THE PRESENT STUDY

The present study is carried out following a different kind of methodology. Hence a detailed rationale for the method is given hereunder. Following this the methodology proper is described.

RATIONALE FOR THE METHOD

The present study deals with the development of an inventory based on an Indian literary philosophical work in Tamil "Thirukkural" as described above. The study which is based on an Indian work with its unique socio-cultural background has to be viewed in a unique way. The approach of the Indian thought to the study of mental health has its uniqueness. It views in terms of 'what ought to be' and not 'what is' as described earlier. Hence the conventional method of standardisation, development of norms, and other associated aspects do not fit right in the study of Indian approach to mental health. There are certain limitations to the conventional methodology. Wright (1967) has criticised traditionally constructed tests on two psychometric grounds: the score obtained by a particular individual is a function of the group used to standardise the test. The item selection techniques, which are traditionally used to construct typical tests are designed to ensure a normal distribution of test scores (Hashway, 1978). fourthly, following the first two aspects dealt above, the generalisability and applicability of a traditionally
constructed test to a particular group of individuals are related to the degree to which the particular group corresponds to the group used to calibrate the traditional test (Korchin, 1986).

Human behaviour is not a question of normality or dichotomy between good and bad, but is essentially a question of self fulfillment. Thus, what is normal is an inner ability to make oneself the best and fullest possible personality that he is able to create. (Bischof, 1970). Maslow regards empirical research as a vital source of knowledge about the human personality. But he also agrees that all too many psychologists misguidedly seek to emulate the precision of the physical sciences, over emphasise the importance of quantification, tailor their research to those methods with which they are familiar, and concentrate on empirically simple but trivial issues (Ewen, 1984).

Many psychologists concentrate on studying insignificant questions for which there are adequate research methods rather than attaching more important issues with less precision (Maslow, 1957). Man, as a unique creature, has unique problems which cannot be investigated through the traditional methods used with rats, monkeys or neurotic individuals (Munn et al, 1972). Human behaviour should not be viewed in mechanistic or reductionistic terms, but rather distinctly human qualities should be emphasised, such as choice, creativity, valuation, and self-actualisation.
Shultz (1977) says that "there is a desirable level of growth and development that goes beyond normality, and they argue that it is necessary for human beings to strive for that advanced level of growth in order to realise, or actualise, all of their potentials...the absence of emotional illness is no more than a necessary first step to growth and fulfillment".

Currently new trends in human science research have been coming up. The four major human science research methods are the experiential, hermeneutical, perceptual psychological, and the phenomenological (Aanstoos, 1984). However, it cannot be claimed that these alternatives exhaust the realm of possible human science methodologies (Barrell et al, 1987).

However, humanists have been accused of taking self-reports at face value and ignoring the operation of unconsious processes, defenses and other distortions of an individual's perception of the world. They also fail to take account of the fact that some people are unable to express themselves and their experiences and thus cannot give the therapist an accurate picture of their reality. It has also been criticised for lacking any objective assessment techniques beyond self report. Critics feel that the kind of data the humanistic existential theorists ignore behavioural observations, past life events, family history, and so forth, which are critically important to an understanding/
of an individual's personality (Darley, 1991). It has no special methods. It has developed in resistance to current practices, but it has not clearly formulated any of its own (Munn, 1972). "Humanistic psychology is as much distinguished by what it is not or by what it opposes as by what it affirms" (Bugenthal, 1967).

Inspite of these limitations, humanistic psychology survives as the third force. This way become more popular and specified in the future as its methodology gets refined and appropriate. This may be found in Eastern methods, as Munn et al (1972) quote Maslow, "The Western psychology, particularly in the US, ignores private experiences; it is suggested that we have much to learn from Eastern societies which emphasise meditation and introspection. Academic psychology, it is said, is too concerned with man's objective, public and behavioural aspects as opposed to his subjective, inner meditative nature".

In India, the methodology used to study the mind of man is predominantly through introspection. Inspite of the limitation of introspection, which are well known, and also criticised in humanistic psychology, it is a valid method as per the following points. it is by the person who is experiencing it; first hand; the aspects which are hidden consciously, unconsciously or forgotten may be kindled by the person who is handling the case in hand; more or less a conscious cognitive approach to the understanding of the
mind, which is in vogue currently; assumed that individuals aim at and strive to achieve the highest - self actualisation, and hence will open up to cooperate in the process of assessment and therapy.

In the present study an inventory is developed based on Thirukkural, which is assumed to give norms for better adaptive behaviour. The conventional standardisation procedure, development of norms, and other related issues are not dealt with in the present study, because of the following reasons:

1. The inventory is developed based on Indian conceptualisation of mental health. In India, the systems of thought / philosophy accept 'Sabda', i.e., verbal testimony of an authority as one means of knowledge and it is the 'antya pramana', i.e., supreme way of acquiring valid knowledge (Atreya, 1971). Thus the concepts of adaptive behaviour given by Thiruvalluvar are accepted as they are resulting in the assumption that Thiruvalluvar gives norms - "ideal norms" for adaptive behaviour. This is also is based on the the fact that the Western conceptualisations view mental health in terms of social and / or statistical norms, i.e., 'what is'. Where as Indian conceptualisations view mental health in terms of 'what ought to be'. Thus, Thirukkural gives 'ideal norms' for better adaptive behaviour.
2. The methodology used in the present study has a slant towards humanistic methods, where in the individual is considered to be an active person with humane qualities of creativity and selfactualisation. And hence Indian method of introspection discussed earlier as quoted by Munn from Maslow is followed. Introspective method in the present study means the self report given by the subjects on the inventories given to them. That is, whether or not they are in conformity with what the authority, i.e., Thiruvalluvar has said about adaptive behaviour. It means that the norms of Thiruvalluvar is accepted and the conventional standardisation procedure is not used.

3. Each item measures one aspect of life, thus having 88 items with 88 aspects of adaptive behaviour. The total cannot be taken as a measure of adaptive behaviour. So neither one single nor can be developed for this inventory, nor a norm for each item /aspect of adaptive behaviour can be developed, since it is one single item and not a set of items.

4. To prevent the corrosion of basic idealism as of Thirukkural, the conventional standardisation procedure is not used.
ASSUMPTION
The major assumption made in the present study is that Thirukkural gives norms – ideal norms for adaptive behaviour. This is based on the fact that the Western conceptualisations view mental health in terms of social and/or statistical norms, i.e., 'what is'. Whereas Indian conceptualisations view mental health in terms of 'what ought to be' (Parikh, 1971). Thus Thirukkural gives ideal norms for better adaptive behaviour.

PROBLEM FOR INVESTIGATION
To develop a psychological assessment tool to elicit areas of maladaptive behaviour, based on Thirukkural.

RESEARCH QUESTIONS
1. What is the nature of distribution of the Thirukkural Adaptive Behaviour Inventory (TABI)?
2. What is the relationship between adaptive behaviour and self-actualisation?
3. What is the relationship between adaptive behaviour and neuroticism?

HYPOTHESES
1.1: Considering the "ideal norms", TABI will follow a skewed distribution.
2.1: There is no difference between self-actualisers and normals on adaptive behaviour.
2.2: There is no difference between self-actualisers and non-actualisers on adaptive behaviour.
2.3: There is no difference between normals and non-actualisers on adaptive behaviour.
2.4: Adaptive behaviour and self-actualisation are not correlated.
3.1: There is no difference between neurotic subjects and stable subjects on their adaptive behaviour.

3.2: Adaptive behaviour and neuroticism are not correlated.

OPERATIONAL DEFINITION OF TERMS

Adaptive behaviour: Higher the score on TABI, better the adaptive behaviour.

Self-actualisation: Higher the score on different scales of the POI, higher the level of self-actualisation.

Neuroticism: Higher the score on neuroticism - stable dimension of the EPI, more the neuroticism.

Ideal norm: Studies on indigenous concepts in India have followed the usual methodology which is in vogue today, i.e., standardisation procedures, deriving normative data, and the like. However, it is found and realised by many that indigenous concepts of mental health speak, in a positive way, i.e., positive state of mental health or the ideal mental health and the ways of achieving it. The method used currently fits in right for studies on the Western concepts, except that of the humanists'. Since this method does not fit in appropriately in the study of Indian concepts, which talks about "growth psychology" and the ideal, the concept of "ideal norm" is being used in the study. Thus the essence of Indian concepts can be kept up and yet be put to test. The "ideal norm" in the present
study is "the prescriptions of adaptive behaviour as in Thirukkural, enunciated by each "kural", consequently each "adiharam" under consideration".

SAMPLE
The sample is from Coimbatore city in Tamil Nadu, India. The subjects know Tamil – either as mother tongue or as domicile of Tamil Nadu. Since the assessment tools are of self report type the subjects have basic schooling.

Sample size is determined on the basis of the study by Krejcie and Morgan (1970), wherein they have found specific sample sizes to be representative of a specific population sizes, when the 0.05 confidence level is desired. They have found that for a population size of about 10,00,000, a sample size of about 380 is representative of the population. and beyond the population size of 10,00,000, the curve denoting the sample size reaches a plateau. Coimbatore city has a total population of 8,16,321, according to the 1991 census. In the present study, keeping in mind the fact that larger the sample size better the reliability, the sample size is aimed at 900. Since it is a large sample and a general one, incidental sampling method is used to avail data. The subjects are from hostels, PG departments of various colleges, shops, and other work places where subjects are available in chunk. However, though the target is to get a data of 900, because of the reasons given below some of them have to be deleted.
Total data collected 1028
Incomplete response sheets 262
High score on Lie scale of EPI 149
10 or more items unfilled on POI 112
Total invalid data 523
Valid data 505

Because of time restriction keeping up the target of 900 valid data is not possible. Also, the size of 505 is in accordance with the logic of determining the sample size given above. Hence the study is carried out with the sample size of 505.

Sample characteristics:

<table>
<thead>
<tr>
<th>Description of the sample</th>
<th>Number of subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>20 - 30 yrs</td>
<td>436</td>
</tr>
<tr>
<td>31 - 40 yrs</td>
<td>69</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>272</td>
</tr>
<tr>
<td>Female</td>
<td>233</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>SSLC &amp; below (SSLC)</td>
<td>105</td>
</tr>
<tr>
<td>Above SSLC - UG &amp; below (UG)</td>
<td>176</td>
</tr>
<tr>
<td>Above UG - PG &amp; above &amp; Prof.courses (PG)</td>
<td>224</td>
</tr>
<tr>
<td>occupation</td>
<td></td>
</tr>
<tr>
<td>Not employed (NE)</td>
<td>328</td>
</tr>
<tr>
<td>Self employed (SE)</td>
<td>27</td>
</tr>
<tr>
<td>Employed elsewhere (EE)</td>
<td>150</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>89</td>
</tr>
<tr>
<td>Unmarried</td>
<td>412</td>
</tr>
<tr>
<td>Divorced</td>
<td>2</td>
</tr>
<tr>
<td>widow(er)</td>
<td>2</td>
</tr>
</tbody>
</table>
ASSESSMENT TOOLS

1. Thirukkural Adaptive Behaviour Inventory (TABI)
2. Personal Orientation Inventory (POI)
3. Eysenck personality Inventory (EPI)
4. Demographic Information Sheet

Thirukkural Adaptive Behaviour Inventory (TABI)

The TABI is developed in the present study by the investigator and the guide. The steps followed in the development of the inventory are given hereunder.

1. The TABI is developed after reading the original text of Thirukkural (Markasahayanjettiar & Ramasamypulavar, 1969); the commentaries given by different scholars - Parimelazhagar Urai (Puliyur Kesikan, 1976); Thirukkuralin Unmaipporu] (Anandan, 1986); Thirukkural Valviyal Urai (Ilanguumararan, 1990); and the transalations of Pope et al (1958); and Muthusamy (date not mentioned in the book).

2. An interpretation of each 'adhihāram', after reading each 'kural' in an 'adhihāram', is arrived at. In the process certain 'adhihāram' are left out as described in the chapter on Thirukkural. Thus, 88 'adhihāram' are considered for the present study.

3. Based on the interpretation, items are pooled from each 'kural'.

4. The central meaning of each 'adhihāram' is considered and item for each 'adiharam' is framed.
5. These items are phrased in such a way that they are direct, simple and do not imply more than one meaning.

6. Care is taken to frame the items in such a way that they obviously reflect the respective 'adīhāram'.

7. The responses are to be rated on a 3 point scale: 0 - 1 - 2, for not at all, sometimes, and always.

8. The responses cannot be totalled up because of the reason given under rationale for the methodology. Hence, the percentage of items responded as 0, 1, or 2 is taken to get a single score. Higher the percentage of items responded as '2' better the adaptive behaviour.

9. TABI is distributed to six judges who are experts in Thirukkural, to find out whether the items reflect the theme of the 'adīhāram', for content validity. They are requested to read each item and its corresponding 'adīhāram'. They are to judge how much the items reflect the respective 'adīhāram'. If they find that the item is not reflecting the 'adīhāram', they are requested to alter the item to suit the 'adīhāram'. A formal evaluation report in writing came from only one judge. Discussions with 3 judges about the items being framed based on the interpretations that the investigator and the guide had made, revealed that the interpretations are accurate enough and the items did reflect the content of the 'adīhāram'. They did not have time and hence did not give a formal response to the request.
for evaluation. In the formal report given by one judge, item 18 is asked to be changed. He has also suggested minor modifications of grammatical nature for few items. A discussion is held with him and the item 18 is modified and other modifications are also made. On the whole content validity seems to be good. Few items which had poor content validity were also modified to improve the validity.

10. All the items are written on cards separately for each item and the cards are shuffled to randomise the items, so that the effect of set is controlled.

11. These randomised items are typed along with instructions and examples to make the TABI (Appendix - B).

12. The TABI is administered to the sample along with POI and EPI, and the data is obtained, after a trial with a few subjects.

**Personal Orientation Inventory (POI)**

The POI was developed by Shostrom (1972) as an empirical and objective measure of Maslow's concept of self-actualisation. The POI has two major scales and ten subscales. The total number of items is 150. It consists of two choice statements in which the subject is instructed to choose the statement within each pair that best applies to oneself. Reliability studies on POI have been conducted by many researchers beginning from Shostrom. These studies have found correlations ranging from .03 to .77 (Knapp, 1976).
It is not conclusive. Numerous studies on validity have been done. These studies have demonstrated that it possesses a high level of concurrent validity (Fehr, 1983). It is being used in India. Barnes and Radhika (1993), Sharma and Rosha (1992) have used POI to study the self-actualisation in the Indian set up. Since, the original articles are not available to the investigator, the investigator is not aware whether the instrument that they have used is standardised or not. For the present study, since the investigator is not aware of a Tamil version of the inventory, the inventory by Shostrom is translated into Tamil by the investigator and the guide. (Appendix - C)

**Eysenck Personality Inventory (EPI):**

The EPI was developed by Eysenck (1964). It sets out to measure two major dimensions of personality - Extroversion-Introversion and Neuroticism-Stable. These two dimensions are assessed with 24 items each. The inventory also consists of a lie scale with 9 items. This was introduced to assess social desirability factors. Totally there are 57 items. The EPI has a test-retest reliabilities ranging from 0.84 to 0.94. Split half reliabilities range from 0.55 to 0.95. It is found to be valid in assessing behaviour manifestation of personality. Eysenck has given norms for the general population. In India Abraham (1977) has standardised to the Indian population and has arrived at norms for Indian population. For the present study the Tamil version of the Abraham adaptation of EPI is being used. (Appendix - D)
Demographic Information:
This sheet will include the basic information regarding the subject like name, age, sex, education, occupation, marital status, and children if any. This will be included in the response sheet. The response sheet contains the demographic details and the blanks for each of the three inventories 'A', 'B', and 'C'. (Appendix - A)

The three inventories are made into a set and pinned. A covering page having the general instruction is attached.

PROCEDURE
The subjects are assessed individually. The assessment is based on the self report given by the subject on the inventories. The subject is told that an investigation is being done to see the way they behave in different contexts. The subject is requested to read the instructions given in the covering page and then fill up the demographic details. He is directed to read the instructions for each inventory, before beginning to mark the responses. He is instructed to see the number of the inventory and the number given in the response sheet. Also, he should see for the number of the item in the response sheet and the number in the inventory, so that his responses are appropriate to the items given. This is mentioned in the instructions. They are told that this study is meant only for research purpose and that it will be held confidential. This is also mentioned in the directions.
The inventories are administered on take home basis. Following this procedure, the response sheets as well as booklets are collected.

ANALYSES

1. The details of analyses are given in the next chapter. Notes on certain points which would be helpful to understand the next chapter are given hereunder.

2. The analyses are carried out keeping in mind the assumption that Thirukkural gives 'ideal norms' for better adaptive behaviour.

3. The analyses are done using the percentage of items responded by each subject as 0, 1, 2 on TABI. Responses of '2' means that the subject always behave adaptively for a particular aspect. Since the TABI is to assess adaptive behaviour as given by Thiruvalluvar, it is decided to take those responses which the subjects have given as 'always', i.e., '2' for analyses.

4. Analysis of POI is done using the two major scales - Time competence (Tc) and Inner-directedness (I).

5. Appropriate statistical techniques are used to analyse the data, to test the hypotheses.
PILOT STUDY

The main purpose of the pilot study is to find out how the inventories are being understood and responded? Is there any problem in understanding the questions and the language? And to find out the approximate time each of the three inventories take to be filled.

The conventional assessments of reliability and validity for the tests in the pilot study are not done. Because, for the first questionnaire (TABI), as given in the rationale for the method and in the steps for the development of the inventory, conventional methodology is not used at all. For the second inventory (POI), the investigator is not aware of it being standardised in the Indian set up, though it is being used in India. The Tamil version is being made by the investigator and the guide. This has to be tried out in the sample to find out whether it is understandable. Reliability and validity assessments are not made. The EPI Tamil version is an established one.

The inventories are distributed to a sample of 30 subjects of both sexes studying in the PG departments. The age range is between 20 to 30 yrs. The assessments are done individually. After the inventories are filled, they are asked about how they felt, whether they had difficulty in understanding. They are also interviewed colloquially, content being the same as that of the items in TABI. The time is recorded for each inventory separately.
The findings are as follows:

1. In general all the items were understood clearly by the subjects.

2. Item 4 had a different understanding by the subjects. It is supposed to mean whether the subject has the habit of taking alcoholic drinks. But the question asked meant whether the subject has had the experience of advising a drunkard when he is drunk. And, if he says 'no' it means he has the habit of drinking. Subjects did not have the experience of advising a drunkard and at the same time did not have the habit of drinking. So the question was modified and was made direct - Do you have the habit of taking alcoholic drinks?

3. Item 42 was understood as, whether the subject has the experience of shying away because he had done something which ought not to have been done. That is, he had already done something which had to be shied away. But the question ought to have been, whether the subject shys away from wrong doings. Hence, the question was modified.

4. The approximate time taken to complete responding to this inventory was about 20 minutes.
POI
1. A few of the subjects said that it is difficult to fill because the same item is asked in opposites and that each one has to be read carefully with full attention. This comment cannot be taken because the inventory is intentionally made that way.

2. The inventory is long.

3. The approximate time taken to complete responding to this inventory was about 40 to 60 minutes.

EPI
1. No critical comments were made.

2. The approximate time taken to complete responding to this inventory was about 10 to 15 minutes.

In general, except for the modification done for TABI, no other alterations were made. The total time taken for all the three inventories to be completed was about one and a half hours.

*****