

CHAPTER-3

METHODOLOGY

The present study is aimed at assessing the affiliation of trade union members. The affiliation is being assessed in five affiliative syndromes viz (1) security (2) economic well being (3) ideology (4) political beliefs and (5) leadership aspects of the union. Further, importance is also given to the assessment of the motivational and personal needs of the employees. The motivational areas are : (1) adequate earning (2) work achievement, (3) Promotion opportunity (4) suitable type of job (5) comfortable working conditions (6) opportunity to learn a job (7) job security and (8) competition. The next purpose of the study is to determine the need pattern of these employees as measured by Edwards Personal Preference Schedule (E.P.P.S).

Labour is the most important factor of production in industry. Labour is defined by economists as " any exertion of mind or body undergone partly or wholly with a view to some good other than pleasure derived directly from work"¹. Labour is not a passive object, but is an

1. Marshall (1961). Principle of Economics, E.L.B.S. Publication.

active and live soul which continuously acts and reacts in order to satisfy its natural desire for few comforts, new pleasure and improve standard of living. In order to attain more necessary comforts, a worker shows more loyalty to his group and group members with whom he can participate more freely, and have more liberty to express his emotions.

The projection of the union affiliation of a union member is widely related to the total structure of union, its constitution, ideology, political set up in particular and economic condition of a country, cultural background, and the relationship of a worker with the management. Keeping in view the importance let us turn our attention to see what is affiliation.

Affiliation

By nature, man is gregarious. Most of his time is spent with other people - parents, family friends, neighbours, club members and so on. The formal and informal situation, that lead the organism to combine together. The attainment of such combination is very much related to affiliation behaviour of an individual. Trade union is of formal type in which members act cohesively to attain their goal.

Affiliation has been defined in the Encyclopedia of Psychology in the following way²:

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2. Eysenck, Arnold, Warzburg, Meili, Encyclopedia of Psychology, Vol.1 Search Press, London.

uncertainty about the appropriateness of emotional reactions, about the correctness of opinions or one's own abilities lead to affiliation with individuals who are experienced as similar to oneself.

Operation of definition: Affiliation can be defined as a social need which stimulate the organism into gregarious tendencies of maintaining friendship, forming a group, becoming member of different groups, showing interest and engaging in group activities etc. It can, further, be defined as an association which satisfies personal, social, political ideological and economic needs of the individuals.

It is generally assumed that union affiliation can be projected through different union affiliation syndromes such as security, economic well being, ideology, political beliefs and leadership. These syndromes are independent to each other but very much interdependent to project trade union affiliation.

Human relation and affiliation needs: The traditional type of human relation had completely faded away and a new art of human relations began to emerge ever since late Elton Mayo started his experiments at the Hawthorne works of the Eastern Electrical Company in Chicago. A new vista of human relation was started in industry and Elton Mayo was remarkably successful in this as an evangelist. In his theory, Elton Mayo (1945)³ stated that workers tend to cluster together into informal groups in order to fill a void in their lives and

3. Opt. ct.

that this void results from the basic need for cooperation, and comradeship which modern industrial organisation has ignored. Further, these informal groups could exert a far stronger pull on the workers' motivation than the combined strength of money, discipline, and even job security, itself. Mayo certainly stressed enough in condemning the impersonal factory system. The growth of trade union demonstrates the pronounced outburst of old system.

Lateron, Schatcher gave more scientific approach on affiliation motive in general. According to him affiliation could be projected under two situations (1) seeking affiliation because of pleasant stimulus reward value of the affiliative relationship (approach behaviour) (2) Seeking affiliation because of painful stimulates value of rejection. A variety of factors have been found related to these processes of affiliation - acceptance, rejection, pressure towards uniformity, high anxiety, unpleasant past, similarity between the people, self evaluation and objective of evaluation of opinion and emotion. In the industrial society, the workers come together in a common platform either by painful stimulus or by pleasure stimuli. Both these stimuli which enforce the workers to unite and to be loyal to the organisation are termed as affiliation. The structure of a group is the extent to which its members perceive themselves as belonging to the group. This belongingness is reflected

through the affiliation of the union. Some employees of a given organisation may individually consider themselves merely as a person who work for that organisation along with a number of others. Their goals are not common goals but individual goals. They may remain passive members of the union and not active members. Their affiliation towards the union will be very much static and may reduce in later stages.

Motivation: Motivation is basic psychological process.

It is a hypothetical construct that is used to explain behaviour. It should not equate behaviour. Any study on motivation deals with analysis of the various factors which invite and direct an individual action. Psychologists use the concept of motivation in conjunction with three basic features of behaviour; the first is that there are variations in the energy with which an act is performed, secondly differences exists in the direction of behaviour under the same condition and lastly, it is an energising condition for the organism and directs the organism into certain goal⁴.

Motivation of the workers with their personal needs will have a considerable influence on affiliation of union members. As Tolman (1932)⁵ puts it, "his (organism) behaviour is therefore purposive in the sense that it is directed and hence is organised in reference to particular end". Motivation does

4. Sanford E.H Psychology : A Scientific study of man.

5. Tolman E.C. purposive behaviour in Animal and Men"
Century 1932.

not change the individual's capacity to work, but an incentive given in the form of motive will have an influence on work out put. The concept of and application of motivation is more closely associated with industrial psychology. In the present study eight motivational areas have been covered; they are related to financial and non-financial motives.

Personal Needs:

The term need is used, here, in the sense Murray (1938)⁶ used it. It is a construct which stands for a force (tension caused by internal or external pressure) in the organism which organises perceptual and conative processes and directs behaviour towards the achievement of a satisfying (reduced tension level) state for the organism.

'Need' in a simple word is a 'want' state, which impels organism towards some 'goal' or away from it, to reduce tension caused by the 'want' state when need is not active, it is a state of readiness to approach or to avoid certain objects, conditions, or persons in order to reduce tension.

Needs may be manifest (expressed through striving towards, goals which may satisfy the need) or latent (or passive) which do not find expression due to certain unfavourable conditions. Similarly needs may be conscious or unconscious and both types may be manifest or latent.

6. Murray Henry (1938) Exploration in personality, New York Oxford University Press.

The need which are common to all and are satisfied without any obstructions do not form basis for the differentiation, among individual's motivational make-up or personality (individuality). Most of the viscerogenic needs are of this type. On the other hand psycho-genic needs differ from individual to individual in their strengths and manifestations depending upon individual's environmental conditions for the acquisition and expression of their needs. These needs, thus form a basis - for personality differences and provides explanation for individual differences in behaviour in a given situation.

Another important characteristic of the 'needs' is that they get integrated to those objects or conditions which repeatedly lead to satisfying state. If this kind of integration has taken place, whenever, 'need' is aroused organism will seek integrated objects or conditions. On the other hand, perception of these objects or conditions may also arouse the integrated needs.

Statement of the Problem

The problem of the present investigation is to study trade union affiliation in relation to motivational and personal needs. Trade union is an institution which is aimed at protecting the workers. They join the union and identify themselves with the union, which may be termed as "affiliation". Since union is a social institution, it provides opportunities

for the satisfaction of many of their needs, viz. economic betterment, security, identification, self expression, group pressure and recognition in society.

Certain motivational and personal needs will influence the affiliation of trade union members. Further, it is believed that there will be variation of motivational and personal needs among the white collar and blue collar employees.

Objectives of the study

Based on the theoretical assumption mentioned above, the present study aims to investigate a number of phenomenon. In the first place it attempts to study the affiliation tendencies of white collar and blue collar workers belonging to three different unions on affiliation syndromes, namely (1) Union ideology (2) security (3) economic well being (4) leadership aspect of the union (5) political beliefs of the workers. It is believed that among the several factors, the above five aspects are much more significant in controlling and determining trade union affiliation. It is further assumed that the workers belonging to three different unions namely All India Trade Union Congress, (AITUC), Indian National Trade Union Congress (INTUC) and Hind Mazdoor Sabha (HMS) will have different patterns of affiliation with respect to the above five affiliation syndromes.

The second objective is to study the motivation aspect of workers. Motivation has been divided into eight areas,

motivation for (1) adequate earning (2) comfortable working condition (3) suitable type of job (4) work achievement (5) opportunity to learn a job (6) job security (7) opportunity for promotion and (8) competition. It is inferred that there will be different patterns of motivation of the workers on different dimensions.

The third purpose of the study is to determine the need patterns of these workers with the help of Edward Personal Preference Schedule (EPPS).

The last objective is to treat affiliation tendency as a dependent variable and predict it on the basis of motivational dimensions and needs.

The objectives are summarised in simple statement forms as under:

- 1) To determine the affiliation tendency of trade union members among the three different unions viz (a) All India Trade Union Congress (AITUC) (b) Indian National Trade Union Congress (INTUC) and (c) Hind Mazdoor Sabha (HMS).
- 2) To determine the trade union affiliation tendency of the workers of these unions with respect to affiliation syndromes or factors such as union ideology, security economic well being, leadership aspects and political beliefs.
- 3) To study the motivational aspect of the union members belonging to all the three type of unions. The motivational

dimensions are adequate earning, comfortable working conditions, suitable type of job, work achievement, opportunity to learn a job, job security, opportunity for promotion and competition.

- 4) To study the effect of nature of job (white collar and blue collar) on affiliation tendency among the workers of the three unions.
- 5) To study the interaction effect of type of union and nature of job on trade union affiliation of workers.
- 6) To study the interaction effect of the type of union and nature of job on motivation of workers.
- 7) To study the interaction effect of type of union and nature of job on needs of the workers.
- 8) To predict trade union affiliation on the basis of motivation and personal needs of the workers.

Hypothesis

Based on the above objectives the following hypotheses were formed:

- 1) The degree of trade union affiliation with respect to union ideology, economic security, political and leadership aspects will vary according to the type of union.
- 2) Trade union affiliation will vary according to the nature of job (white collar employees and blue collar employees).

- 3) The degree of trade union affiliation will be influenced by the combined effect of type of union and nature of job.
- 4) The general motivational aspects of the employees will vary according to the type of union to which they belong.
- 5) The motivation of employees will vary according to the nature of job (white collar employees and blue collar employees).
- 6) The general motivation level will be influenced by the combined effect of type of union and nature of job.
- 7) The personal needs of union members will vary according to the type of union.
- 8) The personal needs of the employees will vary according to the type of job.
- 9) The personal needs of employees will be influenced by the combined effect of type of union and nature of job.
- 10) Trade union affiliation can be predicted with combined influence of general motivation and personal needs.

RESEARCH TOOLS

TRADE UNION AFFILIATION QUESTIONNAIRE

The purpose of the questionnaire is to assess the affiliation of trade union members. By nature, men are prone to be gregarious. It was generally assumed that affiliation could be either a means to an end or an end itself. People might seek the company of others in order to gain some kind of impersonal reward, which others meted out, such as money, favours or protection or they might socialise simply because they enjoy it.

Affiliation is a social need which stimulates the organism into gregarious tendencies such as making friends, forming groups or becoming members of different groups:

Main features - There are 30 questions covering five areas namely security, economic well being, ideology, political condition and leadership. It is a 5 point scale ranging from strongly agree to strongly disagree. Area-wise description is as follows.

Security aspects - Workers show much affiliation towards their unions because their security is in danger or they want to protect it. They do believe that a strong and united trade union is a foundation for their survival. Security is also related to the overall prosperity of the workers. It also includes financial and non-financial benefits. Further, security syndromes denote social security, the prosperity of the workers and the prosperity of the nation.

Economic aspects: Generally, national economic policy and in particular the labour policy will have a definite impact on trade union activities and its development. Even cordial relation between the management and the workers, between the workers and the elected government depends very much upon the economic aspects. In the sense of union affiliation,

economic aspect largely depends upon the economic betterment of the workers in terms of wage policy, profit sharing, their individual right to hold the job, etc.

Ideological aspects - Ideological aspects of trade union affiliation is related to the free stable and independent trade union movement in the country. A common philosophy to safeguard the interest of the workers. Further ideology denotes the moral, the intellectual, the social, and the cultural development of the members, trade union participation in the socio-economic upliftment of the society. And also ideologically it expresses the desire to keep the movement of trade union high above antagonistic forces like caste, creed, religion and language.

Political aspects - Political syndrome of trade union affiliation is related to the practice of democratic norms in the union set up. Further, it implies the merging of all trade unions for the welfare of employees. A political consciousness is also an important strategy of this aspect.

Leadership aspects - Leader is the most important chain between the management and the workers. Very often workers follow the guidelines of their leader. They are often concerned with type of leader, style of functioning of a leader. Further, it denotes the establishment of good industrial relation, a full time dedicated leader for the upliftment of the workers etc.

Exploration of the work

Most of us have encountered psychological test of one variety or another. These tests consist of items to which we are asked to respond in some specified way. In general, the questionnaire contains items that have been carefully selected and edited in accordance with the desired criteria. As the initial exploration of the work the investigator had a wide discussion with a number of people who were closely associated with labour and labour movement. The investigator personally interviewed Sr. Personnel Managers, Welfare Officers, trade union leaders, union members in addition to academicians. The interview was scheduled to get different opinions about union affiliation in statement forms. A statement may be defined as anything that is said about a psychological object. The class of all possible statements that could be made about a given psychological objective is often called a universe of the content. So, the obtained statements should reflect the desired universe of the interest, in this case trade union affiliation. Thus, the information obtained through interview schedule was used to frame questions for affiliation scale. In addition some statements were borrowed from foreign and Indian standardised questionnaires. In all hundred and ten questions were tentatively formed. After editing ninety four statements were retained and the remaining were omitted.

The ninety four questions were given to 30 judges to judge each of the item objectively to know to what extent each

statement is projecting the affiliation of workers towards their union. Necessary instructions were written on the first page. The judges were requested to judge the item on a five point-scale ranging from item indicating "extreme affiliation" to item indicating "least-affiliation". They were also requested to give their frank opinion about the weaknesses of these written statements and provide suggestions to improve the questionnaire. Judges were of heterogeneous group consisting of (1) Senior personal Managers (2) Welfare Officers (3) Trade Union Leaders and (4) Academicians from the Department of Psychology, Social Work, Political Science, Economics and Sociology.

Selection of the Statement: The criterion for selecting an item was as follows. If the statement was classified by 50% of the judges as extremely or moderately affiliated or classified as less and least affiliated it was inferred that the statement showed some kind of affiliation either positively or negatively.

Any statement which was rated 50 % towards the "extreme affiliation" or "moderately affiliated" category was treated as a positive statement whereas any statement which was rated 50 % towards "less affiliation" or "least" affiliation category was treated as negative statements. Statements with heavy concentration towards the middle or 'neutral' category were

rejected. Accordingly a total of sixty seven questions were retained. The remaining questions were eliminated because they were found incapable of projecting any type of positive or negative affiliation. The judges were also able to give more light on questions pertaining to leadership aspects. A few questions were once again re-edited based on the suggestion of the judges.

Pilot study: A pilot study was carried out to know the responses from the workers. Once again the questionnaire was given in a five point scale ranging from "strongly agree" to "strongly disagree". It was administered on 60 members of a major trade union. (A.I.T.U.C.)

Scoring and item analysis

The scoring was done in the following manner:

	strongly agree	agree	uncertain	disagree	strongly disagree
Positive statement	5	4	3	2	1
Negative statement	1	2	3	4	5

Further total scores of each sample were calculated.

A typical item analysis yields two kinds of information. It provides an index of an item difficulty and an index of validity. The index of validity may mean how well the item measured or discriminated in agreement with the rest of the test, or how well it predicts some external criteria. The

most common use of item analysis data is in the selection of best item to compose final test form.

A very common step is to divide the total samples into two criterion groups. The minimum obtained total score was 90 and the maximum was 157. Further, the total scores were arranged from low to high to make two criterion groups; these two groups discriminate each other. The first group score was very low while on the other hand, the second group score was very high. Further mean differences of the 1st and the 2nd group were also calculated on each item. The obtained mean difference was 0.0 and the highest was 2.46. Once again the mean score differences were arranged from lowest to the highest in an ascending order. After arranging in an ascending order from low to high score, a threshold point was decided to where the mean difference .53 would fall. The statements fallen above the threshold point i.e. where the mean score difference was less than 0.53 were eliminated. Theoretically, the higher the mean score difference the higher the affiliated statement. In the final version, 30 statements were included. They covered all the aspects of union affiliation. The distribution of area wise statement is as follows:

Statement	Area
1 to 6	Security
7 to 12	economic aspect
13 to 18	ideology
19 to 24	political aspect
25 to 30	leadership

Reliability: Test retest reliability of all the combined dimensions is $r.87$

Validity: The data obtained on two groups i.e. active and non-active yield a biserial $r = .614$

2. WORKER'S MOTIVATION SCALE

Worker's motivation scale is developed in a forced choice format to assess the motivation of worker. The motivation areas are adequate earning, work achievement, opportunity for promotion, suitable type of job, comfortable working conditions, opportunity to learn a job, job security, and competition.

The measurement of motivation

Man has many motives. They give direction and intensity to behaviour. Theoretically, each act has a corresponding motive or motives. Every behaviour is motivated. Included among the diversity of motives which operate in human beings in our society are motive of power, sex, affiliation, curiosity, security and achievement.

Efforts to understand motivation and its dynamics have led to search for means of measuring it. Investigators have attempted to define motivation, to determine behaviours which are related to it and to predict on the basis of motivation how workers will perform effectively.

Measurement of motivation is based on the assumption of motivational theories. Vroom's (1964)⁷ theory hypothesised that

⁷. Vroom V.H. (1964) Work motivation (New York, Wiley)

valence of effective performance increased as instrumentality of effective performance for the attainment of money, increases, assuming that the valence of money is positive. In terms of expectancy theory, Lawler (1968)⁸ argues that changing job content by making the job more challenging by job relation, or job enlargement (giving the worker more tasks) or job enrichment (giving him more challenging tasks) will increase the perceived probability of intrinsic reward.

Self report instrument

Included in the classification of self report instruments are questionnaire, rating scales and check lists which elicit individuals assessment of his own behaviour, belief or performance. Studies have shown that verbal reports liable to errors.

Projective Tests

Projective technique is based on the assumption that men project some part of themselves into everything they do. The main characteristic of projective technique is the relating or unstructured nature of the response sought from the examinee. It is postulated that when response is unrestricted, the person will be more apt to project his personality into task.

8. Lawler E.E. (1968) Equity theory as a predictor of productivity as work quality, psychological bulletin Vol.70 pp 596-610.

Development of worker's motivation scale

A motivating situation has both subjective and objective aspects. The subjective side is a condition in the individual which is called a need, a drive or a desire. The objective side is an object outside the individual which may be called as incentives or goals. Initially both a need and the proper incentive must be present to arouse behaviour.

As stated earlier eight motivation aspects have been studied. The investigator adopted forced-choice technique which is theoretically more sound than the rank order method. The motivational scale is developed using forced choice technique. Forced choice rating instruments are a relatively new development dating from World War II. The technique has been defined as⁹ "A pattern used in both self-description and rating of others, in which the individual is required to select one of a set of statements as most descriptive (and perhaps another as least descriptive)".

Forced choice rating device was introduced to meet problems arising in the evaluation of army officers in the USA. The efficiency reports were most striking examples of leniency error. Distributions were very negative with about half of the officers often being rated in the top category 'Superior'. This made for

9. Robert L. Thondike, Elizabeth: Measurement and Evaluation in Psychology and Education - Rasan Wilsey Eastern Pvt.Ltd.

good description of very small proportion of worst officers at the lower extreme but gave no basis for discriminating small proportions of the best. The forced-choice method was invoked to meet this situation. Descriptions are analysed into simple behaviour qualities stated in very short sentences or phrases. They are called elements. These elements are used in constructing items.

Theory of forced-choice technique:

It is supposed that the rater's general tendency is to rate too low and his tendencies will be counteracted by pairing of descriptions. It is supposed that irrelevant descriptions serve as 'Suppressor variables' that will operate to depress the rater's personal biases. This can best be explained by saying that if the rater is dominated by a desire to make the rates good and to avoid making him look bad in using an ordinary check list device, he could check a large number of favourable traits and avoid checking unfavourable ones. In the forced choice device, however, it is thought that under the same kind of set, the rater is likely to mark the irrelevant traits as often as relevant ones since he presumably has no inkling as to which is favourable and unfavourable traits receive weight towards the score.

Evaluation of forced choice technique:

There has been some criticism of the forced choice technique. It is recognised that the research work involved in constructing

a scale of this type is considerable and that each device must be constructed for a particular purpose for use on particular population.

Another limitation is that it has a tendency to create rater resistance because of the difficulty of the judgements that the rater is called upon to make. On the other hand, the score that results from this type of instruments, does not have any clear trait label or psychological interpretation even if it is a relatively good predictor of some particular criterion. It gives us little help in building a descriptive picture and an understanding of the individual.

The operational assumption employed while defining the concept is as follows:

Adequate earning:

To earn money by hard work, earn money by honest means, earn money according to the basic needs, to aspire to get highly paid job, to aspire to be rich.

Work Achievement:

To undertake difficult task, to work hard, to get success, to be successful, aspiring to become a man with wonderful achievement, to be very industrious, to establish a glorious record of achievements.

Opportunity for promotion:

Profession advancement, to have a good training and qualification for promotion, aspiring to get promotion,

seniority importance, promotion policies within the industrial units to perform effectively in the present job.

Suitable type of job:

Job satisfaction, enjoyment in the present job, work according to the taste, oneness with the job, due recognition for the job, prestige in the job, devotion for the job.

Comfortable working conditions:

work in a less prone accident machines, good hygienic condition in the factory, good working atmosphere, improvement in the working conditions, legal help against the improvement of working conditions.

Opportunity to learn a job:

To learn a new thing, to show interest in a new work situation, to have up to date information related to work, to experiment new things in the job, to learn modern methods from seniors, to know more about new technique.

Job Security:

Guarantee of the job, security from the unions, job security from the government, government protection of the job, desire for protection.

Competition: to have a competitive spirit and competitive atmosphere to promote industrial production by making a competitive atmosphere in the industry, to keep a problem as a

puzzle until it is solved to have a liking for the competitive fellow workers, to look into the advantages of competitive spirit.

Item judgement:

Based on the operational definition the statements were constructed covering entire motivational areas. In each area, twelve statements were finally edited, and given to ten judges to judge them objectively. The following instruction was provided in the first page "over leaf you will find a few statements covering the motivational aspects of trade union members. The areas are adequate earning, work achievement, opportunity for promotion, suitable type of job, comfortable working conditions, opportunity to learn a job, job security, and competition."

The said areas are represented in the form of statements. You have to judge whether each statement conveys the meaning of said motivation aspects in respect to each area". The judges were asked to judge each item using a five point scale viz "very much", 'much', 'neutral', 'little', 'very little'.

Selection of the statements:

The statement which received 50% of response in favour of 'very much' and 'much' was treated as a statement that conveys the meaning of a particular motivational aspect. Sixty four questions were thus finally selected covering all

the motivational aspects. Later on, they were arranged in a forced-choice format.

Content:

There are thirtytwo pairs of questions each of which are two self descriptive statements arranged in a forced choice format. All statements are in first-person singular and most of them used in the format of either 'like' or 'I believe'. Each of the statement is paired with different areas,

Administration and scoring: The instruction was given in the questionnaire itself. The responses were taken in a separate answer sheet for easy scoring. There are two statements. The respondent was asked to mark any one of the statements which was more acceptable to him. Each response carry one point. The maximum score will be 8 and the minimum will be 0, total score will be 32.

Reliability - A Test-retest reliability of each dimension of motivational areas is as follows:

	r
Adequate earning	.75
Work achievement	.64
Opportunity for promotion	.74
Suitable type of job	.80
Comfortable working condition	.82
Opportunity to learn a job	.68
Job security	.76
Competition	.75

Personal Need Measures:

Shortened form of Edward's Personal Preference Schedule (E.P.P.S.) was used for the measurement of 15 personal needs. The fifteen manifest needs measured by E.P.P.S. are : n. Achievement; n. Deference; n. Order; n. Exhibition; n. Autonomy; n. Affiliation; n. Intraception; n. Succorance; n. Dominance ; n. Abasement; n. Nurturance ; n. Change; n. Endurance; n. Heterosexuality; n. Aggression. (A short description of these needs given in Appendix A)

E.P.P.S consists of 210 pairs of statements which measure relative strength of 15 personal needs drawn from Murray's list. The statements measuring a particular need are paired twice with each of the remaining 14 needs. Subjects responding to the schedule are forced to choose one of the two statements. Thus they express their relative preference for one of the two needs. Maximum score on any need can be 28 and minimum zero.

Reliability of E.P.P.S

Split-half reliability coefficients for 15 needs range from .60 to .87 and test-retest reliability coefficients range from .74 to .83 which are shown in Table 3.1.

Table 3.1 Split-half and test re-test reliability coefficients
of 15 E.P.P.S. needs

Needs		Split half			Test Re-test		
		r_1^I	Mean	S.D.	r_1^I	Mean	S.D.
1.	n. Achievement	.74	14.38	4.36	.74	14.46	4.09
2.	n. Deference	.60	11.80	3.71	.78	12.02	3.68
3.	n. Order	.74	10.24	4.34	.87	11.31	4.45
4.	n. Exhibition	.61	14.34	3.59	.74	14.43	3.69
5.	n. Autonomy	.76	13.31	4.53	.83	13.62	4.48
6.	n. Affiliation	.70	16.19	4.36	.77	15.40	4.09
7.	n. Intraception	.79	16.72	5.01	.86	17.00	5.60
8.	n. Succorance	.76	11.63	5.65	.78	12.09	4.59
9.	n. Dominance	.81	15.83	5.02	.87	15.72	5.28
10.	n. Abasement	.84	13.66	5.14	.88	14.10	4.96
11.	n. Nurturance	.78	15.22	4.76	.79	14.04	4.78
12.	n. Change	.79	16.35	4.88	.83	16.17	4.88
13.	n. Endurance	.81	12.65	5.25	.86	12.52	5.11
14.	n. Heterosexuality	.87	16.01	5.68	.85	15.08	5.66
15.	n. Aggression	.84	11.70	4.73	.78	11.55	4.57
Consistency score			11.64	1.84	.78	11.59	1.78
N.			1509				

(Source: From EPPS Manual (1959). The Psychological Corporation, New York).

Validity of EPPS

EPPS is , basically, based upon face validity, but evidence for its validity comes from different sources.

(a) Self-rating and EPPS Measures:

Two studies described in the manual (specific reference not mentioned), one using ranking method and one 'Q' sort, show that self-estimates and EPPS scores agree perfectly for some subjects but for some do not agree. This may be due to 'ability' of some subjects to estimate their needs accurately and their ability to compare all the needs with each other objectly (without being influenced by social desirability elements), while many may be finding it not that easy. Since, with some subjects there is perfect agreement between self-estimated strength of needs and strength of needs as measured by EPPS, there is some indication that EPPS measures the 15 needs it purports to measure.

A study by Renzaglia Guy (1962) shows similar results. It shows that self-estimated scores and EPPS score agree for some subjects and do not for some. But investigation suggests validity of EPPS. For some disagreements, reasons may be the same as in the case of 'self-ranking' and 'Q sort'. studies. In another

Renzaglia Guy A. 'Estimation and Measurement of Personality Characteristics and Correlates of their Congruence'.
(J. Counsel Psy., 1962 (9)).

study by Mann (1958) , findings support the conclusions that (a) the EPPS has satisfactory test-retest reliability, and (b) the EPPS correlates with self-ratings on the variables which it purports to measure.

An Indian study by Patil (1967) showed sufficiently high positive correlation between EPPS scores and self-rating scores for all the needs.

(b) Relationship with other personality measures:

EPPS is a measure of personality and therefore studies showing relationship with other personality measures give evidence for its construct validity. One study quoted by the author of the EPPS manual (but not specified) shows relationship between Guilford Martin Personal Inventory, Taylor Manifest Anxiety Scale and EPPS. Manifest Anxiety correlated positively and significantly with n Succorance and negatively and significantly with n. Endurance. Co-operativeness on GMPI correlated significantly positively with n Deference and n Endurance Scales, but negatively with scores on n Autonomy and n Aggression scales. Similarly scores on agreeableness measure correlated positively with n Deference, n Order, n Affiliation, n Abasement, n Nurturance, n Endurance and

Mann J.M. 'Self-ratings and the EPPS. 'J. Appl.Psy., 1958 (42), 267-268.

Patil, L.A. ' A study of Possible Relationship between self-estimated and Objectively measured Personality Variables'. Unpublished Master's Dissertation, M.S. University of Baroda, 1967.

negatively with n Autonomy, n Succorance, n Dominance, n Heterosexuality and n Aggression.

Studies by Dunnette et al (1958) showing relationship between EPPS and California Psychological Inventory, by Allen (1957), Merrill (1955) showing relationship between relevant scales of EPPS and MMPI and by Schlag, Madeleine (1959) showing relationship between EPPS measures and AVL Values give evidence in favour of the validity of EPPS as a measure of personality needs. Zuckerman (1958) demonstrated validity of EPPS by differentiating rebellious, submissive, conforming and dependent groups of subjects on EPPS measures.

(c) Validity of Individual Scales of EPPS

Bernardin and Jessor (1958) found construct validity of EPPS with respect to dependency, Gisvold (1958) demonstrated validity of n Autonomy and n Deference scales, (1955)

Dunnette, M.D., Kirchner, W.K. and DeGidio Jo Anne. 'Relations among Scores on EPPS, California Psychological Inventory and strong vocational interest Blank for an industrial sample' J. Appl. Psy., 1958(42), 178-181.

Allen, R.M. 'The Relationship between the EPPS Variables and the MMPI Scales.' J. of Appl. Psy., 1957(41), 307-311.

Merrill, R.M. 'Relations of the EPPS to the Clinical and Experimental Scales of the MMPI.' (Amer. Psychologist, 1955(10) 366 (Abstract))

Schlag Madeleine, Mentioned in EPPS Manual (1959).

Zuckerman, M. 'The Validity of the EPPS in the Measurement of Dependency-Rebelliousness' J. Clinical Psy. 1958(14), 379-382.

Bernardin, A.C. and Jessor, R.A. 'Construct Validity of EPPS with respect to Dependency,' J. Consult. Psy., 1957 (21), 63-67.

Gisvold, D. 'A Validity Study of the Autonomy and Deference Sub-Scales of EPPS.' J. Consult. Pshy. 1958(22), 445-447.

Melikian (1958) showed relationship between EPPS n Achievement score and McClelland's measure of achievement motivation.

Wide use of EPPS as a measure of personal needs also indicates its validity as it reflects experts opinion in favour of this schedule as a measure of personality needs.

Social Desirability and EPPS

Social desirability element always plagues measurement of psychological measurements through inventories or other self-reporting methods. An attempt has been made to control this element in EPPS by pairing items on the basis of social desirability scale values of the items. The two items in any pair have comparable social desirability value. Pairing the items on the basis of empirically determined social desirability scale values controls the social desirability element to a great extent.

Independence of the Scale

Inter-correlations among 15 EPPS variables, as given below in Table 3.2 shows that the variables are independent.

Relevance of EPPS Needs to Indian Culture

EPPS is a reliable and valid measure of fifteen independent personal needs. These fifteen needs are global or universal in nature. Whatever be the cultural differences in the modes of expression, these needs are common human needs irrespective

Melikian, L.H. 'The Relationship between Edwards and McClelland's Measure of Achievement Motivation J.Consult.Psy. 296-298.

Table 3.2. Intercorrelations of the Variables measured by EPPS

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. n.Ach.	.x														
2. n.Def.	-.17	x													
3. n.Ord.	-.05	.26	x												
4. n.Exh	.03	-.22	-.21	x											
5. n.Aut.	.14	-.30	-.15	.09	x										
6. n.Affl.	-.33	.08	-.16	-.08	-.33	x									
7. n.Int.	-.09	.10	-.06	-.22	-.10	-.01	x								
8. n.Suc.	-.14	-.09	-.08	-.02	-.21	.09	-.16	x							
9. n.Doml.	.19	-.22	-.16	.11	.07	-.12	-.12	-.22	x						
10. n.Abs.	-.28	.16	.02	-.18	-.26	.09	.01	-.11	.34	x					
11. n.Nurt.	-.30	.05	-.16	-.17	-.36	.46	.07	.16	-.20	.23	x				
12. n.Chg.	-.14	-.09	-.18	.12	.15	.06	-.10	-.18	-.11	-.11	-.12	x			
13. n.End.	.07	.22	.33	-.27	-.13	-.15	.03	-.31	-.16	.07	-.12	-.14	x		
14. n.Het.	.02	-.28	-.16	.12	.09	-.21	-.19	.07	.04	-.29	-.21	-.07	.27	x	
15. n.Agg.	.09	-.31	-.16	.11	.29	-.33	-.20	-.01	.21	-.25	-.33	-.08	-.22	.15	x
Consistency score	.10	-.12	-.06	.00	.11	-.04	.06	-.05	.02	-.05	.00	.00	.06	.01	.05

(From EPPS Manual, 1959)

of socio-cultural environment, which only condition the relative importance of some of the needs. This conditioning, however, does not influence assessment of individual differences in the motivational make-up of individuals within a culture.

Apart from use of EPPS in several studies in the fields of education and psychology in India, relevance of the fifteen needs of Indian culture is demonstrated by the Hindi version of the EPPS standardized by R.P. Bhatnagar (1966) . Fuster (1962) used English EPPS on Indian College Students and though mean scores for some of the needs differed, all the needs were found equally relevant to Indian College students. The EPPS was considered to be a suitable measure for the measurement of personal needs. However, the length of the schedule limits its use to many situations, especially its use in industrial organisations have been very limited. EPPS consists of 225 items and forced choice method necessitates several repetitions of items. The length and repetition cause boredom and annoy many respondents and it becomes difficult to get cooperation and genuine responses from subjects. To overcome this problem a shorter version of EPPS was prepared and called SPFS. It consists of only 105 pairs of statements!

Bhatnagar, R.P. 'Development of the EPPS Schedule in Hindi.' Indian Psychological Review, 1966 (2) 103-108.

Fuster, J.M. 'A study of EPPS on Indian Students' J. Soc. Psy., 1962 (57) 309-314.

1. Courtesy- Dr.N.T.Pandey - A doctoral thesis on Personal needs, work values, and job satisfaction.

Reliability of SPSS

EPPS was administered to 100 male secondary school teachers belonging to 20 to 45 years age group. They were explained the theoretical purpose of the study and were assured that responses would be kept strictly confidential. Since aim was not only to determine reliability but also to see if the fifteen variables are relatively stable motivational dimensions of personality, SPSS was administered to the same individuals after one month with same instructions.

The scores of SPSS for each variable were doubled to make the mean scores and SDs on the two measures apparently comparable. A preliminary computation showed that this did not make any significant difference in the correlations. This procedure made the 'means' and 'S.D.' on SPSS comparable with the means and S.D for male adults reported in the Manual. No attempt was made to find out significance of differences between means and S.Ds. reported in the Manual for the adult population and means and S.Ds. obtained by SPSS, but for simple comparison purpose they are reported in Table 3.3 below, along with the correlation coefficients between each EPPS and SPSS sub-scales.

Table 3.3 Correlation coefficient for the SPPS Variables and Means, and S.Ds., for each variables as obtained by EPPS and SPPS.

Needs	Correlation coefficients between EPPS & SPPS scores	Mean & S.D. on SPPS		Mean & S.D. on EPPS		Means & S.D. reported for adult Male population in the Manual	
		Mean	S.D.	Mean	S.D.	Mean	S.D.
n.Ach.	.950	15.08	4.10	13.79	3.57	14.79	4.14
n.Def.	.874	11.26	5.19	10.85	3.68	14.19	3.91
n.Ord.	.849	12.08	4.33	12.47	3.66	14.69	4.87
n.Exh.	.832	12.80	3.71	13.05	3.54	12.75	3.99
n.Aut.	.901	15.60	4.55	14.79	3.52	14.02	4.38
n.Affi.	.880	15.84	4.62	14.07	3.85	14.51	4.32
n.Intra.	.891	15.69	4.80	15.60	4.05	14.18	4.42
n.Succ.	.821	8.61	4.55	7.49	4.24	10.78	4.71
n.Domi.	.863	15.04	4.40	16.39	3.10	14.50	5.27
n.Abas.	.858	12.89	5.60	13.21	4.26	14.59	5.13
n.Nurt.	.906	17.06	5.23	16.69	7.35	15.67	4.97
n.Chg.	.854	18.69	3.69	17.61	2.80	13.87	4.76
n.End.	.847	14.29	5.02	12.71	5.36	16.97	4.90
n.Net.	.839	14.42	5.57	14.31	5.16	11.21	7.70
n.Agg.	.865	16.81	3.99	16.09	2.63	13.06	4.60

(Courtesy Dr. N.T. Pandey)

Very high positive correlation coefficients not only show the reliability of SPPS but also indicate the personal needs measured by it are relatively stable motivational structure of an individual.

Test re-test stability for each sub-scale is given below in Table No. 3.4.

Table 3.4 Test -Re-test Reliability for each sub-scale

Sub-scales	'r'	Sub-scales	'r'
n Achievement	.78	n Dominance	.86
n Deference	.83	n Abasement	.74
n Order	.91	n Nurturance	.79
n Exhibition	.73	n Change	.88
n Autonomy	.92	n Endurance	.92
n Affiliation	.76	n Heterosexuality	.95
n Intraception	.90	n Aggression	.83
n Succorance	.77	-	

Samples: Samples were drawn from public and private industries in and around Baroda. Each of these industries has a work force of more than two thousand and they are found having full pledged trade union activities. Three major national trade unions namely (1) Indian National Trade Union Congress (I.N.T.U.C.) (2) All India Trade Union Congress (A.I.T.U.C.) (3) Hind Mazdoor Sabha (H.M.S) were selected. Totally, 120 blue collar and 120 white collar workers were selected from each of these unions.

Data Collection: Since workers are not well-versed in English language, care has been taken to translate the entire tool into

Gujarati language. The face validity of the translated material was taken into consideration. A Gujarati version of E.P.P.S was available but some changes had to be made because the translation was not upto the mark. Opinions of the language experts and psychologists were also taken to get the accurate meaning of the statements.

A formal introductory letter from the Head of the Psychology Department was taken, explaining the purpose of the research and requesting to help the investigator. With this letter the investigator approached the concerned people in various industries and office bearers of trade unions. In most of the cases the questionnaire was distributed personally by the investigator himself. However, in some cases it was distributed through the union leaders. All the trade unions have a local office in Baroda, where the respective union members gather in the evening and holidays. Such occasions were also used for data collection. To avoid mental fatigue, the two sets of questionnaire viz. Trade Union affiliation questionnaire and motivation scale were administered followed by E.P.P.S. Since sufficient instructions were written on the questionnaire, the enquiries from the respondents were minimum. Except one or two industries, all others have extended full cooperation in the data collection.

Scoring: The trade union affiliation questionnaire was of a five point scale. The scoring was carried out in the following manner.

strongly agree	agree	uncertain	disagree	strongly disagree
5	4	3	2	1

Each dimension of the affiliation syndromes were also worked out. As it is mentioned earlier, the motivational questionnaire was prepared in a forced choice format. For easy scoring a key was prepared. Totally there was eight motivational charts each depicting the scores of each motivational aspect. And finally fifteen tables were prepared for the E.F.P.S. personal needs.

Statistical Analysis: To analyse the data, the following statistical methods were used:

1) Analysis of variance

Analysis of variance is a technique for dividing the variation observed in experimental data into different parts, each part assignable to a known source, cause or a factor. In its simplest form, analysis of variance is used to test the significance of the difference between the means of a number of different samples.

In the present study, 2 x 3 factorial design was used. The data were arranged in a table containing two rows and three columns. The rows corresponds to the type of job, the column, the unions. The type of job is of

white collar employees and blue collar employees and the union is of AITUC, INTUC and HMS.

Mean differences were also calculated. Further, to find out the difference between the groups, Tukey's gap test was also calculated for each Anova table.

- 2) Stepwise multiple regression analysis was used to find out the predictive value of union affiliation from the variable studied.

The raw data were punched into IBM card and analysed with the help of the IBM 360 Computer of the M.S. University, Baroda.

SUMMARY

Main objective of the present study were :

- (1) To determine the affiliation tendency of trade union members among the three different unions viz (a) The All India Trade Union Congress (A.I.T.U.C.) (b) The Indian National Trade Union Congress (I.N.T.U.C.) and (3) The Hind Mazdoor Sabha (H.M.S).
- (2) To study the motivational aspects and personal needs of the union members belonging to the three unions.
- (3) To study the effect of nature of job on affiliation, motivation and personal needs.

- (4) To predict the trade union affiliation on the basis of motivational and personal needs.

Trade union affiliation questionnaire was developed for the purpose of the study. The questionnaire assess the union affiliation in five affiliative syndromes viz (1) security, (2) economic well being (3) ideology (4) political belief and (5) leadership aspects of the union.

Further the importance is given to assess the motivational and personal needs of the employees. To assess the motivation, a questionnaire was developed in a forced-choice format.

The next chapter deals with the discussion and interpretation of the results.