# CHAPTER 2

## METHODOLOGY

This chapter focuses on the aims and objectives of the study, the research design, which includes the variables into consideration, hypotheses, and the instruments used for the study. This chapter of the dissertation describes the various phases under which the research has been carried out. It emphasizes on the construction and standardization of the instrument to measure the internalization of conflict.

## AIM OF THE STUDY

The aim of the study was to study the internalization and, management of conflict in relation to certain personality types of the managers.

## OBJECTIVES OF THE STUDY

The lack of coordination at one or the other level and in one or the other form in the organizations increases the importance of the present study. The main objectives of this research were as follows:

1. To study the internalization of conflict as predictor of some behavioural and emotional symptoms.

2. To study the internalization of conflict among the managers of different personality types.

3. To study the conflict management styles of the managers of the different personality types emerged from the sample.

4. To study the difference in internalization of conflict between clear extraverts and clear introverts.

5. To study the difference in conflict management style of clear extraverts and clear introverts.

6. To study the difference between high and low levels of internalization of conflict for each of the personality type, i.e., (EI, SN, JP, TF).

## HYPOTHESES

The available literature from Dictionary of occupational titles (U.S. Department of Labour, 1977) shows that only certain types of personality emerge among managers which are dominantly found in organizations. On the basis of this, the following hypotheses and sub-hypotheses were formed:

1. It is assumed that the internalization of conflict would contribute to certain behavioural symptoms.

2. There would be a significant difference in the levels of internalization of conflict among the managers of different personality types (ISTJ and ESTJ).

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(a) The ISTJs would show high internalization of conflict as they are orderly, responsible and see that everything is well organized.

(b) Since the ESTJs are realists and practical, they tend to focus on the job, not the people behind the job. Hence, they are expected to internalize low level of conflict.

3. There would be a significant difference in the style of conflict management between the two personality types (ISTJ and ESTJ).

(a) The ISTJs are expected to adopt solution oriented (SO) style of conflict management as they make-up their own mind as to what should be accomplished and work steadily, regardless of protests or distraction.

(b) Since, the ESTJs are realistic and practical in their approach, getting things done in their strong suit. They are expected to adopt Control (C) style of conflict management.

4. There would be a significant difference between high and low level of internalization for each of the following indices of personality pattern EI, SN, JP, TF.

5. A significant difference is expected between clear preference for Extraversion (clear extraverts) and Introversion (clear introverts) for each dimension of internalization of conflict.

## VARIABLES UNDER STUDY

The variables under study were as follows:

### Independent Variable

The Independent variables for the study were Personality Types, based on Jung's analytic theory. According to this theory, everyone uses four basic mental functions or processes which are called Sensing (S), Intuition (N), Thinking (T), and Feeling (F). Different personality types differ in the priorities of use of these functions and attitudes i.e. extraversion (E) and introversion (I). These functions represent an individual's orientation towards consciousness. (Jung, 1921, p. 436).

### Dependent Variables

Based on the assumption, that the internalization of conflict, symptoms experienced in conflicting situations and conflict management styles would vary with the Personality types, we selected the following three dependent variables:
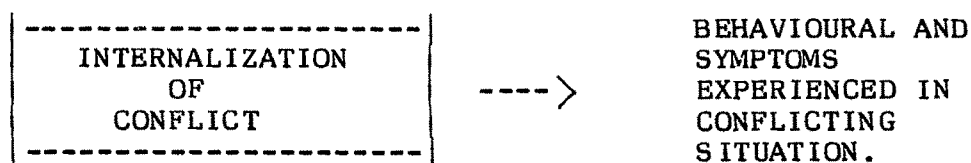1. Internalization of conflict.
2. Symptoms experienced by the individual, who is in conflicting situation.
3. Styles of conflict management.

The variables were analyzed to discover the relationship between the two personality types from the managerial sample and the level of internalization of conflict (high and low level), the eight dimensions of internalization of conflict, the three styles of conflict management and the relationship between the internalization of conflict as predictor of some behavioural emotional symptoms. The details of various analysis have been given separately.
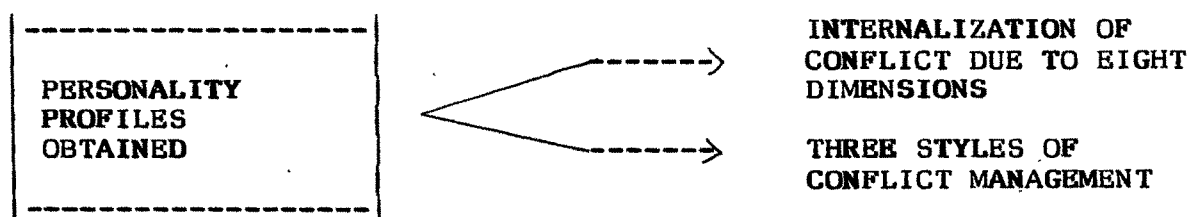
## Figure 2.1

### Proposed Relationship Between The Study Variables

ANALYSIS - I

```
┌─────────────────────────┐
│                         │
│    INTERNALIZATION      │      ----->      BEHAVIOURAL AND
│         OF              │                  SYMPTOMS
│      CONFLICT           │                  EXPERIENCED IN
│                         │                  CONFLICTING
└─────────────────────────┘                  SITUATION.
```

ANALYSIS - II

```
┌─────────────────────────┐
│                         │                     INTERNALIZATION OF
│    PERSONALITY          │         ------>      CONFLICT DUE TO EIGHT
│    PROFILES             │                      DIMENSIONS
│    OBTAINED             │
│                         │         ------>      THREE STYLES OF
│                         │                      CONFLICT MANAGEMENT
└─────────────────────────┘
```

## ANALYSIS - III

```
 ┌────────────────────┐              ┌────────────────────────────┐
 │                    │              │ EIGHT DIMENSIONS OF        │
 │                    │     -----→   │ INTERNALIZATION OF CONFLICT│
 │ FOUR INDICES       │              ├────────────────────────────┤
 │ OF PERSONALITY     │              │ HIGH AND LOW LEVEL OF      │
 │ PROFILE            │  ←----→      │ INTERNALIZATION            │
 │                    │              ├────────────────────────────┤
 │                    │     -----→   │ THREE STYLES OF CONFLICT   │
 │                    │              │ MANAGEMENT                 │
 └────────────────────┘              └────────────────────────────┘
```

## ANALYSIS - IV

```
 ┌────────────────────┐              ┌────────────────────────────┐
 │ CLEAR EXTRAVERTS   │     ----→    │ EIGHT DIMENSIONS OF        │
 │       AND          │              │ INTERNALIZATION OF CONFLICT│
 │ CLEAR INTROVERTS   │     ----→    ├────────────────────────────┤
 │                    │              │ THREE STYLES OF CONFLICT   │
 │                    │              │ MANAGEMENT                 │
 └────────────────────┘              └────────────────────────────┘
```

## ANALYSIS - V

```
 ┌────────────────────┐              ┌────────────────────────────┐
 │ EIGHT DIMENSIONS   │              │                            │
 │       OF           │              │ THREE STYLES OF CONFLICT   │
 │ INTERNALIZATION    │  -------→    │ MANAGEMENT                 │
 │ OF CONFLICT        │              │                            │
 └────────────────────┘              └────────────────────────────┘
```

Relevant literature which highlights the type of personality and preference for job,shows that only two personality types of people are frequently found to opt for managerial tasks. The rest of the fourteen personality types are occasionally seen in the managerial tasks. These two personality types which are

frequently found in organizations doing managerial tasks are Extravert - Sensing - Thinking - Judging (ESTJ) type and Introvert - Sensing - Thinking - Judging (ISTJ) type.

In the present study also only these two Personality types were observed prominently and the other types were occasionally observed.

## SAMPLE

The sample for the study consisted of managers of different organizations. Since, the study was carried out in different phases the sample size varied with the requirement.

## Phase - I

The study began with the construction of the instrument to measure the internalization of conflict. For, the first phase, the data were collected from three Organizations, chosen randomly. The total sample size for this phase was 50. The following table shows the sample distribution, in terms of Organizations.

## TABLE 2.1

### Sample Distribution in Terms of Organizations for Phase - I

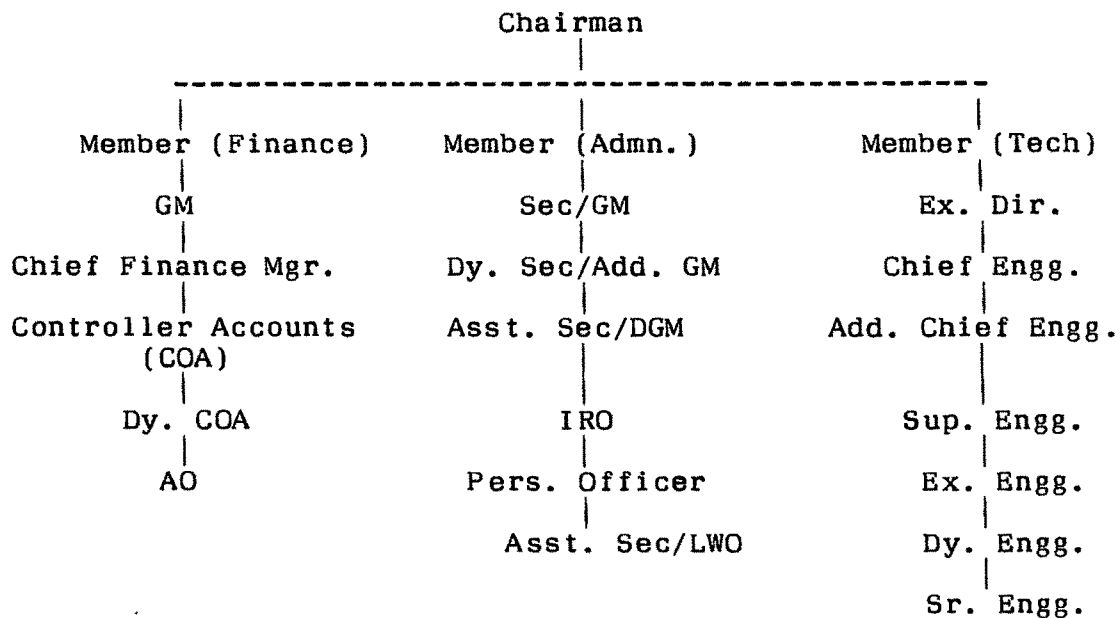| TOTAL NO. OF RESPONDENTS | ORGANIZATIONS | | |
|---|---|---|---|
| | $O_1$ | $O_2$ | $O_3$ |
| 50 | 14 | 22 | 14 |

These three organizations were from Public Sector. $O_1$ is an organization based in Orissa, India. It is a manufacturing organization.

$O_2$ is a Central Governement Service Organization. It is one of the India's largest service organizations. The site for data collection was Baroda, India.

$O_3$ is again a Public Sector organization, producing Thermal Power. The organization is based in Orissa, India.

## Phase - II

All necessary psychometeric steps were carried out for the above mentioned scale. The final scale thus prepared, was used for data collection from the managers of four other organizations. These organizations were chosen randomly, that means, they did not match for size or nature of the organization.

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This was a deliberate decision because the purpose was to workout the reliability of the tool.

The following table shows the sample distribution, in terms of organizations.

TABLE 2.2

Sample Distribution in Terms of Organizations for Phase - II

| TOTAL NO. OF RESPONDENTS 60 | ORGANIZATIONS | | | |
| --- | --- | --- | --- | --- |
| | $O_4$ | $O_5$ | $O_6$ | $O_7$ |
| | 17 | 13 | 11 | 19 |

The organization $O_4$ is a state government organization producing and distributing electricity. The data were collected from their corporate office in Baroda, India.

This organization was established in 1960. The main areas of work include supply and distribution of power.

The organization is headed by the Chairman. The hierarchy of the organization is represented by the following chart.
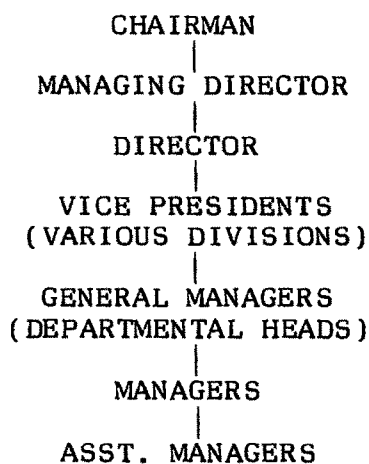
## Figure 2.2

## Hierarchical Chart of O4

```
                        Chairman
                           |
     ----------------------------------------------------
     |                      |                           |
Member (Finance)      Member (Admn.)            Member (Tech)
     |                      |                           |
    GM                  Sec/GM                     Ex. Dir.
     |                      |                           |
Chief Finance Mgr.    Dy. Sec/Add. GM            Chief Engg.
     |                      |                           |
Controller Accounts   Asst. Sec/DGM            Add. Chief Engg.
    (COA)                   |                           |
     |                     IRO                    Sup. Engg.
  Dy. COA                   |                           |
     |                 Pers. Officer              Ex. Engg.
    AO                      |                           |
                      Asst. Sec/LWO               Dy. Engg.
                                                        |
                                                   Sr. Engg.
```

The organization O5 is a private sector organization. It is a nationally known pharmaceutical company. The data were collected from its corporate office in Baroda.

The organization O5 is one of the leading pharmaceutical organization. It was established in 1907. It was established by important personalities, who held scientific vision and single belief i.e. the medicine must be related to man in his environment. It aims at self-reliance. The organization has infrastructure in various parts of India. The manufacturing practices conform to the norms of World Health Organization. The product development and innovation is for domestic and international market.

The distribution network is all over India with 18 offices. There are four Regional offices in the East, West, North and South India. The organization has offices overseas too.

The hierarchy of the organization is in the following way:

**Figure 2.3**

**Hierarchical Chart of $O_5$**

CHAIRMAN
|
MANAGING DIRECTOR
|
DIRECTOR
|
VICE PRESIDENTS
(VARIOUS DIVISIONS)
|
GENERAL MANAGERS
(DEPARTMENTAL HEADS)
|
MANAGERS
|
ASST. MANAGERS

Incidentally, the Chairman is the owner's son, the Managing Director is owners grandson and the Director is owner's daughter-in-law. Though, it looks like family regime, but it is a limited organization which has its shares in the market.

The Vice Presidents are for various divisions. In each division there are various departments, each department is leaded by the General Managers, followed by Managers, Asst. Managers.

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The O$_6$ is a computer manufacturing organization. It has collaboration with a Dutch company. It is one of the oldest computer manufacturing company. It is involved in making hardwares and softwares. The hierarchy of the organization is shown below in the form of chart.

**Figure 2.4**

**Hierarchical Chart of O$_6$**

Chairman
|
Vice Chairman
|
GM (Various Departments)
|
Managers
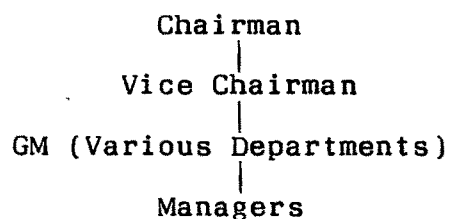
The head of the organization is the Chairman. The Chairman is followed by the Vice Chairman, who is supported by the General Managers of various departments. There are managers who are directly accountable to the General Managers.

O$_7$ is a German organization based in Baroda. This organization is manufacturing bearings. It was established in 1963. It is a precision engineering organization with the world-wide operations. It sets itself the objective of securing the company's position on a long term basis through continuous good earnings. The security is achieved by high efficiency by maintaining high standards in domestic and international markets. There is constant consolidation and expansion of the market position, through innovation, research and development.

The hierarchy of the organization shows that the organization's top most person is the Chairman. The Chairman does not interfere in day-to-day activities.

**Figure 2.5**

<u>**Hierarchical Chart of $O_7$**</u>

```
              Chairman
                 |
                 MD
                 |
                 VP
                 |
                 GM
                 |
          Senior Managers
                 |
              Managers
                 |
             Executives
```
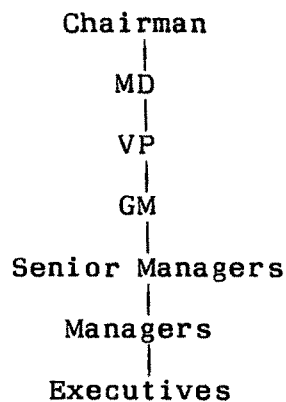
The data collected from these four organizations were used for the purpose of establishing reliability of the scale. The validity of this scale too was established with the help of this data.

The details of the construction and establishment of reliability and validity will be given in the forthcoming part of the chapter under the heading of 'Tools.'

<u>**Phase - III**</u>

The data for the last phase were collected from India's one of the largest service organizations, headed and managed by a

ministry of the government of India. The details about this organization would be given in the later part of the chapter under the sub-heading SITE.

## TOOLS

As per the requirement of the study, an instrument was developed by the investigator which has two parts. Two available instruments were also used.

1.  Myers-Briggs Type Indicator (MBTI FORM G) (Briggs, 1961).
2.  Occupational Communication Conflict Inventory.
        (O.C.C.I. FORM B) (Putnam & Wilson, 1988).
3.  (i) The Internalization of Conflict Scale (I.C.S.)
        (designed by the researcher).
    (ii) Symptom Checklist (compiled by the researcer).

## Myers-Briggs Type Indicator (MBTI)

The Myers-Briggs Type Indicator (MBTI) was developed by Katherin C. Briggs (1961). It was especially designed to make it possible to test Jung's theory of psychological types (Jung 1921/1971). The essence of the theory states that much seemingly random variation in behaviour is in reality quite orderly and consistent. It is due to the basic differences in the way individuals prefer to use their perception and judgement. It is assumed, that if people differ systematically in what they

perceive and in how they reach conclusion, then it is quite, natural for them to differ correspondingly in their reactions, values, skills, etc.

The MBTI is based on Jung's ideas about the perception and judgement and the attitudes in which these are used.

## Identifying the MBTI Preferences

The main objective of the MBTI is to identify four basic preferences. The indices Extraversion-Introversion (EI), Sensing - Intuition (SN), Thinking - Feeling (TF) and Judgement - Perception (JP) are not designed as scales for measurement of traits or behaviours. Every individual is assumed to use both poles of each of the four preferences. However, they respond first or most often with preferred functions or attitudes.

## Items and Scores

The MBTI contains 95 items. The items are scored for each index which offer forced choices between the poles of the preference at an issue. The choices are between seemingly inconsequential everyday event chosen by Myers as stimuli to evoke the more comprehensive type preferences.

All types reflect two poles of the same Jungian preference (e.g. E or I, S or N). Each of the responses for an item are weighted in terms of 0, 1 or 2 points. The responses that best

predict to total type with a prediction ratio of 72% or greater carry a weight of 2, items that predict to type with a prediction ratio of 63% to 71% carry a weight of 1; over popular responses carry a weight of 0.

The total for weighted scores for each preference are called points. The points are converted to the preference scores and then to the continuous score according to the given formula.

The formula to convert the points to the preference scores is as follows: For E, S, T and J : 2 times (Larger points minus smaller points) minus 1.

For I, N, F, P : 2 times (larger points minus smaller points) plus 1.

For ties, the preference score will be I 01, N 01, F 0 and P 01.

The formula to convert the preference scores to continuous scores is as follows:

For E, S, T and J preference scores, the continuous score is 100 minus the preference score.

For I, N, F and P preference scores the continuous score is 100 plus the numerical portion of the preference score.

The letters (I,N,E,P, etc.) indicate the direction of preference and the number indicates the strength of the preference. The type formula gives letters from all four scores, which provides a compact definition of each person in terms of his type (e.g. ESTJ, ENFP, etc.).

## RELIABILITY

Carskadon (1977) established the test-retest reliability for the continuous scores of the MBTI, which ranged from 0.73 to 0.87, with the exception of scores for thinking and feeling (TF) index which was equal to 0.56.

## VALIDITY

The correlations of the MBTI, with the scales of personality, interest and academic tests made it easier to identify correlates of each preference for construct validity. The conventional rotation for MBTI correlations is followed, such that positive correlations are associated with I,N,F or P and negative correlations with E,S,T or J.

In type theory, extraversion is an outward attitude in which energy flows to the environment. This outward turning is manifested in different ways which are reflected in significant correlations with other scales ranging from -0.77 to -0.40.

Introversion in type theory is neutral term, referring to an inward turning attitude more concerned with inner than outer realities. On few measures, they express the positive qualities of introverts. Significant correlations range from 0.75 to 0.40.

Sensing perception is perception by way of the senses and so it is concerned with awareness of present realities. The $r$ were found to be in range of -0.67 to -0.40.

The Intuition is the perception of possibilities, patterns, symbols and abstractions. Some of the personality scales correlated with intuition within the range of 0.62 to 0.40.

The Thinking should be associated with the analytical logical, skeptical approaches to problems, or to a coolness in interpersonal relations. Personality characteristics are listed that correlated with thinking (-0.57 to -0.50).

Feeling judgements are judgements made on the basis of subjective values rather than analysis or logic. Scales significantly associated with feeling judgement ranged from 0.55 to 0.40.

The Judging attitude prefers decisiveness, desire for control, order, dependability. Scales of personality variables with correlations from -0.59 to -0.40.

The type theory predicts that the perceptive attitude will be associated with spontaneity, adaptability curiosity and openness to new ideas. Scales of personality characteristic correlated with Perceptive attitude from 0.57 to 0.40.

## The Theory of Type Development and the Dynamic Interaction of Preferences

Type theory assumes that children are born with a predisposition to prefer some functions over others, a sense of competence for exercising a function well, the use of the function consistently leads to the surface traits behaviour and skills associated with the functions.

In the process of development of a preferred function, there is relative neglect of the opposite pole of the same preference. Environment becomes extremely important because environmental factors can foster development of each person's natural preferences, or it can discourage their natural bent by reinforcing activities that are less satisfying and less motivating making skill development more difficult. Environmental interference with type difference may result in falsification. Falsified individuals may become skillful in using an initially less-preferred function, but may also be less content and feel less competent.

## The Dynamic Interaction of Preferences

The letter chosen preferences appear in the type formula in the specific order as: E or I, S or N, T or F, J or P. The four letter type formula stand for a complex set of dynamic relationships between the functions (S, N, T & F), the attitudes (E & I) and the orientation to the outer world (J & P).

Jung described the eight preferences types but did not explain the need for auxiliary functions, that were always different from the nature of the primary function (Jung, 1921/1971, p. 406). Myers-Briggs used the ideas of Jung, who commented that in introverts with thinking dominant the counter-balancing functions have an extroverted character. Their assumptions are represented in their dynamic representation of MBTI types.

For each type, one function will lead or be dominant. In other words, the extroverts use the first function mainly in the outer world of extroversion, introverts use the first function mainly in the introverted world of concepts and ideas.

In addition to the dominant function, an auxiliary function will be developed to provide balance. The auxiliary function provides balance between extroversion and introversion. For extroverts, the dominant function will be extroverted, and the second or auxiliary function will be typically used in the inner

world. In case of introverts, the first or the dominant function will be introverted and the auxiliary function will be used in the outer world. Hence, in contacts with the people, introverts are often underestimated as they show their best function to the inner world and the second function to the outer world. This may lead to the misconception that extroverts may never like to be alone and introverts may assume that type theory says they never like to be social instead, the type theory assumes that every one lives in both the extroverted and introverted worlds to some extent, but that for each person one attitude is preferred.

The second function provides balance between perception and judgement. In the development of the auxiliary, the individual gains command of both, perception and judgement i.e. taking in information and making decisions. The JP preference points to the function used in the extraverted attitude, for both extraverts and introverts. If the dominant function is typically extroverted, the other three functions will be typically introverted and vice-versa. The function opposite to the dominant is typically the inferior function. The function opposite to the auxiliary is the third or the tertiary functions. These assumptions make it relevant to use the type formula in identifying the use of dominant, auxiliary and inferior functions for each personality type.

## Interpretation of MBTI Scores

Scores were designed to show the direction of a preference, not its intensity. The strength of preference does not imply excellence. It would be incorrect to assume that an individual scoring high on certain preference has a better command on that particular preference. This score simply explains that the respondent, when forced to choose, is more clear about what he or she prefers.

It is reasonable to expect that those who report clear preferences, exercise it more and so they are likely to develop the skills associated with those preferences and thus, are more likely to develop the traits associated with those skills.

## Interpreting Levels of Preferences

The cut-off points were established by Isabel Myers which are treated as approximations, not as precise division points. The preference score for each index obtained, would give an account of the strength of the preference.

## Very Clear Preferences: (41 or Higher or 31 for F)

Respondents who show very clear preference scores (roughly 41 or more, or for the feeling pole 31 or more) usually agree that they hold the preferences reported by the MBTI. It is

important to note that it is an inquiry into the preference who uses one preference so strongly, but he can use the other preference too if required.

## Clear Preferences (21-39 or 29 for F)

If an individual's preference score are 21 through 39 (29 for F) there is a reasonable probability that the respondent holds and acts on the reported preference.

## Moderate Preference (11-19)

When preference scores are 11 through 19, the respondent may quite often agree with the description of the reported preference.

## Slight Preferences (1-9)

If the preference scores are 1 through 9, it is assumed that the preference is not distinct for any function. Low scores are often a result of diciness between the two poles.

It is to be noted here that the low preference for any pole does not show that the individual can use both the functions equally, instead it reflects the tension between the choice for the poles.

## Occupational Communication Conflict Instrument (OCCI) Form B

This instrument was developed by Putnam and Wilson (1988) to measure the conflict management in organizations.

In this instrument there are 30 items related to conflict management styles. These items are to be rated on a seven point scale ranging from 'Always' (7) to 'Never' (1). Putnam and Wilson (1988) did factor analysis of their original scale having five conflict management styles, e.g., avoidance, accommodation, collaboration, compromise and competition. On factor analysis these five factors (styles) were reduced to three styles namely non-confrontational, solution-oriented and control.

In this study, the revised scale having 3 conflict management styles was picked up for use. These three styles of conflict management represent the traditional five styles of conflict management.

1.  Non-Confrontational (avoidance and accommodation)
2.  Solution - Oriented (includes collaboration and compromise)
3.  Control (it is synonymous with competition).

### Reliability

The reliability of Occupational Communication Conflict Instrument (O.C.C.I.) was calculated from the data obtained from 60 managers belonging to four organizations chosen randomly. The

reliability was estimated by K-R method. The results have been given below:

## TABLE 2.3

### Reliability Index of O.C.C.I.

| CONFLICT MANAGEMENT SYSTEL | RELIABILITY INDEX |
|---|---|
| SO | 0.535 |
| NC | 0.738 |
| C | 0.633 |
| AS A WHOLE | 0.763 |

The reliability of the test was found to be 0.763. The reliability for each style was found to be as follows. For Solution Oriented (SO), the reliability was found to be 0.535, for the Non-Confrontational Style (NC), it was estimated to be 0.738 and for the control style of conflict management was estimated to be 0.633.

## Internalization of Conflict Scale (ICS)

On the basis of the model of Pondy (1975), an attempt was made to develop a rating scale in order to ascertain the proposed dependent variable, internalization of conflict. According, to this model the 'Felt' conflict precedes the phase of manifestation of conflict and succeeds the perceived conflict.

Latent  -  Perceived  -  Felt Conflict  -  Manifestation of Conflict
Conflict  Conflict

Action Behaviour

In other words,

Manifested = f(Perceived Conflict + Internalization of Conflict)
Conflict

Thus, the main focus is on the felt conflict or the internalization of conflict which has been studied by carefully formulating the items depicting only the internalization of conflict or the felt conflict. The instrument consists of 38 items representing various conflicting situations at work-place. This scale with 38 items representing eight dimensions were derived after detailed qualitative and quantitative analysis.

In the initial stage, there were 88 items related to the concept. This was given to the experts for qualitative evaluation. After the evaluation of these experts, 28 items were eliminated and the investigator was left with 60 items. The pilot study was done with these 60 items. The data were collected from managers of the three organizations irrespective of the nature of the organization.

The sample distribution was as given in Table 2.1:

The entire data was coded in the form of a data matrix. It underwent various transformations. The very first statistical method used was Factor Analysis.

Whenever, correlation coefficients of a given set of variables are available, factor analytic techniques enable the data to be 'rearranged' or 'reduced' to smaller set of 'factors' or 'components.'

Factor Analysis deals with –

(a)  Correlation matrix between the component variables.

(b)  Extraction of common factors that reflect in the relationships among components.

(c)  The possibility of naming these factors with the help of factor relation.

## Transformation No. 1

The first transformation of data took place when ratings on 60 items were transformed into a correlation matrix.

The Principal components are exact mathematical transformations of original variables. These principal components reflect the inbuilt structures within the data. These inbuilt structures are the 'factors' which are used in the research. The communality estimates in the table are all equal to 1.00.

## Transformation No. 2

The extracted factors depict the variance in the internalization of conflict due to eight dimensions. Each factor

has an Eigen Value, which shows the relative importance of the single factor of internalization of conflict. This eigen value depicts the solution of simultaneous linear equations. The roots obtained from the solution of these linear equations are called EIGEN VALUES. The number of common factors should be equal to the number of eigen values greater than one. Thus, eight factors were taken into consideration which showed the last eigen value greater than one.

The next table (2.5) shows the extraction of eight factors, where the factor loadings of all the 60 items on each of the eight factors can be seen. These loadings can be negative or positive.

## TABLE 2.4

### Factor Analysis (Initial Statistics)

| FACTOR | EIGEN VALUE | % OF VARIANCE |
|--------|-------------|---------------|
| 1 | 12.50725 | 25.0 |
| 2 | 3.29058 | 6.6 |
| 3 | 2.91521 | 5.8 |
| 4 | 2.46092 | 4.9 |
| 5 | 2.3350 | 4.5 |
| 6 | 1.71619 | 3.4 |
| 7 | 1.36752 | 2.7 |
| 8 | 1.14927 | 2.3 |

## TABLE 2.5

## Factor Analysis (Varimax Rotation Method)

| FACTOR NO. | ITEM NO. | ITEM | FACTOR LOADING |
|---|---|---|---|
| I | 56 | Frequent challenges on jobs or in personal lives could be very disturbing | 0.79772 |
| | 15 | The departmental rivalries affect personal well-being | 0.65992 |
| | 36 | The difficulty in communicating with superiors may make a person feel incompetency | 0.54303 |
| | 41 | If a person is not trusted, he might get upset | 0.72897 |
| | 53 | If a person sees no opportunity to reach to the top in the organization, he will feel frustrated | 0.46308 |
| II | 60 | Ambiguity in the policies and procedure of the organization may mentally upset individual's working | 0.77985 |
| | 57 | Changes are normally painful to the people | 0.74751 |
| | 59 | A feeling of insecurity may surround people if there are sudden changes in rules and regulations of the organization | 0.70254 |
| | 58 | Sudden changes thoroughly upsets the routined people | 0.59934 |
| | 33 | Overloading of work may make a person feel sick | 0.63303 |

| FACTOR NO. | ITEM NO. | ITEM | FACTOR LOADING |
|---|---|---|---|
| III | 51 | Low adaptibility of a person in the organizational situation may affect his working adversely | 0.76029 |
|  | 37 | People may feel lost and confused if they are not able to communicate freely in the organization | 0.52872 |
|  | 32 | It is irritating to work with careles people | 0.61134 |
|  | 24 | A feeling of dislike towards the job may arise if group members ignore a person | 0.51497 |
|  | 14 | Disclosure of group's secret might lead to anxiety and tension among group members | 0.73948 |
| IV | 42 | Criticism may affect people adversely | 0.79547 |
|  | 23 | Sarcastic comment made by a colleague may spoil mental peace | 0.63584 |
|  | 43 | The presence of aggresive people might make affect one's working adversely | 0.57804 |

| FACTOR NO. | ITEM NO. | ITEM | FACTOR LOADING |
|---|---|---|---|
| V | 6 | It becomes disturbing if some-one's working is obstructed by others | 0.74729 |
| | 21 | If a person's poor performance adversely affect the group's functioning, he is likely to suffer with a sense of guilt | 0.61668 |
| | 25 | Unhealthy organizational system gives a feeling of unpleasant-ness | 0.51814 |
| | 31 | Superiors might feel disturbed if the subordinates do not do their job sincerely | 0.51281 |
| | 20 | If the co-workers are not co-operative a feeling of frustra-tion arises | 0.74966 |
| | 8 | Superior might get upset if his orders are not followed properly | 0.73279 |
| | 50 | If a superior can not influence his subordinate to become a good employee he (superior) might feel uncomfortable | 0.80997 |
| | 49 | It is difficult to maintain mental peace when one's job-security is threatened | 0.53824 |
| VI | 1 | When enough resources from the organization are not obtained, a feeling of helplessness arises | 0.82545 |
| | 5 | Lack of sufficient resources may lead to a feeling of incompetency | 0.62285 |
| | 2 | Due to unavailability of resources, loss of interest in work may take place | 0.50772 |

| FACTOR NO. | ITEM NO. | ITEM | FACTOR LOADING |
|---|---|---|---|
| VII | 34 | People, who take jobs more than they can do, often put themselves in fatique | 0.80546 |
| | 38 | If a person is unable to express his disagreement with his superior over any matter, he might feel guilty of doing injustice to the organization | 0.80729 |
| | 9 | Often, the contradictory instructions from superior may put the subordinate in confusion | 0.85502 |
| | 29 | Long waiting may upset a time conscious person | 0.51413 |
| VIII | 17 | If a person does not get recognition in the organization he may get upset | 0.80398 |
| | 16 | If a persons views are always rejected in a group, he might feel alienated | 0.74919 |
| | 45 | If a person does not get respect and appreciation in the organization he/she might feel disgusted | 0.62281 |
| | 18 | Lack of financial rewards might lead to reduction in motivation to work | 0.73460 |
| | 30 | If the value system of the employee and the organization do not coincide then the employee is likely to suffer from mental agony | 0.60284 |

The results of factor analysis helped in obtaining eight dimensions of ICS which are as follows:

TABLE 2.6

**Dimensions Obtained After Factor Analysis**

| DIMENSION NO. | DIMENSIONS | ITEM NO. |
|---|---|---|
| I | Job Prospects & Working Condition | 1,2,3,20,38 |
| II | Unexpected Working Situation | 8,9,10,11,21 |
| III | Workgroup Situations | 12,13,14,15,16 |
| IV | Threat | 17,18,19 |
| V | Work Coordination | 24,25,26,27,28, 29,30,31 |
| VI | Resources | 32,33,34 |
| VII | Individual Inefficiency | 22,23,35,36 |
| VIII | Recognition | 4,5,6,7,37 |

These dimensions are defined below:

1.   JOB PROSPECTS/WORKING CONDITION (JP/WC)

This dimension shows the possibilities of climbing-up the ladder with an essence of trust and harmonious work atmosphere.

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2.  UNEXPECTED WORK SITUATION (UWS)

    This dimension refers to the deviated work situations
which occur occasionally without any notice for which the
individual is not prepared beforehand.

3.  WORKGROUP SITUATION (WGS)

    Workgroup situations include the adaptability and
ability to work with the group in the organization.

4.  THREATS (T)

    The criticism, sarcasm and presence of people of
different temperament have been covered as threats for an
individual working in the concerned organization.

5.  WORK COORDINATION (WC)

    This dimension shows a situation which is a web of
working people with different abilities, temperament and
extent of coordination.

6.  RESOURCES (Rs)

    The financial and material assets which help the
organization to achieve tangible results like economic gain

or loss, productivity margin, etc, have been referred to as the resources.

7. <u>INDIVIDUAL INEFFICIENCY (II)</u>

This dimension describes about the individual's extent of expression or presentation of an issue or the ability and the inability to accept any decision taken by the organization.

8. <u>RECOGNITION (Rc)</u>

The acknowledgement of one's contribution towards the working of the organization has been defined as recognition.

The Internalization of Conflict Scale (ICS) is a 5-point scale, which varies from the maximum agreement (5) to maximum disagreement (1). In other words, (5) represents the maximum internalization of conflict and (1) represents the minimum internalization of conflict.

As stated earlier, this scale with 38 items was used to collect data to establish the reliability and validity of the Instrument. For this purpose the data were collected from four organizations (Table 2.2).

## Reliability

Reliability indices of the internalization of conflict scale (ICS) as a whole was found to be 0.680. The dimension-wise reliability indices was calculated by Kuder-Richardson method.

### TABLE 2.7

### Dimensionwise Reliability Indices

| DIMENSION NO. | DIMENSIONS | RELIABILITY INDEX r u |
|---|---|---|
| I | Job Prospects & Working Condition (JP/WC) | 0.568 |
| II | Unexpected Working Situation (UWS) | 0.660 |
| III | Workgroup Situations(WGS) | 0.592 |
| IV | Threat (T) | 0.686 |
| V | Work Coordination (WC) | 0.723 |
| VI | Resources (Rs) | 0.591 |
| VII | Individual Inefficiency (II) | 0.500 |
| VIII | Recognition (Rc) | 0.613 |

The above table shows that the reliability indices varied from 0.500 to 0.723 from one dimension to the other. This range can be treated as fairly good indices of reliability for our purpose.

## Validity

To test the validity of the Internalization of Conflict Scale (I.C.S.) the dimensions of I.C.S. were correlated with the three styles of conflict management i.e. Solution Oriented Style (SO), Non-Confrontational Style (NC), Control Style (C) of conflict management.

It was hypothesized that since the internalization of conflict in Industrial set-up will be due to eight identified reasons (according to the present study) the conflict management style will differ from one conflicting situations to the other. In the present study, it was expected that according to the previous studies, the most prominent personality type in management set-up, were found to be ISTJ and ESTJ, the chances of non-confrontational style (NC) of conflict management would be the most obvious choice of managing conflict at work place.

The validity of the I.C.S. was established by correlating the dimensions of I.C.S. with the conflict management styles depicted in O.C.C.I. with a sample of 200. The sample distribution for this purpose is as given below:

TABLE 2.8

## Organizationwise Sample Distribution for the Establishment of Validity of ICS

| Total No. of Respondents | O 2 | O 4 | O 5 | O 6 | O 7 |
|---|---|---|---|---|---|
| 200 | 80 | 35 | 30 | 21 | 34 |

The following table shows the co-efficients of Pearson's product moment correlation (r) estimated between the dimensions of internalization of conflict and the three styles of conflict management.

TABLE 2.9

## Product Moment Correlation Between Dimensions of ICS And OCCI

| DIMENSIONS OF ICS | DIMENSIONS OF OCC I | | |
|---|---|---|---|
| | SO | NC | C |
| JP/WC | 0.128 | 0.180** | 0.077 |
| UWS | 0.27 | 0.193** | 0.001 |
| WG | 0.123 | 0.211** | 0.062 |
| T | 0.143* | 0.225** | 0.032 |
| WC | 0.097 | 0.138* | 0.129 |
| Rs | 0.006 | 0.185** | - 0.018 |
| II | 0.096 | 0.131 | 0.179* |
| Rc | 0.103 | 0.189** | 0.138* |
| T | 0.125 | 0.245** | 0.105 |

N = 200    *$p$  .05           ** $p$  .01

As hypothesized, the prominent style of management of conflict would be non-confrontational, the results too show the same. To be precise, the internalization of conflict due to job prospects and working conditions (JP/WC), Unexpected Work Situation (UWS), Workgroup Situation (WGS), Resources (Rs) and Recognition (Rc) in the organizational set up show significant positive product moment correlations (rs) with the non-confrontational style of managing conflict, 0.180, 0.193, 0.211, 0.185 and 0.189, respectively.

The correlation ($\underline{r}$) between the internalization of conflict due to threats (T) show only one significant positive relationship with Solution Oriented (SO) style of managing conflict (0.143). At the same time significant positive correlations were found between Individual Inefficiency (II) and Control Style (C) of conflict management and Recognition (Rc) and Control (C).

By and large, the present data support the hypothesis and the validity of the instrument is established. The correlation between the total I.C.S. and NC (0.245) which shows a significant positive relation.

Norms of I.C.S.

For the present study, the percentile norms were also prepared. The sample size used for this purpose was equal to 200.

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Figure 2.6

**Graphical Representation of Percentile Points**
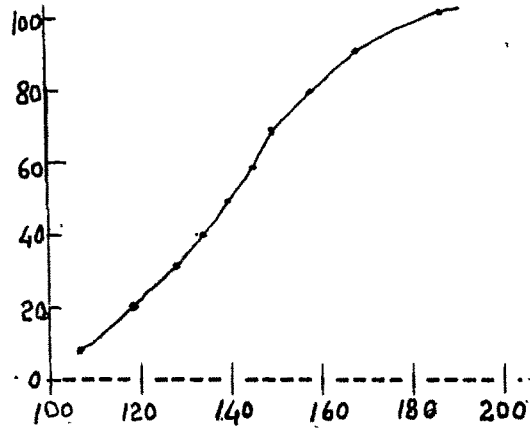


The percentile points of I.C.S.

$P_{10}$ = 106.64            $P_{60}$ = 145.86

$P_{20}$ = 121.038          $P_{70}$ = 153.13

$P_{30}$ = 128.73           $P_{80}$ = 162.10

$P_{40}$ = 134.36           $P_{90}$ = 171.07

$P_{50}$ = 139.8            $P_{100}$ = 189.5

The Percentile ranks were estimated with the help of the following formula:

$$PR = \frac{\text{No. of persons below score + half the persons at the score}}{N} \times 100$$

# TABLE 2.10

## Percentile Ranks

| PR | σ SCORE | % OF AREA BETWEEN CORRESPONDING |
|---|---|---|
| 9.25 | - 1.2σ to - 3σ | 9.9 % |
| 24.5 | - 0.84σ to - 1.2σ | 14.6 % |
| 24.5 | - 0.2σ to - 0.84σ | 15.75 % |
| 40.25 ) | + 0.2σ to - 0.25σ | 17.5 % |
| 40.25 ) | | |
| 57.75 ) | 0.5σ to 0.25σ | 13.75 % |
| 57.75 ) | | |
| 71.5 | 0.84σ to 0.52σ | 11.25 % |
| 82.75 | 1.64σ to 0.84σ | 15.5 % |
| 98.25 | 2.33σ to 1.64σ | 0.75 % |
| 99 | 3σ to 2.33σ | 1.00 % |

The above given graphical presentation was checked for the skewness and kurtosis by the standard formula.

It was found that the curve is slightly negatively skewed (-0.945) and at the same time it is slightly leptocurtic (0.25) i.e., more peaked than the normal curve.

## Symptom Checklist

The symptom checklist was designed to study the internalization of conflict in the light of some of the behavioural and emotional symptoms experienced by any individual who is in conflict situation.

It consists of 35 symptoms with the dichotomous replies of 'Yes,' or 'No.' In this checklist, 'Yes' carries 2 points and 'No' carries 1 point.

The reliability of this symptom checklist was estimated to be equal to 0.671 by K-R method.
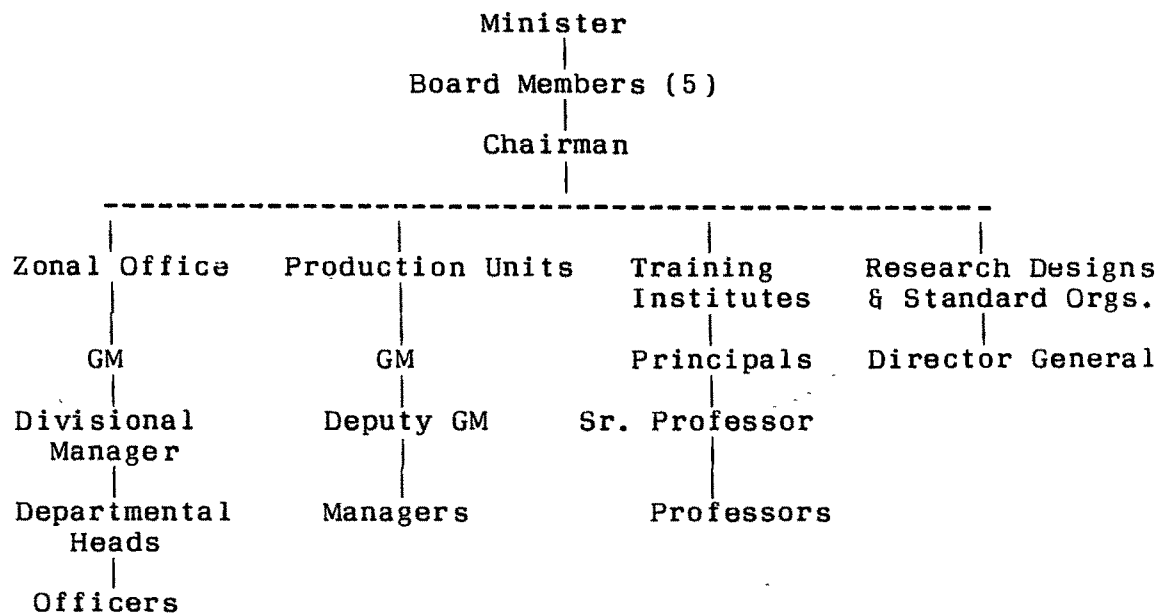
## SITE AND SAMPLE

After going through two stages of the data collection; the focus was on the study of the relationship among the three variables, i.e. Personality types of managers, internalization of conflict, conflict management styles.

To study this phase, the data were collected from one of the largest public sector organization. The history of this organization dates back to the year 1853.

The legislative power with respect to the organization vests exclusively in the Indian parliament. In other words, the legislative power is totally in the hands of the Government of India. Thus, the ministry is therefore, responsible for the management and running of the organization. It is authentical in its step paramedical organizations structure and its decision making organization is divided in three levels, i.e. the Board, the zone and the division.

The Board mainly consists of the Diretors, Joint Directors, Deputy Directors. The zone consists of various departments and officials associated with these departments i.e. engineers, commercial officers, finance officers, personnel officers, stores officers, signal and telecommunication and security. The division is responsible for the day to day functioning of the organizations. It is managed by the representative officers of all departments. The hierarchy of the organization is given in the form of following flow chart.

## Figure 2.7

### Hierarchical Chart of $O_2$

```
                        Minister
                           |
                   Board Members (5)
                           |
                        Chairman
                           |
    -----------------------------------------------------
         |                |              |                |
   Zonal Office    Production Units   Training      Research Designs
         |                |           Institutes    & Standard Orgs.
         |                |              |                |
        GM               GM          Principals    Director General
         |                |              |
   Divisional        Deputy GM    Sr. Professor
    Manager               |              |
         |                |              |
   Departmental       Managers       Professors
     Heads
         |
   Officers
```

The organization has a vast organizational structure, the chart shows only that part of the hierarchy which was found relevant in the present context.

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It is a bureaucratic organization. In terms of Hofstede (1980) the extent of uncertainty avoidance is extremely high. The individuals leave the organizations only when they retire. The individualism-collectivism is not very distinctive. The tendency, is towards collectivism, which is observed on occasion of festivals and rituals. The interpersonal relations are given lot of importance. The power-distance is very high. The new officers are trained, to develop 'officer like quality'. The hierarchical culture has led to (OLQ) kind of caste system where the status of department varies. The employees are non-assertive, non-aggressive towards their task, thus representing low masculinity the fourth dimension of Holfstede.

## DESIGN AND ANALYSIS

The study was conducted with the help of questionnaire. The questionnaires were checked and those found incomplete in any respect were rejected.

To study the phase of 'felt' conflict (Pondy, 1967), the internalization conflict scale, with a symptom checklist was designed by the investigator. The discriminant analysis was used to see how well the predictors distinguish between the presence and absence of the symptom. With this it could be understood, that the predictor, i.e. internalization of conflict dimensions involve behavioural symptoms and thus, the phase shows an independent significance.

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## STATISTICAL ANALYSIS USED

This section of the chapter focuses on the statistics used to analyze the data at various stages.

In the initial stage, when the Internationalization of Conflict Scale (ICS) was developed, the item analysis was done. This was followed by factor analysis.

After arriving at the final instrument, the data was subjected to reliability tests by Kuder-Richards method.

Discriminant analysis was done for 8 dimensions of I.C.S. to see how well the predictors (ICS) distinguish between the absence and presence of the symptoms.

The $t$ tests were used to test the significance of difference:

1.  Between Extroverts and introverts for eight dimensions of I.C.S. and the internalization of conflict score as a whole.

2.  Between Extroverts and Introverts for 3 styles of conflict management i.e. non-confrontation, solution - oriented and control style of conflict management.

3.  Between ISTJ and ESTJs for I.C.S.

4.  Between ISTJs and ESTJs for conflict management.

5. Between high and low level of I.C.S. for four indices (EI, SN, TF, JP)

6. $\underline{t}$ between 4 indices of personality types and 3 styles of conflict management.


Pearson's product moment correlations were calculated ($\underline{r}$):

1. Between eight dimensions and ICS as a whole with 3 styles of conflict management.

2. Between eight dimensions of ICS and ICS as a whole with 4 indices of personality types (EI, SN, TF, JP).