CHAPTER III
METHODOLOGY

Introduction

In the present study an exploratory attempt has been made to identify and study some components of mental health among the Pulayas, a tribal community at Thirumoorthy Hills. This chapter gives a vivid account of various stages of the present study. The hazards and tensions experienced by the investigator during field work and data collection are discussed in detail. It also explains the steps taken by the investigator to overcome the hazards and tensions.

Tools of data collection and anthropological population

Most of the research studies in the field of anthropology are field studies (Runkel and McGrath, 1972, p.90). Research tools needed to study anthropological population require great sensitivity and self-awareness on the part of the investigator, since he is his own main instrument and other methods are just alternative techniques to objectify and standardize his perception (Pelto, 1970, p.90). Participant observation, Structured interview, Questionnaire, Ratings and Rankings, Projective techniques, Inventories and Unobtrusive measures are some of the tools of research on tribal community. Due to the inherent limitations of the tools, in most of the studies combination of different tools are employed to collect both
qualitative and quantitative data to establish reliability and validity. Pelto (1970, p. 74), Bell and Newby (1971, p. 74), Pelto and Pelto (1973, pp. 269) and Bogdan and Taylor (1975, p. 73) indicate the eclectic nature of research techniques and methods and strongly recommend for combination of various methods or multi-instrument research methodology.

Purpose of the study

It is the contention of the present investigation that mental health is characterized by the Acceptance of one's Community and Life situations and Adjustment in the areas of Community, family, occupation and emotion. As an exploratory study of mental health in a tribal community, the objectives of the present study are two-fold. Firstly an attempt is made to describe in general the socio-cultural background of mental health among Pulayas. Secondly an attempt is made to study the components of mental health such as Acceptance of Community and Acceptance of Life-situations and Adjustment in the area of Community, family, occupation and emotion.

Research setting

Pelto (1970, p. 216) observes that the selection of a setting for a research study depends on the nature of the research problem, methodology and accessibility. Beattie (1965, pp. 13-14) says that the choice of Bunyoro Community was made due to the representative nature,
distance, accessibility and transport facility and social mobility. Gallagher (1961), Philips (1966), Lewis (1963), Leslie (1960) selected their research settings for the purpose of comparison of observation and results. Bogadan and Taylor (1975, p.28) recommend that research settings selected must consist of subjects who happen to be strangers to the researchers.

The present research setting, Pulaya community at Thirumoorthy Hills was selected for the following reasons:

i) a tribal community with distinct and homogenous socio-cultural life.

ii) the language spoken by the subjects is Tamil, though the local dialect differs.

iii) it is an unexplored and unexposed tribal community from the point of view of research studies.

iv) they were found to be socially tolerable, co-operative and friendly as per the oral reports of the forest officers.

Population and Sample

Tribal communities like Kadars, Muduvans, Eravalar and Pulayas live in different parts of Thirumoorthy Hill forest areas in Udumalpet Taluk, Coimbatore district, Tamil Nadu. The present investigation deals with Pulaya Community. Pulayas of Thirumoorthy Hills prefer to be
known as 'Kurumba Pulayas', who are different from 'Karaiveli Pulayas', of Kodaikkanal in Madurai district and "Thanda Pulayas in Kerala. In the present investigation the term "Pulaya" refers to Kurumba Pulayas. They live in the following six settlements.

1. Kurumalai
2. Kulipatty
3. Mavadappu
4. Esalthittu
5. Kodanthur

A sample-frame was prepared to select the required sample. Due to lack of time, and other inherent risks and hazards involved in staying at the remote and dense hill-forest settlements, it was decided to study a sample of respondents, selected on the basis of systematic random sampling (Cochran, 1977). Fifty per cent of the households in each settlement were selected. Thus there was a total sample of 170 respondents. The respondents consisted of husbands and wives. In the case of the widowed, either the wife or husband was interviewed. The sample did not include adolescents and children. As the tribal community has a homogenous culture, the sample selected was found to be adequate.

**Development of tools of data collection**

There were mainly three stages in the development
of tools for data collection in the present investigation. At the first stage preliminary data was collected for the construction of interview schedules. Secondly, a pretest was conducted with the tools developed. Finally on the basis of the results of the pretest and pilot study tools were finalised.

Field expedition

As pointed out by Katz (1953) the field expedition and scouting are indispensable and of relevance in most of the exploratory and field studies in social settings.

Following were the aims of the field-expedition, prior to pre-testing:

i) to gain first hand knowledge of the socio-cultural life of Pulayas.

ii) to identify the relevance of the selected components of mental health in Pulaya Community and select items for interview schedule.

iii) to become familiar with the local dialect to facilitate communication, and to establish rapport with the subjects.

iv) to ascertain the physical hazards and means of overcoming the same and feasibility of conducting the investigation, and

v) to develop the interview schedules.
Field expedition and the collection of Preliminary data

Based on the suggestion of village landlords (non-tribal) and forest officers, the investigator decided to make observational visit to Kurumalai and Kulipatty. The investigator reached Kurumalai accompanied by the Forest guard and Forest Watcher. The village leaders and priest were introduced to the investigator. He was accommodated in an isolated hut built for strangers in a corner of the settlement. The officials returned to their Head Quarters in the same day, requesting the local tribal leaders to extend all possible help to the investigator.

As pointed out by Bogdan and Taylor (1975, p.42) at this stage the researcher felt uncomfortable and uneasy due to the restricted interaction between him and Pulayas. During the initial period the tribal leaders volunteered to assist the researcher in cooking. Two adolescent tribal boys were requested to assist him and take him around the settlement. Generally the boys used to visit their fields or go to the forest for honey-collection during day-time. Hence the investigator had to remain lonely and spend the time with the children. It was really difficult to talk to them as they were afraid and felt shy. Moreover the researcher was not so familiar and fluent in the local tribal dialect, that he could not establish proper communication initially. The
investigator was carrying a small pocket transistor radio which they had not seen before. He offered it to one of the boys to carry with him for some-time. This attracted the remaining children and most of them wanted to keep it with them for some time. Thus the researcher was able to become closer to them.

The investigator then applied medicine from the first-aid kit carried by him and dressed the wounds of the children. As they are not immune to modern allopathic medicine, it was effective in healing the wounds. Seeing the healing effectiveness of the medicine, grandmothers brought young children for mild ailments and gradually women and men as well approached the researcher for medicine. This was like the experience of Middleton (1970, pp.22-23) with his Lugbera subjects.

During the evening hours, all men used to gather in a common place to discuss their day to day activities and share their experiences in the forest and agricultural field. The investigator used to go there with his transistor radio. The people used to sit around him and listen to the transistor. This was one of the occasions to observe them and informally interview them on general matters of interests to them. Though their language was Tamil, the dialect was difficult to understand and follow.
Actually it was difficult to listen to their conversation and verbal exchanges when they spoke fluently and spontaneously among themselves.

During the late hours in the night, the womenfolk after completing their domestic work used to assemble and listen to the radio. They used to pass comments among themselves but were hesitant to express it openly. After one month, they became friendly and used to sing and dance in the presence of the researcher, a non-tribal man.

Gradually most of the Pulayas became friendly with the investigator, irrespective of age and sex. The womenfolk were so courteous that they fetched water for the researcher from the river or tank. They were kind enough to bring greens, fruits and roots when they returned from the forest in the evenings and offered the same to the investigator.

The key-informants like tribal oldmen and women during day time served as sources of information pertaining to their kinship, lifestyle, marriage, death, religion and rituals. As they were fully convinced and impressed by the researcher they were free and did not have any inhibitions. It was a unique occasion and experience for them to see a non-tribal man staying with them for weeks together. They were happy and proud
that their community was being studied. So they came forward narrating their past history and gave a detailed account of their culture in general.

The investigator occasionally accompanied Pulayas to their agricultural field in the hill forests and honey collection. It was suggested by a few of the key-informants to pay visits to other settlements and they had also agreed to arrange for the visit. Whenever a relative came to Kurumalai, they introduced him to the investigator and requested him to extend help and cooperation during the stay of the investigator in his settlement. This really helped the investigator at a later stage of field work and data collection. Initially, the guest-Pulaya was shy and hesitant to talk to the worker and hence his responses were merely monosyllabic. Witnessing the free and friendly contact of his kinsmen with the investigator, he also gradually became friendly. The investigator used to offer him coffee or tea and shared his food with him. When he took leave for his native settlement, he voluntarily invited the investigator to his place and promised to be helpful to him during field visits to his settlement.

During the stay at Kurumalai settlement one of the key informants had to go to another settlement, Kulipatty and stay there for a few days. He himself
suggested the investigator to accompany him so that he could introduce him to his kinsmen. The investigator accompanied him to Kulipatty settlement and stayed there for a week.

Though Kulipatty settlement people were aware of the investigator's stay at Kurumalai, they did not mix freely as Kurumalai Pulayas did. Few of the key-informants like village Moopan who were introduced on earlier occasions came forward to discuss with the investigator. The investigator was disappointed and lost his hopes in Kulipatty at the outset. But later on it was explained that their indifference was owing to the conflict they had with the forest department. Hence they were suspicious of the investigator. The investigator visited another settlement, Esalthittu and stayed there for a couple of weeks. The people were social and friendly like Kurumalai settlement. The investigator was staying and spent nearly one month in Kovil settlement which is located at the foot of the hill. Practically this was the headquarters of the investigator during the entire period of his research study.

Outcome of the field expedition

As a result of the field expedition it was possible for the investigator to find out the feasibility of conducting the research study in Pulaya Community. He had
an orientation towards the socio-cultural life of Pulaya. He was exposed to the possible risks and hazards in the hill forest and this exposure helped him to prepare adequately during future visits. The preliminary visit enabled the investigator to establish rapport with the key-informants and other respondents in general. It was possible for the researcher to become familiar with the dialect of the tribal community, which finally strengthened the communication between him and the respondents.

**Preparation of Tools of data collection**

The scouting expedition and field experience provided adequate ground for the preparation of tools of data collection. First it helped to establish the cultural relevance of the three selected components of mental health. Secondly items for the specific tools were developed, since it was observed that data could be collected through interview schedule. It was also felt that certain variations in their responses could also be studied. Hence it was decided to structure the interview schedule. As Pulayas at Thirumoorthy Hills were not exposed to social research situation before, it was found difficult to administer sophisticated psychological tools which were also irrelevant to their culture. So specific tools of data collection in the form of structured interview schedules were prepared.
to suit their culture specifically, as suggested by Barnow (1963). After carefully scrutinizing the items, structured interview schedules akin to five point scale were constructed to study their Acceptance of community and Acceptance of Life-situations and Adjustment particularly in the areas of Community, Family, Occupation and Emotion. A separate interview schedule was also framed to collect personal and social data. It was observed that only personal data pertaining to size of the family, active-role in common settlement activities, migration, debt and sex could be collected. Since they belong to a homogenous tribal culture, there was not so much variation in the socio-cultural data.

Pre-test

An attempt was made to pre-test the interview schedules with the purpose of ascertaining the responses to the style and content of the schedules and the cultural relevance of the items of the interview schedule. It was also considered necessary to find out the feasibility of administering structured interview schedules and refine the tools of data collection. Since the investigator was familiar and had established sound rapport at Kurumalai settlement, pre-test was conducted at Kurumalai. The worker had to patiently explain each item of the interview
schedule to the respondents and elicit data. He had to elicit one response, for example, either agree or disagree and then probed further to know whether they strongly agree or disagree with the statement in the interview schedule. This attempt was time-consuming and created stress and strain for the investigator and respondents as well.

As a result of the pre-test of the interview schedules and the experience gained on the occasion, it was possible to have the cultural validation. The investigator was able to interpret the statements in their local dialect which made the communication understandable and easier. It also provided an opportunity to understand practically the need and importance of combining other techniques of data collection as suggested by Pelto (1970, pp. 145 and 146). It opened avenues to gain confidence to conduct the study on a tribal community located in the risky and hazardous hill forests.

Reliability and validity

An attempt to combine different techniques of data collection like interview, observation, and key-informant interview enhances the credibility of the results of socio-cultural investigations (Pelto, 1970, p.44 and Pelto and Pelto, 1973, p.269). Reliability in field
studies is rather a function of the level of interviewing skills and interviewer controls. (Goode and Hatt, 1952, p.186). The cultural validation is possible through the methods of participant observation and key-informant interview. (Bogdan and Taylor, 1975, p.73). The prolonged field work in a small community and combination of various techniques of data collection guarantee a high degree of validity (Pelto, 1970, p.42). Bruyn (1970, p.319) considers participant-observation more reliable than other methods of data collection. Hence it could be said that the interview schedules which were developed mainly on the basis of field observation of the investigator in the present study are quite reliable. Bruyn (1970, p.319) observes, "the participant observation does not need to defend the reliability or validity of his data (in the traditional sense) in certain stages of his work. Moreover the highly structured interview schedules solve the problem of standardization as observed by Goode and Hatt (1952, p.185).

It is observed that in the anthropological interview the problem of reliability is not often raised (Goode and Hatt, 1952, p.185). However, adequate care was taken in the present study to indicate the reliability and validity of the interview schedules. The present study is a long term field investigation in a small and
homogenous tribal community. Being an exploratory study on a tribal population, the investigator had taken adequate precautions necessary in a field expedition (Katz, 1953, pp.56-97). Necessary care was taken to maintain effective control during interview situations. In addition to structured interview schedules, different techniques of data collection like participant observation and Key-informant interview were also made use of. From these it can be concluded that the problem of reliability and validity of the present study in the tribal community are adequate.

**Tools of data collection: Finalization**

On the basis of the pre-testing and field observation the interview schedules were refined and finalized. As the respondents were not able to respond directly to the items in the interview schedule, necessary flexible ways of interviewing to elicit data were adopted. In simple words the interviewing situation was very informal. After finalization the Community Acceptance schedule consisted of fifteen items and Life Situation Acceptance schedule twenty-four items. The Adjustment schedule consisted of ten items each in the areas of community, family, occupation and emotion.

On most of the occasions, the interview situations were like 'interview-conversation' as mentioned by
Blum (1972, p.84). Key-informant method as indicated by Blum (1972, p.85), Bogdan and Taylor (1975, p.49) and Pelto (1970, pp.95-98) was also used to gather information on socio-cultural background of Pulayas. Attempts were also made to observe them on various occasions and gather information to understand their socio-cultural relevance of mental health concept used in the present investigation. As pointed out by Bell and Newby (1971, p.74) most of the community studies depend on various sources of data. In the present study though interview method remained central, other methods like key-informant interview and observation were also used as suggested by Pelto (1970), Bell and Newby (1971) and Bogdan and Taylor (1975). Care was also taken to carry technical equipments like tape-recorder and camera.

Field work and data collection

The investigator visited six settlements in the following order.

1. Kurumalai
2. Kulipatty
3. Easalthittu
4. Kodanthur
5. Mavadappu
6. Koil
The previous field expedition and observational visits to the tribal settlements enabled the investigator to have the impression-management as vividly discussed by Pelto: (1970, pp. 216-220). Elaborate arrangements were made and the worker adequately prepared himself for long term field work and data collection. Food materials, grocery and cooking utensils were carried with him. To make Pulayás feel more social and friendly with the investigator, simple food was prepared. Two or three adolescent boys assisted him in cooking. Early in the morning, coffee was prepared in a big pot by the investigator and it was shared with the Pulayás assembled in front of his hut. The worker used to supply beedies and tobacco to them. Gradually when they became closer to him they demanded beedies. This turned out to be an occasion to meet and contact some of the male respondents during morning hours.

Greens, fruits, honey and Cow's milk were supplied by the settlement people. On most of the occasions, the investigator shared his food with the local people and it is a custom among Pulayás to share food, if consumed in the presence of others. As mentioned by Pelto and Pelto (1973, p.251), sharing of food indicates the symbolic acceptance of the investigator and his goodwill.
During the early stages of the stay at these settlements the investigator allowed them to keep the pocket transistor radio. During evening hours when people assembled to retire from occupational pressures, the worker recorded their conversation and songs of Pulayas with the aid of a tape-recorder and replayed the same. It was a surprise for them to hear their own recorded voices and they were so eager to hear it again and again. The same method was adopted in most of the settlements to establish rapport with the respondents.

As suggested by Mann (1972, p.123) attempts were taken to involve leaders in the research study and data collection. Key informants like village leaders and priest were contacted and an informal gathering was arranged with their help. The investigator explained the purpose of his visit to their settlement. He did not reveal the fact that he had a proposal to study their mental health, since it was too technical and philosophical for them to understand. Bell and Newby (1971, p.72) quote the views of Gans (1967) regarding the investigators occasional dishonesty to the respondents to elicit honest data.

Most of the people appreciated the work and strains of the investigator. Some of them felt that the study and findings might be a source for their progress and development. This might draw the attention of the
Social Welfare department of the Government. It was frankly revealed by the investigator that investigation would not directly contribute anything for their welfare and betterment. However, it was assured, that attempts would be taken to draw the attention of the welfare department of the Government. This frank and honest reply impressed them as they were thoroughly disappointed by the promises made by some of the Government Officers. Thus honesty and frankness in field situations made people appreciate as discussed by Nader (1970, p.109).

The investigator made it a point to visit the local tribal temples on the day of his arrival to the tribal settlement, accompanied by some local people. Eatables were prepared and offered by the investigator which was shared by Pulayas after the prayer. Since they were more religious and ritualistic, attempts were made to reach them through their religion and ritual. The investigator participated in the common prayer and community-feast in three of the settlements. The investigator joined them in community feasts and danced with them. The representatives from other settlements were really happy and carried this observation and experience to their settlements and shared with their kinsmen. So when the worker visited other settlements they readily accepted him and were friendly with him.
The investigator had problems while interviewing the respondents particularly in the initial stages in all the settlements since they were not exposed to interview situations for research purposes. Though it was felt that they had accepted him, and were friendly, most of them were hesitant and found it uncomfortable during interviewing. Hence the worker interviewed local leaders, priests, and Key-informants if they came under the sample. Their wives were also interviewed immediately. This actually gave an impression that both husband and wife had to be interviewed in their settlement.

The interviewing situation was informal. The male members were interviewed mostly either in the morning or evening hours. Sometimes the investigator had to accompany them to their agricultural field or forest to interview them with an intention not to disturb or hinder their occupational involvement. On certain occasions the researcher helped them in clearing their agricultural field and setting fire. They were also happy because their work in the field was not disturbed.

The respondents who were hesitant and not willing were not forced by the investigator. They were interviewed when they were convinced and had accepted the investigator. Some of the womenfolk stayed back at home and co-operated well. The sympathy they had for
the investigator and the acceptance gained through their children made them co-operative. It was often told by them that they had never seen a non-tribal man staying and living with them for days together to study their community. Some of them even went on accusing the investigator for leaving his family and creating anxiety in his family members. Thus with this sympathy, they requested the male members to co-operate well and help the worker to complete his work in their settlement and allow him to go to other settlements.

Hazards and Tensions in field work and data collection

carrying out fieldwork and employing participant observation method. Wintrob (1969) discusses the anxiety faced by the researcher due to environmental stresses, health hazards, inadequate feelings and fear of failure of data collection. In the present study the investigator had undergone most of the hazards and tensions cited in the above studies.

Though accommodation was not a problem in the present study, food and preparing food was a serious problem as experienced by Chagnon and Diamond (1970). On one occasion, the food materials stored were exhausted due to extension of stay during fieldwork and data collection at Mavadappu. Hence the investigator had to share the local food like Middleton (1970, p.22). The uncleanliness and insanitary conditions of the settlements created tensions in accepting their food. It was observed that they did not bathe for days together and washed their clothes rarely. Unlike Holmberg (1969), Whitten (1970) and Maxwell (1970) the investigator did not suffer from any serious illness. But general physical health had deteriorated to some extent and the investigator felt tired and exhausted. As he could afford only very simple food, he was subjected to malnutrition. He was frequently experiencing severe head ache which might have been caused by the constant exposure to the
hot sun in the forest. In Esalthittu the researcher was suffering from dysentry. But it was cured with the medicine he had carried with him. The local men offered the juice of the bark of a tree which was also used by him.

In two of the settlements namely Esalthittu and Kulipatty the sources of drinking water was a problem. There were neither rivers nor springs as in the other settlements. The people had to collect water from tanks or ponds. This was a source of health hazard and the water had to be boiled, filtered and protected for drinking purpose. In Esalthittu the stagnant water in the pond was stinking and it was difficult to drink. Hence the investigator had to walk nearly 3 kilometres to fetch water along with some of the tribal men.

Moving from one Pulaya settlement to another was highly risky in the hill forest. There were no transport facilities nor proper roads to walk. The worker had to walk through the thick forest guided by Pulayas. Pulayas were highly sensitive to the movements of elephants and wild animals. There were frequent attacks of wild bears and rogue elephants. They said that they restricted their movements and visits to other settlements due to this fear of attack by wild animals. While moving from Kurumalai to Kulipatty and from Kulipatty to Mavadappu,
the investigator and other Pulayas were chased away by rogue elephants. The investigator had to run lonely to hide himself in a cave for more than an hour till the Pulayas accompanying him, came back to pick him up.

In Mavadappu settlement while interviewing a respondent under a tree, a poisonous snake fell from the branch of the tree. Moreover a small snake was found inside the investigator's hut which was killed by the adolescent boys. Exposure to such a risky environment was creating stress and strain. In the same settlement a herd of elephants managed to enter into the settlement on a particular night. Since the harvest season was nearing most of the male members were in the agricultural fields to drive away the elephants and wild bears. The women and children raised alarm and cried on seeing the elephants. Hearing the noise and cries, the elephants ran away from the settlement. Following 5 or 6 womenfolk rolled down on the floor and became delirious. Sacred ash was given to them and prayers were conducted to seek relief. It was said that they were afraid that the elephants were God-sent to punish them for some of the religious violations made by one of the Pulayas knowingly or unknowingly who could not be identified. Elephant is symbolically accepted as Lord Ganesha who has the face of an elephant. The whole night some of the
womenfolk took up responsibility of patrolling the settlement. They gave all possible moral support to the investigator who was not exposed to such a risk and hazardous tribal environment in the hill forests.

In addition to these risky and hazardous environments there were other sources of strains and stresses. The forest department assistants and some of the non-tribal men were so curious and anxious to know about the exact work and were present while collecting data. The investigator had to avoid them since Pulayas were not comfortable and felt uneasy in their presence. On some of the occasions it was really strenuous to avoid them.

As pointed out by Bogdan and Taylor (1975) most of the qualitative methodologies and combination of various techniques of data collection are flexible in nature. Though they seem to be flexible, they cause strain in collecting information by an individual. Moreover though the interview schedules were structured, data could not be collected directly and formally as we could do with non-tribal population. The investigator had to patiently explain to them and take extra care to keep them under purposeful interview situation. On most of the occasions interview situations were lengthy, indirect and informal. The worker had to accompany them to the fields and honey collection so that they did not feel that their work got
disturbed. Moving in the forest in the hot sun was also
strainful.

The worker used to interview male members mostly in
the evenings. There was no proper light. Fire was set to
a big piece of wood and with this light the worker managed
to record some of the data, which was also strainful.

Since most of the settlements were ecologically
located in the hill forests it was not possible to have
communication channel. The investigator had to wait ten
days to receive letters, newspapers and magazines which
were brought by Pulayas or as arranged by the forest
department. Above all the investigator had to frequently
leave his family members and could not communicate to
them. In simple terms he was ecologically socially and
psychologically isolated during field work and data
collection. One need not exaggerate the manifestation
of such an isolation and their impact on the personality
and behaviour of a researcher in a tribal population.
The effects of such hazards and tensions on the investi-
gator was to a great extent minimised by the co-operative
and friendly attitude of the Pulayas towards the
researcher.
Classification of Data and Statistics used.

The data collected are treated and analyzed as a whole and also settlementwise. Mean, Standard Deviation and Standard Error give an account of the general level of Acceptance of Community, Acceptance of Life-situation and adjustment. To determine the relationship among these mental health indicators the co-efficient of co-relation has been found out. The co-efficient of contingency has also been found to determine the association among these mental health indicators. Analysis of variance has been used to find out the differences between six settlements. Critical Ratio has been used to find out the difference between various groups.

The names of the settlements are not given in the Tables; but they are indicated by the following codes.

K for Kurumalai settlement
M for Mavadappu settlement
KO for Kodanthur settlement
KV for Kovil settlement
E for Esalthittu settlement
KL for Kulipatty settlement

In the present study 'Small Family' denotes a family consisting of five or below five members and 'Big Family' more than five members. 'Migration' refers to migration from one Pulaya settlement to another. 'Active Role' refers to the significant and active role of Pulayas in the general community welfare and common religious activities.
CHAPTER IV