clarity, update content and delete items
that might be objectionable to some respondents. The
descriptions of high and low scores on each scale have been
refined and sharpened through extensive analysis of ratings
and other observer data, as well as correlation with other
personality tests.

A new model has been developed in terms of 3 broad themes
identified by factor analysis of the 20 scales. The new
scores corresponding to the three themes can be described as
follows: (1) Introversion-Extroversion, (2) Favouring and
following conventional norms, versus doubting or rejecting
norms, and (3) self-realisation and sense of integration. A
three dimensional typological model is provided for
classifying high scoring and low scoring individuals on
different combinations of the three scores.

**Personality Inventory for Children**

The PIC [7] was developed with the same general methodology
as the MMPI through some 20 ears of research by a group of
researchers at the University of Minnesota, who were exposed
to the rationale and clinical use of the MMPI. The PIC is
developed for use with children and adolescents between the
ages 6 and 16. The 600 items of the true-false type
questionnaire were answered not by the child but by a knowledgeable adult, usually the mother. This procedure is just like the common practice in child clinics in which the mother is interviewed as the principal source of information about the present problems and case history of the child. It thus is not a self-report inventory, but an inventory of observed behaviour. As such, it is consistent with the behavioural assessment orientation to clinical psychology. Since parents’ responses are assessed, they reflect in part the motivation, attitudes and personal or cultural standards of the parents. The 600 items of the test are grouped into three "validity scales", a general screening scale and 12 clinical scales. The three validity scales are (i) Lie Scale, consisting of items that make the child appear in an unrealistically favourable light, (ii) Frequency Scale, comprising rarely endorsed items, and (iii) Defensiveness Scale, designed to assess parental defensiveness about the child’s behaviour. The fourth scale, the Adjustment Scale is a screening instrument originally introduced to identify children in need of psychological evaluation. The remaining 12 scales are Clinical Scales, designed to assess the child’s cognitive development and academic achievement, several well-known emotional and interpersonal problems, such as Depression, Anxiety, Withdrawal, Hyperactivity and the Psychological climate of the family.
The revised version of the PIC shows considerable flexibility to meet the need for briefer or more extensive evaluations. Some PIC scales were developed by empirical comparison of response frequencies in criterion and control groups. Through an interactive procedure, items were added in stages until optimum scale validity was reached. Other scales showed content validity by initially choosing on the basis of judges' nominations or ratings for scale relevance. Although much remains to be done and plans are under way for continuing research, what has been accomplished within a short time since its publication in extent and quality is promising.

**Millan Clinical Multi-axial Inventory**

Although this MCMI [8] follows the tradition of MMPI in many ways, it introduces significant methodological innovations. It contains 175 brief, self-descriptive statements to be marked true or false by the respondent. It was designed for clinical patients of 17+ age with a reading level at or above the eighth grade. The inventory can be scored by computer and automated interpretive reports are also available. The score profile includes 20 clinical scales, each based on 16 to 47 overlapping items. There are also correction scores to detect taking, random responding and other test-taking biases.
The clinical scales were prepared to fit syndromes or constructs derived from personality theory. Separate scales were developed for more stable personality characteristics and for acute clinical states. The scales are able to distinguish between deterrent levels of severity within similar personality patterns. To enhance the diagnosis, the reference group employed in the MCMI for item analysis was a representative but undifferentiated psychiatric sample, instead of a normal sample. Actuarial base-rate data rather than normalized standard scores were employed in calculating scale scores. This procedure has an advantage over the other methods in setting optimal cut-off scores for differential diagnosis. Item development followed the multiple approach characteristic of recent practice in the construction and validation of personality inventories. The procedure included a sequence of three major steps: (1) Theoretical-substantive, i.e., writing and selecting items to fit clinically relevant constructs, (2) Internal-structural, e.g. item-scale correlations, endorsement frequencies etc., and (3) External-Criterion such as differentiation of diagnostic groups from reference group, cross-validation on new samples, etc. Since this is a recent innovation, it is too early to assess its eventual effectiveness as a clinical instrument. The manual suggests additional research in cross-validation and in norming on non-clinical populations.
Millan Adolescent Personality Inventory

It is a recently developed instrument meant for adolescents. Designed for ages 13 to 19, it is recommended for counselling and academic advising and also for clinical assessment and intervention in mental health settings. It consists of 150 true-false items yielding scores on 20 scales, which are grouped under three dimensions: (1) Personality Style, (2) Expressed Concerns, and (3) Behavioral Correlates. The first two scales were developed from Millon's personality theory and the third through empirical criterion keying. They are designed to identify respondents who are likely to have problems in impulse control, social conformity or schooling. Some measures of validity are also provided.

The MAPI is available in two forms: (1) Clinical Form, and (2) Guidance Form. They differ only in scoring procedures. Base-rate scores and narrative interpretive statements are included in the computer-generated reports for both forms. The reading have required for the two forms is sixth grade level in language suitable for adolescents. The content of this inventory was designed to suit the needs of this age-level. The manual contains a fair amount of psychometric data obtained through well-selected and appropriate procedures.
Guilford-Zimmerman Temperament Survey

The items of this inventory are expressed in the form of affirmative statement rather than questions. The following are some of the examples:

- You start work on a new project with a great deal of low enthusiasm
- You are often in low spirits
- Most people use politeness to cover up what is really "cut-throat" competition

The affirmative item form was chosen to avoid some people’s resistance to direct questions which are likely to arouse. In this inventory, three verification keys are provided to detect falsification and carelessness of response. Although an effort is made to obtain independent, uncorrelated trait categories, some of the intercorrelations among the 10 traits that are measured by this inventory are still appreciable. They were initially selected on the basis of factorial validity, however, this inventory has been employed in many studies of empirical validity with varied results.

Comrey Personality Scales

They are based on factor analysis studied like Guilford’s. This inventory yields scores on eight personality scales as follows:

- T - Trust v/s Defensiveness
- O - Orderliness v/s Lack of compulsion
C - Social Conformity v/s Rebelliousness
A - Activity v/s Lack of energy
S - Emotional Stability v/s Neuroticism
E - Extraversion v/s Introversion
M - Masculinity v/s Femininity
P - Empathy v/s Egocentrism

This inventory includes a validity check to detect random or inappropriate marking and response bias to assess the tendency to respond in a socially desirable direction.

The Comrey inventories make use of a 7 point scale for recording item responses which range from "always" to "never" or from "definitely" to "definitely not". Test construction procedures adopted in the selection and grouping of items were of high quality. Studies in cross-cultural stability in the trait categories report good results.

**Cattell Inventories**

R.B. Cattell has used factor analysis studies in a little different way. He assembled all personality trait names occurring in dictionaries of psychology and in psychiatric literature. He combined several of them and reduced them to 171 traits. This list was then employed in obtaining associates' ratings of a heterogeneous group of 100 adults. Factor analysis of these ratings were followed by other
ratings of 208 men on a shorter list. Factor analysis of these ratings gave birth to his primarily source traits of personality.

Factor identified through the correlations of ratings may reflect the influence of social stereo-types and other constant errors of judgement, rather than the trait organization of the persons rated. Factor analysis of ratings reveal more about the raters than about the ratees.

With the help of their factoral research, Gattell and his coworkers have constructed a number of personality inventories, the best known of which is 16 P.F. Designed for ages 16 and above this inventory yields 16 scores in such traits as reserved v/s outgoing, humble v/s assertive, shy v/s venturesome and so on. A motivational distortion or verification key is also provided for some of the forms. A computerised, narrative reporting service is also provided with the test.

Similar inventories have been developed for ages 12 to 18 (High School Personality Questionnaire), 8 to 12 (Children's Personality Questionnaire) and 6 to 8 (Early School Personality Questionnaire). Other inventories test anxiety, depression and neuroticism. These areas correspond to some second order factors identified among correlated first order factors. Another addition to the series of Cattell's
inventories is Clinical Analysis Questionnaire, a 28 scale inventory which includes a shorter version of 16 PF in "clinical dress" and 12 pathological scales derived from the MMPI and other clinical scales. Some adaptations of the 16 PF are also made in special "dress" for career development, marriage counselling and evaluation of business executives. Most of Cattell's inventories have been adapted in Gujarati language.

**Jackson Personality Research Form and Jackson Personality Inventory**

Jackson adopted a different approach to personality assessment by first giving explicit, detailed description of the constructs to be measured. These descriptions form the basis of item writing as well as for defining the traits to be rated by judges in validation studies. The PRF [9] has two parallel forms and also shorter and longer versions. The longer versions provides a total of 22 scale scores which include two validity scores, Infrequency and Desirability. The former is based on the number of highly unlikely responses chosen by the test taker, such as "I try to get at least some sleep every night" and "I make all my clothes and shoes". Although social desirability bias is reduced in advance by procedures employed in item development and selection, a Desirability Scale is also provided. Usually high or low scores on it indicate not only a typical test-taking attitude such as deliberate
attempt to create a favourable impression v/s malingering, but also some personality characteristics in their own right, such as high self regard or high degree of conventional socialization v/s low self-regard.

For preparing PRF, Jackson began with Murray's personality theory and with the help of accumulated research and theoretical literature, he formulated behaviourally oriented and mutually exclusive definitions of 20 personality constructs or traits. Out of these 12 have the same names as those of Edward's Personal Preference Schedule and the remaining are Harm Avoidance, Impulsivity, Play, Social Recognition, Understanding, Cognitive Structure, Defendence and Sentience. They are all described in detail in the manual for high scores and low scores. The following is one example:

<table>
<thead>
<tr>
<th>Scale</th>
<th>High Score</th>
<th>Low Score</th>
</tr>
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<tbody>
<tr>
<td>Sentience</td>
<td>Notices smells, sounds sights, tastes and the way things feel; remembers these sensations and believes that they are an important part of life, is sensitive to many forms of experience; may maintain an essentially hedonistic or aesthetic view of life</td>
<td>Aesthetic, enjoys physical sensations, observant, earthy, aware, notices, environment, feeling sensitive, sensuous, open to experience, perceptive, noticing discriminating, alive to impressions</td>
</tr>
</tbody>
</table>
A pool of more than 100 items was thus generated for each of the 20 scales through carefully controlled procedures. 20 items were then selected out of these for each scale on the basis of high biserial correlation with total scale score and low correlation with scores on other trait scales and on Desirability Scale. Selected items were then assigned to the two parallel forms in terms of biserial correlation with their own scale as well as endorsement frequency.

Jackson Personality Inventory has been developed on the same lines recently and has a more practical orientation. Among the 16 scales of this inventory are anxiety, conformity, responsibility, social adroitness, and tolerance. Validity data were gathered not only through correlations with peer ratings and self-ratings, but also through studies of particular groups for whom relevant behavioural data in real life situations were available.

**Edwards Personal Preference Schedule**

EPPS was developed on Murray's theory of personality assessing 15 needs drawn from his list. Edwards prepared items to fit these needs. Some of these needs are Achievement, Deference, Exhibition, Interception, Dominance and Nurtance.

The inventory consists of 210 pairs of statements in which items from each of the 15 scales are paired with items from
the other 14, and the respondent is required to choose one statement that he feels as more characteristic of him. For example:

1. I like to talk about myself to others.
2. I like to work towards some goal that have set for myself.
3. I feel depressed when I fail at something.
4. I feel nervous when giving a talk before a group.

There are internal checks in the EPPS. 15 pairs of statements are repeated in identical form for providing an index of respondent's consistency. Another check yields a profile stability score which is odd-even correlation for the respondent. The scores on the EPPS are evaluated in terms of both percentile and T-score norms for college going men and women. 760 men and 749 women from 29 colleges of 48 states.

It should be remembered that EPPS yields ipsative scores, i.e., the strength of each need is expressed, not in absolute terms, but in relation to the strength of other needs. The frame of reference in ipsative scores is the individual and not the normative sample.

Although very little data are reported in the manual of EPPS, a large number of independent validation studies have been published. With ipsative scores, the mean intercorrelation of individual scales tends to be negative.
and the mean correlation of all the scales with any outside variable will approach zero. Due to this limitation of ipsative scores, they cannot be properly analysed by the ordinary correlation procedures.

**Bernreuter Personality Inventory**

The BPI, based on the work of Woodworth, Thurstone, Laird and Allport, is one of the most used and translated personality inventory. It was designed for the use with adolescents and adults. Experience has been shown to affect some of the items of BPI. Mood might also be expected to affect scores on a self-descriptive scale like BPI which consists of 125 questions based on those used in earlier inventories, such as "Are your feelings easily hurt?" Answers are recorded on the blank, in terms of 'yes', 'no' and '?'. There are some extreme or potentially offensive items making the inventory acceptable to most groups. With groups of adolescents, however, it is desirable to minimize opportunities for laughter and joking by business like administration and good proctoring.

This inventory is self-administering and there is no set time-limit but it takes 20 to 30 minutes for the respondent to finish it. Scoring keys are available for Neuroticism, Self-sufficiency, Introversion, Dominance, Self-Confidence and Solitariness with weights ranging from 7 to -7 assigned to each item according to its diagnostic value. These
weights were determined by relationship to the parent inventories.

Norms are provided on high school, college and adult population, gradations which are sufficiently refined as shown by many studies of age differences. Many of the items of this inventory were taken from earlier blanks and criterion groups selected on the basis of high and low scores on this form.

Bell Adjustment Inventory

Like Bernreuter's, this inventory of Bell also is a very much used and translated into several languages of the world. It is published in two forms, one for the students and the other for the adults and is scorable for Home, Health, Social, Emotional and Occupational adjustment. Although some of its items seem offensive, it is well-accepted to the subjects with whom it worked. It consists of 100 questions like other inventories.

The clinical validity of the Bell is a little disappointing. Unlike other personality inventories, this instrument attempts to measure not only traits but also degrees of adjustment in several areas like home, social groups and health.

In schools and colleges, this inventory can be used as a screening instrument for maladjustment. Many better inventories have now replaced the use of this inventory.
Minnesota Personality Scale

It was once in great use in America. It consists of five parts or a total of 218 questions, measuring morale, social adjustment, family relations, emotionality and economic conservatism. Some of its items are:

- Court decisions are almost always just
- There is almost no point in living
- Do you have a fairly good time at parties?
- Do you and your parents live in different worlds, as far as you are concerned?

The items of this inventory were selected on the basis of factor analysis.

Eysenck Personality Questionnaire and Junior Eysenck Personality Questionnaire

Both H.J. Eysenck and Sybil Eysenck have experimented on personality inventories for adults as well as college students with their questionnaires. These inventories are largely used in England and their adaptations have been made in many Indian languages. The items of these inventories are similar to the other well known inventories discussed thusfar. Eysenck has largely used the results of factor analysis like Cattell and Guilford.

The Cornell Index

It was devised "for the rapid psychiatric and psychosomatic evaluation of large number of persons in a variety of situations". The index "was assembled as a series of
Two unusual features differentiate this questionnaire from others, (i) cut-off scores, and (ii) stop scores. Both were based on 1,000 cases at military installations.

The efficacy of this index in identifying poor personality risks is great enough to warrant its use for the purposes of screening rapidly large numbers of persons. In situations, where such pressure does not exist, the index is still useful as a basis for and a guide to subsequent interview and to psychopathy. The index does not identify larger percentages of probable poor risks at some levels, while at the same time, it rejects a number of "psychiatric accepts". It may be due to some inadequacy of the inventory or errors in psychiatric judgements leading to acceptance or rejection after psychiatric interview.

Studies in India

Several adjustment inventories have been either adapted from foreign instruments or prepared on their lines and standardised in Indian languages.

Adolescent Adjustment Inventory

This inventory was prepared by N.Y. Reddy in the Department of Psychology of Osmania University, Hyderabad for adolescent boys and girls. [11]. It measures personal and social adjustments and provides data about adolescents' mental hygiene. The items on personal adjustment measure
neurotic tendencies, feelings of guilt, personal worth, inferiority and attitude towards future. The items on social adjustment measure adjustment towards home and school and sex adjustment. Reliability and validity of the inventory have been found to be good. The following are some specimen items:

1. Do you like to mix with girls?
2. Do you worry unnecessarily?
3. Do you feel uneasy if you happen to be in a gathering of girls?
4. When the teacher asks you questions, do you feel nervous and upset?
5. Do you hesitate to meet important and highly placed persons?
6. Do you feel shy when people look at you?
7. Do your brothers and sisters quarrel with you unnecessarily?
8. Do your parents put too many restrictions on you?
9. Do you dislike meeting strangers?
10. Do you feel that your parents are responsible for many of your difficulties?

This inventory was validated against teachers' ratings, Bell Adjustment Inventory, California Personal and Social Adjustment Inventory, parents' ratings, etc.

**Personal Adjustment Inventory**

This inventory was prepared by U.S. Shanthamani and A. Hafeez in the Indian Institute of Science, Bangalore, to
identify the personality maladjustment of an individual [12].
It consists of 20 items on neuroticism. Its reliability and validity were checked and found satisfactory. The following are specimen items of the inventory to be answered on yes, no scale.

1. I get up rested most of the mornings.
2. Sometimes I walk in sleep.
3. I am anxious about something or someone almost all the time.
4. I work under a great deal of tension.
5. I am not worried and upset very often.
6. Usually I sleep well.
7. I feel many people do not care for me.

(Udai Pareekh and T. Venkateswara Rao, Handbook of Psychological and Instruments, Baroda: Samasti, 1974).

Asthana's Adjustment Inventory
It was prepared by H.S. Asthana in Sagar University [13]. It contains 42 yes-no type questions in Hindi. Its reliability and validity were established and were found to be very good. It is meant for counselling Hindi knowing school and college students. Its manual has been published in Varanasi: Rupa Psychological Corporation, 1968.

Kundu's Neurotic Personality Inventory
It was constructed by R. Kundu. Its reliability and validity have been high. [14]. The following are some
specimen items from this inventory which consists of 66 items:

1. As ideas run through read, it is difficult to sleep.
2. Being easily affected by praising or blaming.
4. Having fear of death about your parents, friends or other persons whom you love.
5. Thinking yourself as nervous.
7. Becoming nervous to face quarrelsome situations.
9. Suffering from bad headache not due to any apparent physical cause.
10. Highly sensitive to unpleasant smell.

F-Scale

It was constructed by Prayag Mehta, B.P. Sinha and P.P. Gokulnathan in the University of Udaipur [15]. It included the following dimensions in 19 items: (1) Conservatism, (2) Authoritarian agression and submission, (3) Superstitions and stereotypes, (4) Power and thoughtness, and (5) Destructiveness and synicism.

The following are some specimen items:

1. God has divided society into two parts that is rich and poor.
2. Family planning is not going to be beneficial in any way to the country.
3. We should not be mixed up so much since it produces the feeling of scorn.
4. It is indispensable to use force for the offenders.
5. One day people will accept it that palmistry (Jyotish-Shastris) can predict future events.
6. We should believe in religion without suspicion.
7. It is difficult to work together for the persons belonging to varied religious groups.

Insecurity Questionnaire
It was constructed by G.C. Pati in the Mental Health Institute of Cuttack and required 40 minutes to take [16]. Its reliability and validity were found to be quite high. Its specimen items are given below:
1. Do parents love you less (than your brothers and sisters)?
2. Were you getting food and clothings alright in your childhood?
3. Do they say most of the time that you do not play well?
4. Do you like to argue very often?
5. Do you feel insulted if people make fun of you?
6. Do you sometimes feel that it is better to die?
7. Do you feel discouraged if hindered while doing a work?
8. Do you like sometimes to play truant from home?
Extraversion-Introversion Inventory

This inventory was prepared by V.S. Shanthamani and A. Haterz in the Indian Institute of Science, Bangalore and consisted of 20 items each related to extraversion and introversion [17]. Its reliability and validity were found satisfactory. The following are some specimen items.

1. I enjoy social gatherings or parties.
2. I do not like to be leader in social functions.
3. I am not afraid of being punished.
4. My memory is good.
5. I blush very often in the presence of others.
6. Life is for getting pleasure.
7. I am not usually calm and collected most of the time.
8. I do not like public speaking.

Dependence Proneness Scale

It was constructed by Jai B.P. Sinha in A.N.S. Institute of Social Studies, Patna for the use with college students [18]. Its reliability was found very high and the validity also good.

The following are some specimen representative items:

1. I hesitate to take help from others.
2. I enjoy doing things that others think are crazy.
3. I don’t do things just to please my parents.
4. My parents unnecessarily impose themselves upon me.
5. Teachers should explain in detail as to what the students should reach.

6. I want to behave according to the wishes of the teachers.

7. In class, it is better to go along with the majority than to have one's own way.

Like adjustment inventories, personality inventories, and anxiety scales attempt to measure the level of an individual's mental hygiene. Here are some specimen personality inventories and anxiety scales.

**Dutt Personality Inventory**

It was constructed by N.K. Dutt in the Central Institute of Education, Delhi for clinical diagnosis and for measuring anxiety [19]. It was meant for adolescent boys and girls studying in high schools and colleges. It included the following specimen items:

1. Do you want someone to look after you and advise you?
2. Have you been afraid of going mad?
3. Is life a strain for you?
4. Does your heart beat too quickly or thump in your ears so that you cannot sleep?
5. Do you try to avoid going to a strange shop or talking to a strange man?
6. Do you get mentally tired easily?
7. Do things swim before your eyes, go blurred or misty?
8. Do you have nightmares?
9. Do you worry over what will happen to your family members after your death?
10. Do you feel you are a relaxing or a happy-go-lucky sort of person?

Sinha's Anxiety Scale

This scale was constructed by Durganand Sinha of Allahabad for adults, college and high school students [20]. Its main features are that it is self-administered, and can be administered in group also. It is available in both English and Hindi. Its reliability and validity were checked and found very high.

1. I feel uncomfortable on a conveyance which is driven at a fast speed.
2. I sweat easily even on cool days.
3. I am sometimes sorry that I may become important.
4. I feel uneasy when I have to meet my superiors.
5. I am often short of breath when engaged in quick work.
6. My feelings get hurt quite easily.
7. I have great deal of stomach trouble.
8. Sometimes I have the feeling that I cannot face the society.
9. If I make an awkward social mistake, I find difficult to forget it.
10. Quite often I am unable to decide what course of action is good for me.
Self-confidence Inventory

It was constructed by M. Basavanna in S.V. University, Tirupati to assess the self-confidence of high school and college students, since self-confidence is an attribute of mental hygiene [21]. It consists of 100 items and its reliability and validity were checked and found high. The following are some specimen representative items:

1. I can be natural while at party.
2. In social conversion I am usually a listener than a talker.
3. I feel insecure within myself.
4. I am much affected by the praise or blame of many people.
5. I feel bored much of the time.
6. I worry over humility situations more than most persons.
7. I am bothered by inferiority feelings.
8. I blush very often.
9. I shrink from facing a crisis or difficulty.
10. I think too much over everything.

CASE Adjustment Inventory

This inventory constructed by S. Bhattacharya, M.M. Shah and J.C. Parikh in CASE of M.S. University of Baroda to measure the adjustment of adolescent school students, consists of 55 items both in Gujarati and English [22]. Its reliability
and validity were checked and found satisfactory. The following are some specimen items from this inventory.

1. I do not like physical exercises.
2. I am worried when I cannot get sound sleep.
3. I feel I am much superior to others.
4. I wish I can speak fluently.
5. I get frightened when I am alone at night in my house.
6. I constantly feel I am miserable.
7. I have no interest in studies.
8. I am very much weak in written expression.
9. Generally a teacher is unpractical.
10. I like to see only the pictures wherein there is much of sex.

**Adjustment Inventory**

This inventory was constructed by Prem Pasricha, R.M. Pagedar and J.J. Gajjar in the Faculty of Psychology and Education, M.S. University of Baroda [23]. It consists of 232 items covering 11 areas of adjustment; viz. health and physical, sensitivity and confidence, economic and lack of facilities, self-reliance and independence, mild neurosis, self and self-image, sex and marriage, social, family, studies, school and teachers, work career and future. Its reliability and validity are not reported. The following are some of the specimen items from this adjustment inventory.
1. I always feel inferior due to my personal appearance.
2. I cannot speak some words correctly.
3. My voice is unattractive.
4. I am very self-conscious.
5. I do not know different sources of enjoyment.
6. The financial difficulties in my family make me unhappy.
7. I am not able to solve my own difficulties.
8. I am engaged to a boy whom I dislike.
9. I feel shy while talking to girls.
10. I do not like restrictions on friendship with opposite sex.
11. I like to live alone.
12. I always like to rebel against authority.
13. I feel I do not know much of etiquette.
14. I have to suffer due to extreme religious attitudes of parents.
15. My choice of vocation is unwise.

Self-acceptance Inventory

This inventory was constructed by S.B. Kakkar in Patiala [24], for high school and college students and can be administered in 10 minutes. Nothing is reported about its reliability and validity. The following are some specimen items from this inventory:

1. At times I abuse my parents.
2. Sometimes I am fussy over trifles.
3. Sometimes I am unsportsman like in my behaviour.
4. At times I brag about my qualities before others.
5. At times, I am unkind to the youngs of little birds and animals.

**Desai Adjustment Inventory**

This recent instrument was constructed by K.G. Desai for adolescents [25]. It consists of 100 statements of both adjustment and maladjustment. It measures adjustment in the following areas: physical health, mental health, neurosis, hypochondria, sex matters and social adjustment. Its reliability and validity are found high. The following are some of the specimen items:

1. I have a good appetite.
2. I like to read articles about crime in newspapers.
3. I work under great mental stress.
4. I get dangerous dreams every other night.
5. I do not speak the truth always.
6. I am liked by all whom I know.
7. I get defeated in arguments easily.
8. Most of the time I am in good mood.
9. I have great attraction toward fire.
10. Sometimes I feel that I will be torn into pieces.

**Desai Manifest Anxiety Scale**

This scale was constructed by K.G. Desai recently for adolescents and it consists of 50 items on common sources of
anxiety [26]. Its reliability and validity have been found high. It is also available in Gujarati and is very much used in Gujarati schools. Here are some of its specimen items:

1. My siblings and I shiver from the rage of my father.
2. I will select my life partner keeping in view whether my friends will like it or not.
3. I am afraid that I am not able to do my homework regularly.
4. I often go back to check whether I have properly locked my house or bicycle.
5. I am not able to sleep after seeing horror pictures.

**Personality Inventory**
This inventory was adapted by K.G. Desai from Sybil B.G. Eysenck’s Junior Personality Inventory to measure certain aspects of adolescents’ personality including their mental hygiene [27]. Since it is in Gujarati, it is largely used in schools of Gujarat and by research students in Education and Psychology. Its reliability has been checked and is found high and its validity was determined by the original author. The following are some of the specimen items from this inventory.

1. Do you like that very encouraging atmosphere remains around you?
2. Do you get angry quite often?
3. Are you annoyed by many things?
4. Do you worry that some dreadful incidents will happen?
5. Do you get bored by something very often?
6. Do you think you are a happy-go-lucky person?
7. Do you experience difficulty in getting sleep when you are worrying over some matter?
8. Do you feel shy in starting conversation with strangers?
9. When other boys shout at you, do you also shout?
10. Do you enter into difficulty very often for doing something without pre-thinking?

**Sex Adjustment Inventory (on sex matters)**

This inventory was constructed by Chandra Mohini to study adjustment of adolescents in sex-matters [28]. It consists of 80 items and is available both in English and Gujarati. Its reliability and validity were checked and were found high. Here are some of its specimen items:

1. My parents avoid talking with me about sex matters.
2. My parents prevent me unnecessarily from reading love stories.
3. I refer to keep standing rather than sitting by the side of some unknown person of opposite sex.
4. I am afraid of making some mistake.
5. People stare at me.
6. I am not able to participate in sports during menstrual period.
7. I worry over my habit of masturbation.
8. I feel sorry after I get nocturnal discharge.
9. My feet and thighs ache and create trouble in walking before or during menstruation.

10. I feel I am different from others of my sex.

In addition to the above few inventories reviewed here, a number of such inventories have been compiled in different languages of India. Some of these are reviewed in Pareek and Rao’s Handbook [29]. They are more or less of the same type as described hereto.

The greatest difficulty experienced by the compilers is in validating the inventories, because suitable criteria are ordinarily not available to compare them with the contents of the new compilation. Most of the authors therefore remain satisfied with the concurrent validity that they can easily get by comparing their new instrument with some well known inventory.
References


5. Ellis, A. The Validity of Personality Questionnaires, Psychological Ball, 1946, 43, 385-440.


17. Pareek and Rao, *op cit.*, pp. 36-37.


29. Pareekh and Rao, *op cit.*