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**Measurement of Tact Necessary to Prevent Industrial Disputes
Leading To Loss of Productivity-With Reference to Industries
in South Bengal**

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**Measurement of Tact Necessary to Prevent Industrial Disputes
Leading To Loss of Productivity-With Reference to Industries
in South Bengal**



**Thesis
Submitted to the
NIMS University Rajasthan in
Fulfillment of the Requirement for the Degree of
Doctor of Philosophy
in Management**

Submitted by

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2011

PREFACE

The thesis topic “Measurement of Tact Necessary to Prevent Industrial Disputes Leading to Loss of Productivity---with Reference to Industries in South Bengal” addresses directly the needs in occupational psychology. It will also provide an invaluable source of specialist materials for many other audiences including the employees of diverse industries. The thesis addresses the requirements one by one in a self-contained way, although it makes every effort to cross-fertilize and cross-reference across different subjects, in an integrated and coherent way.

There are indeed—as became increasingly apparent to me in writing this thesis—many fine lines that can be drawn between occupational psychology and other disciplines, when it comes to focusing on a particular work issue or problem. For instance, environmental psychology can inform us of theories and concepts to understand why different types of attitude and behaviour can be found across different types of office structure and layout. Other fine lines include cross-over into counselling and clinical psychology, for example, in the counselling, coaching and developmental domains of occupational psychology; into social psychology, developmental psychology, cognitive and socio-cognitive psychology, ergonomics, health psychology and even neuro-cognitive psychology.

It might therefore be a bit futile to claim a distinct knowledge base for occupational psychology, because so many other overlapping claims on the topics it addresses. This does not mean that what occupational psychology does is not distinctive. It is in the practice of occupational psychology that we see our discipline most clearly, and in doing so, draw on the knowledge base of literally any field of psychology, and so long as it can help shed light on a problem or issue, or soundly and accountably inform our interventions.

Devapriya Chatterjee

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Certificate

This is to certify that the thesis entitled “Measurement of Tact Necessary to Prevent Industrial Disputes Leading to Loss of Productivity----with Reference to Industries in South Bengal” is submitted by Sri Devapriya Chatterjee to the NIMS University Rajasthan, Jaipur for the degree of Doctor of Philosophy in Management. It is a novel piece of work carried out by the candidate under my supervision. As of my knowledge, the present study has so far not been submitted here and other University, for the award of the degree.

It is further certified that the candidate has fulfilled all the requisite conditions / requirements laid down by the University. Accordingly, this thesis is eloquently fit for the award of the degree of Doctor of Philosophy.

Jaipur

April / 2011

Prof (Dr) R.K.Patra
(Supervisor)

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CHAPTER- 1

INTRODUCTION

The guided research is aimed to study the skills necessary for the prevention of industrial disputes, that are rampant in the southern districts of West Bengal. The main emphasis of the research is laid on the measurement of tact or skill necessary to handle situations, that lead to Industrial Disputes, resulting in go slow programmes, cease work programmes, strikes, as well as lock-outs. These forms of results of Industrial Disputes cause loss of productivity and decrease of profit, tending towards huge losses. It is therefore necessary to establish a benchmark level of tact or skill, that is required to ensure the prevention of Industrial Disputes. The benchmark level could be an empirical formula or a set of regulatory data, that would be required to be satisfied.

Furthermore, the benchmark level is based on sound psychological theory that has a proven track record. Despite the fact, that it is theory-based, the approach is very pragmatic. Rather than dealing with the psychological causes of behaviour , like attitudes and personalities, it deals with the problem directly. It is very difficult for managers to change attitudes, and even more difficult, if not impossible, for them to change someone's personality. Behaviour, on the other hand, can be changed using techniques that are relatively easy to learn and apply. Unlike some of the traditional approaches, the behavioural approach does not look for deep, internal causes of behaviour such as attitudes or personality. Instead, it concentrates on the behaviour itself, and on ways of influencing behaviour to bring about the desired change. The process of specifying the problems of the people in the industry, in terms of behaviour is not always easy. Specifying the problems in behavioural terms makes the people more amenable to solution. Behaviour can be changed, personalities cannot. Some of the additional advantages of specifying problems in behavioural terms include that the employees become aware of precisely what behaviour is expected of them. It may be required that employees are already aware of what behaviour is required , but that is often not the case. Another advantage is that specifying problems in behavioural terms often avoids negative emotional reactions to criticism.

The measurement of tact necessary to prevent Industrial Disputes leading to loss of productivity in the industries of the southern districts of West Bengal, involve the measurement of the following skills: (a) Active listening and attention – giving people space and safety to say what they need to say, giving good quality attention and asking appropriate, encouraging questions of all parties in a fair and equal way, (b) Summarizing – Being able to remember and represent key facts and issues in a non-blame, non-inflammatory way, (c) Building rapport – creating an atmosphere of trust and safety, helping people feel that their thoughts and feelings are important and understood, giving them the chance to make their own decision at their own pace, demonstrating a sincere interest in helping parties to resolve their differences, (d) Facilitation – helping people to communicate and listen to each other, allowing appropriate, non-damaging expression of feelings, keeping the overall focus and direction of the mediation, (e) Impartiality – remaining non-judgemental, impartial and fair throughout, giving equal attention and time to each person – remaining professional and impartial and not taking sides, (f) Problem solving – helping parties clarify the main issues that can be tackled in the mediation and encouraging them to explore and agree on win-win solutions, changes of behaviour or work practices, and strategies for action. Keeping the process positive and affirming, with an emphasis on how they would like things to be in the future, (g) Conflict Management – staying calm and assertive and encouraging communication even when feelings are running high. Defusing anger and damaging negative feelings or attack. Keeping on track and keeping to what is most constructive for all involved.

CHAPTER- 2

REVIEW AND LITERATURE

The working hypothesis of the guided research would consider the routes to resolution as:

a) **Conciliation** : It involves independent, neutral third parties. They act as messengers and interpreters to identify the causes of the differences and the relative significance and the importance of the issues and position taken by both sides – from ‘easily traded’ to ‘deal brokers’ - to help develop ideas and mutually own joint decisions. Conciliators do not recommend solutions.

(b) **Mediation** : It involves an independent, neutral, third party, assisting sides to resolve differences and come to an agreement. This is more proactive, as mediators may suggest their own proposals, for a resolution. However, such sides are non-binding on both or all sides.

(c) **Arbitration** : It involves referral to an independent, neutral third party, with both sides agreeing beforehand to abide by decisions. The arbitrator hears the agreements of both sides and then comes to a decision. The process is often criticized for the perceived tendency for arbitrators to award decisions alternately, regardless of the merits of each case, in order to be even handed and avoid the risk of appearing to favour one side over the other.

(d) **Intervention** : In an ideal world, with enough time and goodwill on both sides, disagreements could be settled and resolved without recourse to conciliation, mediation or arbitration. Hence intervention remains the final option when both sides in a dispute, are unable to reduce their own differences.

Apart from conciliation, mediation, arbitration and intervention, the guided research takes into consideration certain concepts of measurement, that assists in reaching the goal, that is, the establishing of an empirical formula, or a set of regulatory data, that

measures the tact necessary to prevent Industrial Disputes leading to loss of productivity -
----- with reference to industries in the southern districts of West Bengal.

The concept of measurement refers to the process of describing abstract concepts in term of specific indicators by assigning numbers to these indicators in accordance with rules. In this kind of research work, measurement has become an essential prerequisite because of a number of reasons. One of the important reasons for the measurement of tact is to allow the researchers the opportunity of using these phenomena in hypothesis to determine the effects of a set of variables on others.

Let us consider the hypothesis : “the boys who are lower in their self-esteem will tend to become chronic absentees than the boys with higher self-esteem”. Testing of this hypothesis needs a formal theoretical scheme, where ‘self esteem’ would be related systematically to ‘absenteeism’ in a casual fashion. One part of the testing process would consist of determining rank of absentees of the boys from the school attendance records. We would match those boys with another group of boys randomly; selected from the same school who are regular in attending their classes. To ensure comparable samples of ‘absentees’ and ‘regulars’, the groups could be matched according to several other characteristics such as, age, sex, year of education, socio-economic background, education and occupation of parents and others.

Other part of testing of hypothesis requires assessment of socio-psychological variable of ‘self-esteem’. How do we determine that a particular boy who is a chronic ‘absentee’ or ‘regular’ has more or less of this trait than the others ? We cannot test the hypothesis mentioned above unless and until we can quantify the variable ‘self-esteem’. To test the hypothesis, it is essential that the variable ‘self-esteem’ must be measured empirically. We must be able to say that boys vary according to this variable, and furthermore, we should specify the degree to which each boy possesses this variable. Only then we will be able to test our hypothesis. Measurement allows the researcher the opportunity of using variables in hypothesis to determine their effects on others.

Another definition of measurement is that it is a process of describing abstract concepts in terms of specific indicators by the assignment of numbers or other symbols to this indicator in accordance with rules.

In a very broad sense, measurement determines whether a variable is present or absent. But, in practice, measurement is a more complex process, which involves operations to determine the extent to which a variable is present or absent. Let us consider the following examples :

A researcher, who is working with street children, interviews a child by asking the following question :-

- a) Do you save money ? Yes / No
 - b) If yes, how much ?
 - c) “Child labour in our country must be banned”.
- (Strongly agree) (agree) (Undecided) (Disagree) (Strongly Disagree).

The three questions attempt to measure some of the aspects of street children. The first question measures one aspect by determining the presence or absence of a characteristic ‘saving habit’ among street children. The second question tries to measure in a more specific way involving the amount saved which tries to determine the degree of intensity of saving. Finally, a reaction or comment to a statement is in a sequence of responses, which, in turn, can be converted into scores and would measure the phenomena in question more specifically.

The concepts and variables, basic elements of this research, cannot be normally observed directly. Concepts such as mental retardation, poverty, anxiety, depression, social class and the like cannot be seen but only inferred from some indicators. For example, we can see a child who is being abused. But what about other physical abuses, which might have been reported by a child? We cannot observe all such abuses. However, we can examine him or her physically, or we can gather some information from his or her

parents' or guardian's behaviour towards him or her. On physical examination, we may notice bruises on his or her back or fractured leg. On enquiry we may come to know that he or she is slapped by parents or guardians now and then or he or she is uncared or neglected. All these behaviours and things are indicators of child abuse and not the actual properties of the variable itself. This example also suggests that there can be more than one indicator of a variable. The simple indicator or a variable is treated as 'item'. A set of items used to qualify a variable is commonly known as 'scale'. For example, attitude scales consciously involve asking a person a set of questions or items and then aggregating their responses into a single score that represent their attitude on an issue.

Let us now consider the levels of measurement used in the research. The levels of measurement refer to a set of rules that define permissible mathematical functions that can be performed on numbers or scores produced by a measure. The four levels of measurement used in this research are, nominal, ordinal, interval and ratio.

a) *Nominal Level of Measurement* : It is the lowest and the most simple level of measurement. When a variable is classified into several sub-classes, it is said that the variable in question is measured on a nominal level. For example, the variable – sex – has two nominal sub-classes, namely, male and female. Similarly, religions have many sub-classes, if not infinite, among which are included Hinduism, Muslim, Christianity and Sikhism.

Numbers assigned to nominal sub-classes at this level of measurement represent serial order only. The numbers do not have mathematical values. Hence, no mathematical function is possible with nominal data. For example, let us consider the classification of nominal data as shown below :

- i) Hindu
- ii) Muslim
- iii) Christian

In this example, suppose we add (i) and (ii), we will get (iii) which would be equivalent to saying that a Hindu plus a Muslim equals a Christian. That is not true. In other words (i), (ii) and (iii) here represent first, categories of respondents who are Hindus, second, categories of respondents who are Muslims and third, categories of respondents belonging to Christianity. Another example of nominal level of measurement is getting information about marital status in the following format :

- Marital Status :
1. Unmarried ()
 2. Married ()
 3. Divorce ()
 4. Widow ()

b) Ordinal Level of Measurement : When the relative position of objects or persons with respect to some characteristics are defined, measurements are possible on ordinal levels. The fundamental requirement of an ordinal level of measurement is that one be able to determine the order of positions of objects or persons in term of characteristics under study. Ordinal level measurements are considered of higher level than nominal level because in addition to being mutually exclusive (feature of nominal level of measurement), the categories have a fixed order. Level of education, for example, constitutes an ordinal variable and measures levels of education on ordinal scales.

The following illustration shows the level of education divided into ordinal categories. In ordinal level of measurement, the numbers are used not only to differentiate sub-classes, but also to determine less than or greater than relationship between them. Let us examine the responses given to the level of education :

- Level of Education :
- i) Graduate ()
 - ii) Intermediate ()
 - iii) High School ()
 - iv) Middle School()

- v) Primary ()
- vi) Illiterate ()

The responses have numbers ranging from i) to vi) and are designed to identify ordinal differences between levels of education. Each level is assigned a particular number relative to others and it can be determined readily that graduate level of education is higher than intermediate. However, we can never say that an equal distance will be found amongst all numbers. We cannot say that the same distance exists between i) and ii) as exists between iii) and iv) .

C) *Interval Level of Measurement* : Interval level between the categories of measurement has equal spacing in addition to the characteristics of nominal level (mutually exclusive) and ordinal level (having fixed order). In interval measures, the positions are not only ordered either in ascending order (lower, middle and higher) or in descending order (higher, middle and lower) but the intervals of measurement are also equal. In other words, the distance between the positions is equal , such as, the degrees of a temperature scale. The example of true interval scales are Fahrenheit and Celsius temperature scales. The unit of measurement of both the scales is degree and both are based on equal spacing characteristics of interval.

In an interval scale, an equal distance between units will be found. That means 2 is same distance from 3 as 6 is from 5, and so on. For example, in thermometer, having Celsius as unit of measurement, 60 degree is 10 degree more than 50 degree. However, we cannot compare the ratio of the two temperatures. It would be erroneous to infer that 100 degree is twice as hot as 50 degree. This is because interval scale does not have an absolute zero.

d) *Ratio level of Measurement* : Ratio level of measurement is the highest level of measurement. It has all the characteristics of interval level of measurement except that the zero point is absolute in this case rather than arbitrary as in interval level of measurement. This means that the ratio level of measurement contains the characteristics of nominal level of measurement (mutually exclusive), ordinal level of measurement (fixed order), and interval level of measurement (equal spacing, in addition to an absolute

zero). Income can be measured at ratio level of measurement because it has an absolute zero (no income, at least in money terms, not in terms of economic status). Hence, a person with monthly income of Rs. 1500 (Rupees one thousand five hundred only) has thrice as much as a person earning Rs. 500 (Rupees five hundred only). Most of the functions can be performed on data measurement on interval scales.

In management research, we rarely come across a situation where ratio level of measurement is warranted mostly because it is really difficult to arrive at absolute zero while measuring a management phenomenon. However, to understand the ratio level of measurement, we will consider the measurement of income with which management researchers are likely to deal with. Though there is considerable controversy on whether no income at all can be considered as absolute zero points of the scale, and whether there is equal spacing between the units, we will consider the measurement of income on this scale for the sake of better understanding.

Since the ratio level of measurement facilitates the equality of ratio, we can make statements like an income of Rs. 30000 (Rupees thirty thousand only) is thrice as much as Rs. 10000 (Rupees ten thousand only), but only one-third as much as Rs. 90000 (Rupees Ninety thousand only). However, one has to keep in mind that income, as ratio measure, is only an indicator of the amount of money available to a person and not as the measure of a person's socio-economic status. For example, a difference between Rs. 1,00,000 (Rupees one lakh only) and Rs. 1,10,000 (Rupees one lakh ten thousand only) does not necessarily indicate a change in socio-economic status equivalent to that between Rs. 20,000 (Rupees twenty thousand only) and Rs. 30,000 (Rupees thirty thousand only). It should be finally noted that the variables capable of being measured at higher levels are always better than the variables capable of being measured at lower levels.

While indicating levels of measurement one important consideration is the selection of variables in accordance with the objectives of the study. These levels of measurement have been selected keeping in mind the availability of tools of data collection.

1) SCOPE

The research area is vast, in the sense, that industrial disputes may arise due to various reasons, and the management may have to exercise skills of various nature, and demonstrate negotiating ability, with the agitators and demonstrators, with the appropriate degree of leniency and control, such that any dispute is averted. It is our aim to establish an empirical formula or a set of data for the measurement of tact. The scope of the work tends to become limited, due to the paucity of time. The time constraint arises from the professional commitments and the personal liabilities of the research personnel who have to devote their time judiciously towards, all their responsibilities .

Management profession has a scientific base, which consists of a special body of knowledge – tested knowledge, hypothetical knowledge and assumptive knowledge. Assumptive knowledge requires transformation into hypothetical knowledge , which in turn needs transformation into tested knowledge. Management research has significant role in transferring the hypothetical and assumptive knowledge to tested knowledge.

Not all concepts or theories that are used by management professionals have been tested and validated. Concerted efforts through management research are very much required to conceptually articulate and validate the concepts and theories which in turn, will strengthen the scientific base of professional management.

On the theoretical side, theoretical validity is assured, as management research re-examines the special body of knowledge, concepts and theories and tries to evolve a systematic theory and valid concepts relevant to management practice. Management research may be conducted to know the efficiency of different methods of management as to search for alternate interventions and treatments.

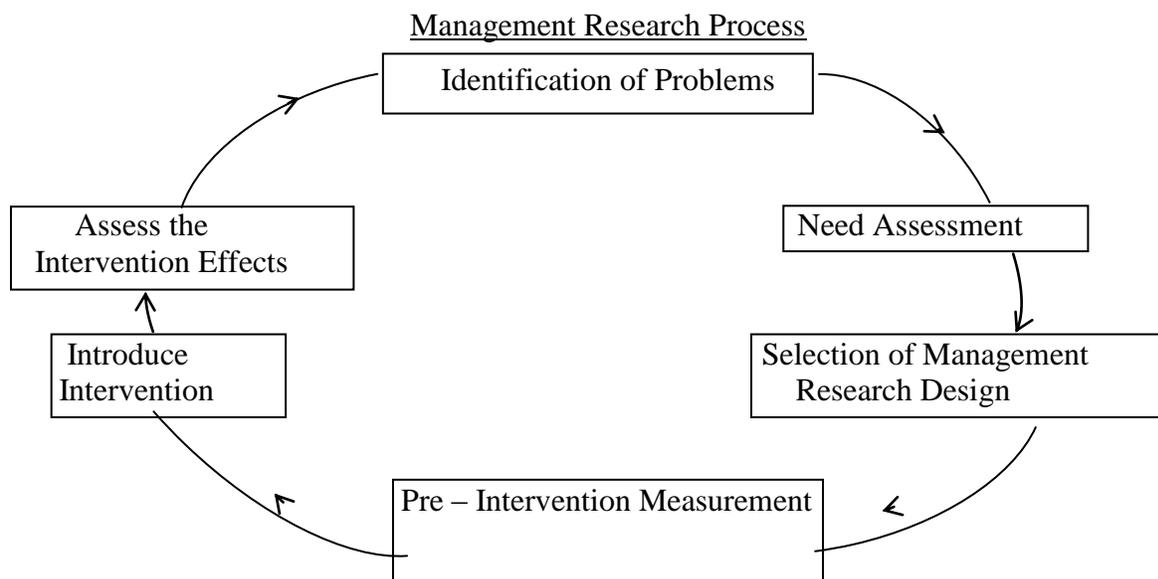
Identification of management needs and resources and evaluation of programmes and services of management agencies are some of the areas in which management research is undertaken. It is conducted to know the problems faced by professional

mangers in their areas of concerns and functions. Thus this research work embraces the entire gamut of management profession, concepts, theories, methods, programmes, services and the problems faced by the management professionals in their practice.

a) Management Research Process : There are many similarities between this process and the traditional research process. There are some additional steps designed to suit the objective of management research. By following the process, management researches are in a position to know precisely what intervention was applied and how much effect was produced. The process also links research and practice.

Management research starts with problem identification and setting up of goals. This is followed by the process of assessment (or need assessment) of the management problems. During these initial stages, the researcher strives to obtain a clear and specific understanding of the problem, using assessment tools, such as interviewing.

After the problem is identified and needs are assessed, the next step is to set up goals to be achieved . The goals are required to be specific, precisely defined and measurable in some way. The third step in the process is to have a pre-intervention measurement as a basis to compare the sample’s condition after the intervention is introduced.



The next stage in the research process is to introduce the intervention. It is important to notice that only a single, coherent intervention be applied during any intervention phase. In the last stage, we assess the effects of intervention by comparing the two measurements, i.e. pre-intervention measurement and measurement during intervention.

b) Role of Research in Management : Management is a challenging task to meet the growing demands of higher professional standards and accountability. The demands for accountability on the part of management profession – like showing empirically what kind of relationship would enhance the achievement of the sample's goal – are becoming louder and broader in scope. In a sense, the profession has to prepare itself to accept the sample's right to demand that managers justify their actions and recommendations on specific and demonstrable grounds.

Another development in the management profession has been the demand for higher professional standards. This has motivated to begin defining social work as a scientific discipline and practice as a 'scientific practice' or 'data guided practice'. This calls for improving the empirical knowledge base for management education and practice, and delivering more effective services to the samples. To meet the growing demands of higher professional standards and accountability, research has to play multifaceted roles. For this, conscious efforts have to be made, to restructure the management research curriculum and integrate research into theory and practice.

This is a challenging task for management educators. The challenge is also to recognize the ways in which research, theory and practice can be linked by incorporating research into practice settings and by shaping practice settings into research opportunities.

The purpose here is to assess the current status of social knowledge base : theory, principles, concepts and practice, and identify the role of research in fostering higher professional standards and accountability.

c) Role of Management Research in Building Knowledge Base : As management deals with dynamic phenomena, the knowledge base needs to be continuously updated and made relevant to the present. The change and new dimensions to the knowledge base consists of changing hypothetical knowledge into tested knowledge.

As management draws heavily from social and biological science, there is great need to properly coordinate and assimilate these to form a strong logical base for social work theory. This is looking at present. While on the one hand, academicians have been particular about the universality of theory, practitioners, on the other hand, tend to pick up suitable bits of theories and make them relevant in application. As they are assumed to be universal, they apply them in contexts, which are not really tested for cross – cultural application.

Management principles have been taken for granted and the need for testing them has not been felt nor has the proposal to subject current management principles to a logical and critical enquiry been made. Although management has now a core of basic concepts which are universal, the application of these concepts and principles varies according to the needs, traditions and economic conditions of the clientele group that is to be served. There are hardly any studies to test the validity of the concepts regarded necessary for social work theory or to test the efficiency of specific techniques. Research gives the answer to many such issues and plays the key roles in raising the professional standards of social work.

d) Role of Management Research in Practice : Although research is different in many respects from management practice, there are significant similarities between the two, which, if integrated can help practitioners to have better understanding of the problems and provide services accordingly. Research begins with problem formulation. Having formulated a researchable problem, the researcher develops a research design. The next stage is data collection, and the final step is to draw conclusions by analyzing the data. In much the same way, the practitioner, first assesses the problems to decide which behaviour systems are possible. After that, the researcher develops a strategy for

intervention that will be effective in alleviating the problem specified in the assessment stage. This is followed by implementation of the intervention strategies. Finally, the practitioner evaluates the effectiveness of the intervention strategies that are implemented.

The greatest drawback of management education has been the lack of fit between research and practice. Practice draws more from practice wisdom than from research, while research is not necessarily practice oriented. Consequently, practice and research are treated independently. The gulf between researchers and practitioners has widened over the years. Researchers frequently complain that practitioners ignore their pertinent and important findings. Practitioners consider much of the research irrelevant and express their inability to use it. Such gaps have been widened by the belief that the same persons cannot be a good researcher and a practitioner. Such beliefs have been substantiated by the facts that management researchers hardly find time to practice.

Conversely, the practitioners, due to their pre-occupation with service delivery system, are least concerned about research. Both the contentions underscore the need to solidify the relationship between schools and agencies by integrating research and practice.

Thus, as research and practice have existed as parallel to each other, most of the time, research is not practice-oriented and as such the findings do not affect management knowledge and practice.

(e) Need Based Research Methodology : Management research has been following hypothetico - deductive model of the research. This dominant paradigm mainly focuses on quantitative measurement, experimental design and probability sampling and multi-variate parametric statistical analysis. The research based on this model has hardly any relevance to practice. Management needs to develop a research paradigm that emphasizes a combination of qualitative and quantitative measurements, quasi-

experimental design, non-probability sampling and multi-variate non parametric statistical analysis.

Management research, by and large, calls for non-probability sampling because it is often impossible to develop an exhaustive sampling frame. Hence, it is imperative for management researchers to deal with topics such as representativeness of sample, generalizability of findings, sampling error and finally internal or external validity in much greater detail than in the case of probability sampling.

Practice based management research offers an opportunity for managers to make significant differences in their professional standards and accountability to their intervention. Steps like redesigning the research curriculum, interlinking research with practice, and teaching research with emphasis on need based research methodology, will provide a strong scientific basis for management profession. Though, almost all the methods, techniques and skills of management research are useful for management work, they need slight modification when applied to management practice so that the assessment becomes relevant, reliable and valid.

Single system research designs, for instance, are used in management work research to assess the effectiveness of intervention with individual, group or community. The essence of single system design is to measure effectiveness of intervention with individual, group or community. The essence of single system design is to measure effectiveness of intervention by subjects as their own control and multiple data set before and after the interview.

(f) Integration of Research and Practice : Integration of research and practice can be initiated from the state of field work. A research design has to be developed and a study undertaken of the problems of researchers and samples during field work. The results of the study can serve as base line data. This can be followed by different levels of intervention as part of field work practice. Research techniques should be used to evaluate the effectiveness of the intervention. The research report should be submitted

along with the report of the field work. The integration of management research and practice can be summarized in the following way :

- a) Problem Assessment
- b) Problem Formulation
- c) Formulation of Intervention Strategies.
- d) Research Design Development
- e) Implementation
- f) Data Collection
- g) Data Analysis
- h) Drawing of Conclusion
- i) Evaluation
- j) Closure

2) LITERATURE

a) A Study Of ‘Good Actors’ And ‘Good Soldiers’: Can Distinctions Be Drawn?

Dr. Robin S. SNELL, Associate Professor, Department of Management, Lingnan University and Dr. Yuk-lan Wong ,Assistant Professor, Department of Management, Lingnan University

This paper investigates the authenticity of Organizational Citizenship behaviour. Bolino (1999: 95) called for qualitative research on the relationship between Organizational Citizenship Behaviour and impression management. He challenged assumptions that Organizational Citizenship Behaviour is driven only by pro-social motives, arising from personal disposition (McNeely and Meglino, 1994), or from social exchange, related to favourable perceptions of superiors’ conduct and organisational arrangements (Organ and Konovsky, 1989). The research evidence for personal disposition as a driver of Organizational Citizenship Behaviour is modest (Podsakoff et al., 2000). While there is stronger evidence for the social exchange thesis (e.g. Farh et al., 1990; Becker and Billings, 1993; Deluga 1995; Organ and Ryan, 1995; Podsakoff et al., 1996; MacKenzie et al, 2001),

Bolino (1999), after Eastman (1994), deposits that impression management (Rosenfeld et al., 1995) also drives Organizational Citizenship Behaviour.

b) NEGOTIATION AND COLLECTIVE SETTLEMENT

Ms. Anju Verma and Mr Sanjeev Kumar, Guru Jambheshwar University, Hisar-125001

According to Harbinson, collective bargaining is “a process of accommodation between two institutions which have both common and conflicting interests.” The Asian Regional Conference of ILO held in 1953, asserts that collective agreements are usually the best measures for the determination and adjustment of wages and that attempt should be made as early as possible to develop systems of collective negotiations based on free associations of employers and workers.

c) Organizational Learning

Brenda Barker Scott, MIR, Facilitator, Queen’s University IRC

This paper establishes that the process of acquiring new knowledge is not one of a simple receptivity. Veridical knowledge is tossed over the fence to those who catch it. Acquiring and leveraging new insights/abilities is dependent on what individuals already know, their perceptual filters, their motivation to learn, their opportunities to learn, and the mechanisms in place to enable the acquisition and application of knowledge. This helps to develop the tact necessary to ensure that organizational behavior never becomes a source of problem as far as productivity is concerned.

The three pieces of literature reviewed by me clearly indicates that tact plays a vital role in organizational effectiveness. Both ‘impression management’ and ‘collective bargaining’ are examples how the exercise of tact on the part of employers help prevent industrial disputes and ensure that the level of productivity does not go below the benchmark level. It is therefore absolutely essential that a research is made on the measurement of tact necessary to prevent industrial disputes.

CHAPTER- 3

MATERIAL AND METHODS

1) SAMPLING AND SAMPLING DESIGN

Sometimes it is feasible to study a whole group or an extremely large group. Management researchers might be interested in learning about the labourers, superiors, white collar staff and executives. It would be difficult to study all members of these groups. The process of sampling allows us to study a manageable number of people from the large group to derive inferences that are likely to be applicable to all the people of the large group. The results obtained from a sample are more precise and correct than the results obtained from the study of the whole group. Costs involved in studying a small group are also much less. Associated with the cost, there are certain other factors, such as time available for the study and accessibility of the units of study. We can almost get the same results by studying a carefully selected small group of people.

A single unit of study is referred to as an element of population. When we select a group of elements for the purpose of study of a particular phenomenon, we refer to that group of elements as a sample. The aggregate of all the elements that conform to some defined set of definitions is called population. To get the desired information, we study only some of the elements rather than all. It is generally much more economical in time, effort and money.

It is presumed that the results from the samples are true of the population as a whole. In reality, this may or may not be true. How closely the sample statistics correspond to the population depend largely on the way the sample is selected. We can devise a sampling plan that will carry the assurance that our sample estimates will not differ from the corresponding true population parameters by say, more than five per cent; the elements will be correct within the limits of five per cent (commonly known as 'margin of error' or 'limit of accuracy') ninety-five per cent of the time (commonly termed as 'probability' or 'confidence level').

The sampling procedures, which ensure that the sample statistics will be correct within certain limits are referred to as a “representative sampling plan”. It ensures that the selected sample is sufficiently representative of the population to justify our running the risk of taking it as representative.

The basic difference in sampling method is between probability and non-probability sampling. Probability sampling makes it possible to select a sample which will be representative. This helps researchers to estimate the extent to which the sample statistics are likely to differ from population parameters. It is possible to ascertain the size of the sample that will be needed if we want to have a given degree of certainty that their sample results do not differ by more than a specified value from those of the population parameters. In non-probability sampling, there is no way of estimating the probability that each element has been included in the sample, and no assurance that every element has some chance of being included.

a) *Non-Probability Sampling* : The four important types of non-probability sampling are accidental sampling, quota sampling, snowball sampling and purposive sampling.

i) Accidental Sampling : This refers to a method of selecting respondents who happen to meet the researcher and are willing to be interviewed. Thus, a researcher may take the first hundred people he meets who are willing to be interviewed.

ii) Quota Sampling : This ensures inclusion of diverse elements of the population in the sample and makes sure that these diverse elements take into account the proportion in which they occur in the population. The major goal is the selection of a sample that is a replica of the population to which one wants to generalize. The critical requirement is not that the various population strata be sampled in their correct proportion, but rather that there be enough cases from each stratum to make possible an estimate of the population stratum value. It is more or less similar

- to accidental sampling procedures, except that it ensures the inclusion of diverse elements of the population.
- iii) *Snowball Sampling* : In this type of sampling, we start with a few respondents of the type we wish to include in our study and who in turn are expected to guide us to get more respondents and so on. It is extremely helpful in studying some special sampling situations like getting a sample of a particular group of people. Like the rotating snowball, sample increases in its size as we continue to get more units of study. This technique is useful in the investigation of sensitive topics because it depends on sampled cases having knowledge of other similar cases. The sampled cases might be hesitant to identify themselves if approached by a stranger but might be friendly to someone who they know and share their experiences or deviant status.
- iv) *Purposive Sampling* : It is based on the presumption that with good judgement one can select the sample units that are satisfactory in relation to one's requirements. A common strategy of this sampling technique is to select cases that are judged to be typical of the population in which one is interested, assuming that errors of judgement in the selection will tend to counter balance each other. For example, if a researcher were conducting a study of patients who are not regular in attending out-patient departments, it might be desirable to choose patients for the sample from among those who are frequently irregular. It is possible that in a truly random sample, the regular patients would nullify the effects of irregular patients, and the findings of the study would be influenced.
- b) *Probability Sampling* : This type of sampling specifies the chances that the sample statistics do not differ more than a certain limit from the population parameters. It also ensures that enough elements are selected from each stratum of the population. The major types of probability sampling include simple random sampling, stratified random sampling and cluster sampling.

- i) *Simple Random Sampling* : It is a process that gives each element in the population an equal chance of being included in the sample. The elements are selected using a list of random numbers appended with most text books of research and statistics. Before using the table of random numbers, it is first necessary to number all the elements in the population to be studied. Then the table is marked at some point and the cases whose number come up as one from this point down the column of numbers are taken into the sample until the desired number of elements is obtained. The selection of any given element places no limits on other element being selected, then making equally possible the selection of anyone of the many possible combinations of elements.
- ii) *Proportionate Stratified Random Sampling* : It is a process in which the population is first divided into strata. The strata may be based on a single criterion or on a combination of two or more criteria. In stratified random sampling, a simple random sample is taken from each stratum, and the sub-samples are then joined to form the total sample. It presupposes that the investigator has some knowledge concerning the population characteristics. It is mostly used when there is a requirement of study of some characteristics of a phenomenon. The sample will have specified characteristics in exact proportion to have same characteristics which are distributed in the population.
- iii) *Disproportionate Stratified Random Sampling* : It is a process that is almost similar to proportionate stratified random sampling except that the sub-samples are not necessarily distributed according to their proportionate weight in the population from which they were drawn. It is possible that some sub-samples are overrepresented while other sub-groups are under-represented. It is possible to get a marked increase in the size of a sample that yields statistics very close to parameters. A reduction in the size of sample may yield statistics that might deviate widely from the population parameters.

- iv) *Cluster Sampling* : In this process, the whole research area is divided into sub-areas, more commonly known as ‘clusters’. The simple random or stratified method is used to select cluster. Finally, the researcher arrives at the ultimate sample size to be studied, by selecting sample from within the clusters which is carried out on a simple or a stratified random sampling basis. This process is used in case the area of study is markedly widespread, and a large expenditure is involved if simple or stratified random sampling is done. The procedure moves through a series of stages, commonly termed ‘multi-stage’-from more inclusive to less inclusive sampling units, until we finally arrive at the population elements that constitute the desired sample.
- v) *Combination with Non-Probability Sampling* : If sampling is carried out in a series of stages, it is possible to combine probability and non-probability samplings in one design. That is, one or more of the stages can be carried out according to probability sampling principles and the balance by non-probability principles. The advantage of such a design is the cost of obtaining cases for the sample. It is relatively inexpensive to select the areas within which the final stage of sampling will take place by probability sampling, and we thereby gain the advantages of probability sampling, at least for the areas. There is some evidence, for instance, that quota samples built up in selected areas are more successful in controlling such variables as socio-economic status than quota samples in which the control of these variables depends on the judgements of the interviewers.

2) METHODS OF DATA COLLECTION

One of the most important stages in the research is data collection. While the initial stages in a research process decide the ways in which the data collection procedures have to be carried out, the remaining stages, i.e. data processing and analysis mainly depend upon it.

- a) *Sources of Data* : The two main sources of data in management research are ‘people’ and ‘paper’. The responses to questions put to people constitute the major

sources of data in management research. The source is labeled as the 'primary source of data'. A large amount of data is also available in the form of 'paper sources'. This includes document, historical records, diaries, biographies, statistical records and the like. The paper sources are commonly known as 'secondary sources of data' or 'available data sources'.

When a researcher decides to collect data through primary sources, he has three options, namely, observation, interview and questionnaire. In case he opts for secondary source of data, he uses the method of content analysis.

b) *Observation* : It is the basic method of obtaining information about management phenomena under investigation. However, all observations are not scientific observations. Observations become a method of data collection when it is planned in accordance with the purpose of search and recorded systematically keeping in mind the validity and the reliability of observed data.

There are numerous situations where this method is considered as most appropriate. Many aspects of our behaviour are so much a part of life that it becomes difficult to translate into words. It is the most appropriate method under circumstances, where the researcher faces resistance from respondents being studied, and show unwillingness to respond to questions of the researcher or do not cooperate with the researcher. Exploratory objectives are best met by the method of observation. A researcher can explore some aspects of the main research question or can gain insight into the research problem and develop the basis for the hypothesis. It may also be used to collect supplementary information that would help interpret findings obtained by other methods.

There are several types of observation varying from completely unstructured to structured, pre-coded, as well as formal procedures to suit the needs of researchers and the overall objectives of the research problem. On the basis of the degree of structuredness, the observational procedures are 'structured' and 'unstructured'. It term

of the role played by the researcher, the observation procedures are 'participant observation' and 'non-participant observation'.

- i) *Structured Observation* : These observations take into consideration a clear and specific definition of the units to be observed and data to be recorded. It is possible only when the problem is well formulated. In exploratory studies, the researcher does not know in advance which dimension of the problem would be relevant. It is mostly used in studies designed to describe a problem or to test casual hypothesis. It presupposes that the researcher knows what aspects of his problem under study are relevant to the research objectives, and is, therefore, in a position, to plan the recording of observations before he starts data collection.
- ii) *Unstructured Observation* : In a practical situation, it is often not possible to plan out the observation process in advance. In case of exploratory studies, the researcher does not have enough clues to structure his observation, that may call for changes in what he observes. Such changes are characteristics of unstructured observation. Since the unstructured observation is flexible, it allows for changes in the focus from time to time, if and when reasonable clues warrant such changes.
- iii) *Participant Observation* : These observations involve sharing the life of the group under study by the researcher. It is an attempt to put both the observer and the observed on the same side by making the observer a member of the group so that he can experience what they experience and work within their frame of reference. In other words, the researcher becomes a member of the community being observed by him.
- iv) *Non-Participant Observation* : These observations are characterized by a lack of participation by the observer in the life of the group that a researcher is observing. In other words, in non-participant observation, the observer has detached role and

records without any attempt on his part to participate in the interaction process with the group being observed.

- c) ***Interview*** : Interview is a verbal interaction between the researcher and the respondents. It involves presentation of question as well as collecting response in oral manner. Many feel that the best way to find out why people behave as they do is to question them about their behavior directly by interviewing them. The interviewer asks questions in a face-to-face contact with the interviewee – the person who is being interviewed and who gives answers to these questions. It is a widely used method of data collection so far as information about the social background, opinion, attitudes and changes in relation are concerned.

Interviews have been classified in different ways. One way of classification is based on the function. The other way is the number of persons participating in the interview process. Yet another process of classifying interviews is the format used for interview, for example, structured and non-structured. The easiest and the most convenient way to classify them is the degree to which they are structured.

- i) ***Structured Interview*** : These types maintain some control over their respondents, considerable flexibility is permitted in deciding the extent to which the interviews should be structured. The first and foremost area, through which an interview is structured is the question and its responses. The responses are regulated and controlled by giving multiple choices to the interviewee. To achieve this, the questions have to be in order and help to get reliable and appropriate responses. It is also beneficial to ask questions in the same order from one interview to another interview.
- ii) ***Unstructured Interview*** : In these types of interviews, questions are not ordered in a particular manner. The order of question is not fixed. The order followed in one interview may not be followed in the next interview. Even the questions

asked are not worded in the same way. In other words, the interview is free of regulation and control.

d) Questionnaire : It is a method of data collection, that has been used in almost all researches. We need to know the contents and types of questions followed by the format and the sequence of question. We further need to know the leading, double barreled and threatening questions. We also need to decide the instruction for the investigators.

i) Contents of Questions : Questionnaires enlist questions, which translate the research objectives into specific questions. The questions must also encourage the respondent so that the necessary data is obtained. It is to these two ends that the question becomes the focus around which the questionnaire is constructed. One of the major issues involved in formulating the questionnaire is its contents. The major issues on which questions may be concerned, are facts, opinion, attitudes, respondents' motivation and their level of acquaintance with a research problem. By and large, questions can be classified into two general categories namely (i) factual question, and (ii) opinion and attitude question.

ii) Factual Questions : These question are asked to elicit information from the respondents regarding their background, such as sex, age, marital status, education or income. It looks easier to design factual questions. Occasionally, factual questions pose problems for the researcher, due to misinterpretation of the questions by the respondents. A very clear communication is necessary on the part of the researcher, with the respondents.

iii) Opinion and Attitude Questions : The concept 'attitude' refers to the sum total of a person's inclination, prejudices, ideas, fears and conviction about any specific topic. 'Opinions' on the other hand, are the verbal expressions of attitudes. Questions about opinion and attitude present more problem in construction than questions about facts. Comparatively, it is simpler to obtain accurate data.

However, in questions on opinions or attitudes, the assumption that the respondents know cannot always be made. Moreover, as there are various aspects or dimensions of attitudes, the respondents may agree with one aspect and disagree with another. This is the reason why attitudes can never be measured by a single question. By using a set of statements, one can reduce the effects of one–aspect responses.

Finally, answers to opinion and attitude question are more sensitive to changes in wording, emphasis and sequence than are those to factual question. This reflects, in part, the multi dimensionality of many attitudes and the result in different answers.

iv) *Open-ended and closed-ended Questions* : In a closed-ended question, respondents are offered a set of answers from which they are asked to choose the one that most closely represents their views. Open-ended question are not followed by any kind of specified responses, and the respondents' responses are recorded in full. The advantage of the open-ended question is that it does not force the respondent to adapt to pre-determined responses : having understood the question, one can express one's ideas freely, spontaneously and in one's own language. If the answer to open-ended question are not clear, the researcher may probe, that is, ask the respondent to explain further or to give reason for something stated earlier. The following considerations should be made to determine the appropriateness :

-----The objectives of the questionnaire : Closed-ended questions are suitable when the researcher's objective is to lead the respondent to express agreement or disagreement with an explicit point of view. When the researcher wishes to learn about the process by which the respondent arrived at a particular point of view, an open-ended question is likely to be more appropriate.

- -----The respondent's level of information about the topic in question : open-ended questions provide opportunities for the interviewer to ascertain lack of information on the part of the respondent, whereas closed-ended questions do not.
 - -----The extent to which the topic has been understood by the respondent : The open-ended question is preferable in situations where the respondents have not yet crystallized their opinion. The use of a closed-ended question in such a situation involves a risk that in accepting one of the alternatives offered, the respondent may make a choice that is quite different from an opinion that would have otherwise been expressed had he or she gone through the process of recall and evaluation of past experience.
 - -----The ease with which the content of the answer can be communicated by the respondent to the event to which the respondent is motivated to communicate on the topic : The closed-ended question requires less motivation to communicate on the part of the respondent and the response itself is usually less revealing to the respondent (and hence less threatening) than in the case of the open-ended question. The researcher who uses closed-ended question tends to encounter less frequent refusals to respond.
- v) *Contingency Question* : When a question is applicable to only a sub-group of the sample, it is known as contingency question. A contingency question is a special case of a closed-ended question and it is one that applies only to a sub-group of respondents. The relevance of the question to the sub-group is determined by the answer of respondents to a preceding question.
- vi) *Matrix Question* : The matrix question is a method for organizing a set of questions that have the same response patterns.
- vii) *Sequence of Question* : There are two general patterns of question sequence, that have been found to be the most appropriate for motivating respondents to

cooperate with the researcher – the funnel sequence and the invested funnel sequence. It should be kept in mind that the questions that are presented first in the questionnaire should put the respondent at ease, and if the interviewer is present, he or she should help in creating rapport between the researcher and the respondent. Thus, the questions in the beginning should be easy to answer, interesting and it should not deal with sensitive issues.

viii) *Question to be avoided :*

- Leading Question – a question worded in such a manner that it appears to the respondent that the researcher expects a certain answer, is commonly known as leading question. As far as possible, leading questions are to be avoided if one is looking for objective responses. In some situations, particularly where leading question may serve the research objective, leading question with suitable wordings are used with extra care.

- Threatening Question : a question that refers to behaviours that are illegal or contranormative or behaviours that are socially deviant and are not discussed in public. Though it is suggested to avoid threatening questions as far as possible, in cases where it is necessary to include such questions, it is advised to use a long introduction to the question (or may be worded in an indirect manner), rather than asking short questions (or direct questions) by an open-ended rather than a closed-ended format, and to a lesser extent, by letting the respondents pick their own words to talk about the sensitive issues.

- Double, Barreled Question : a question that includes two or more questions is termed as a double-barreled question. Such questions might confuse respondents who agree with one aspect of the question, and not with the other. Many questions that are joined by the conjunction ‘and’ are very likely double– barreled, and hence, should not be included in the questionnaire

- ix) *Instructions* : While constructing a questionnaire, it is of utmost importance that the instructions go with each question or with a set of questions. Instructions are required to all such questions that are not self-explanatory. It may be general instruction or very specific instruction that explains how to rank a set of priorities. The instructions are usually written for the interviewer and hence, are often short and concise.

3) ADOPTION OF THE MODE OF RESEARCH DESIGN

The type of design being adopted for this research is of the type ‘AB : The Basic Single – Subject Design’. It is the simplest and the most popular design, as it involves only one baseline phase and one intervention phase, represented by ‘A’ and ‘B’ respectively. The design is more commonly known as AB design. The letter A signifies baseline phase and a period when intervention is drawn in some of the more complex designs. The letter B indicates the intervention phase during which some specific intervention is introduced.

In this design, the effect of intervention is ascertained by comparing the sample’s condition during the intervention phase with that of the baseline phase.

Since this design involves only one baseline assessment and only one intervention phase, its validity is threatened by history; events other than the intervention could be responsible for the change in the sample’s behaviour.

Despite the limitations of the AB design, it provides better evidence of intervention effects than non-experimental case histories. It also has the advantage of being applicable to most clinical situations, especially in cases, where more rigorous designs might be precluded.

Despite its limitations and relative weaknesses, the AB design provides better evidence on effects than non-experimental case treatment. With enough repeated observations, this design can provide valid and reliable evidence concerning the effectiveness of interventions.

4) THE RESEARCH DESIGN

The process of single – subject design is being followed as it is basically a quasi-experimental research, that uses the time – series analysis technique of management research for the evaluation of the impact of interventions. Such designs involve repeated measure of the dependent variable, before and after a particular intervention, to see if a sustained pattern of change in the dependent variable commences shortly after the onset of intervention.

The unit of analysis in this design is one, irrespective of whether the unit of analysis is one individual, one family, a single organization or a group of organizations. As such, one of the major limitations of these designs is their dubious external validity. But the design can identify with a high degree of internal validity in those interventions, that seem to work in one, idiosyncratic, context and can be tested for generalizability in subsequent studies. These subsequent studies might include larger scale experiments utilizing control groups, or they might be additional single subject research work that attempt to approximate replications of the original single – subject experiment in other contexts.

The single – subject design researches are based on the principle of time series data analysis. As such, it requires measurement of dependent variable at successive intervals of time. The measurement points before the intervention are called baseline phase. These measurements serve as control, that is, they serve the same function as control groups, in conventional group experiments. The data collected during the baseline phase are compared with the data collected during the intervention phase.

a) *Problem Formulation :* The industries in the southern districts of the state of West Bengal are frequently plagued by Industrial Relations problem. There are highly volatile unions of workmen, who resort to non-cooperation, go-slow movements, cease-work movements and strikes. These activities are harmful in an otherwise stable environment. These are termed as Industrial Disputes, and are responsible for loss of Productivity and Profit in the organization, leading to lock-outs and closure. As a result, several families are financially ruined and the number of suicides among the employees and the members of their families are on the rise. There is a general collapse of the work environment. In order to obtain a clear and specific understanding of the problem, data were collected and analysed from five sample organization and interviewing of the employees of the five sample organizations was made by the questionnaire method. The questionnaire is included in Annexure A, and the Data Collection Reports are included in Annexure B. A gist of the findings is included in Annexure C. Most of the problems originate from the fixation of wages and over time rates, in contravention to the wishes of the workmen's unions. The subsequent interventions and negotiations by the management do not always bring about a favourable result. Not much tact is used by the management to prevent the Industrial Disputes, leading to loss of Productivity. The lack of tact exercised by the management in the negotiation with the leaders of the union of the workmen result in the complete breakdown of production.

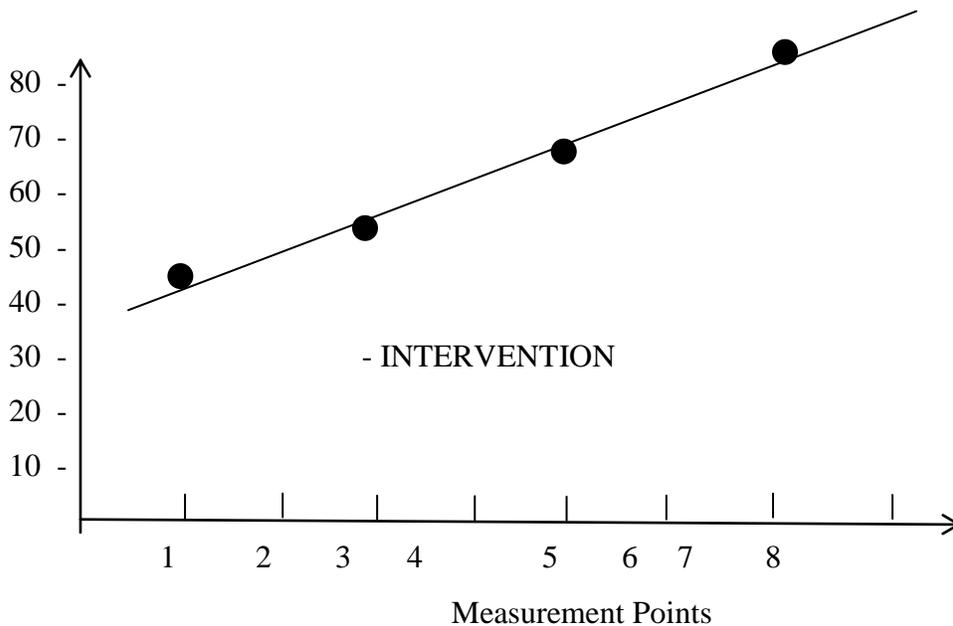
b) *Identification of Objectives :*

- (1) To study the course of anxiety among the management regarding the pending stalemate caused by the dispute.
- (2) To study the attitudes of the workmen of different categories of unions towards specific problems, like, overtime victimization.
- (3) To study the difference in the attitudes of the workmen before intervention and post-intervention.
- (4) To establish the benchmark of tact necessary to prevent Industrial Disputes.

c) **Need Assessment** : The assessment of the problem from the findings of the data, enclosed in Annexure C, reveals that management needs to handle the union leaders very judiciously. As such, a benchmark level of the measurement of tact is necessary to be followed by the management, to reach an understanding with the workmen's union in a Win-Win situation.

d) **Pre-Intervention Assessment** : This assessment is a systematic appraisal in evaluating the management's problems, needs and potential. A scale is designed to measure the degree of anxiety experienced by the management. The nature of the anxiety scores versus measurement points, decides the need of the intervention by the management. The 'Baseline – Increasing' phenomenon, as demonstrated here, from the findings of the collection data of five samples, clearly indicates that intervention, in the form of immediate negotiation with the union leaders is necessary.

Anxiety Series

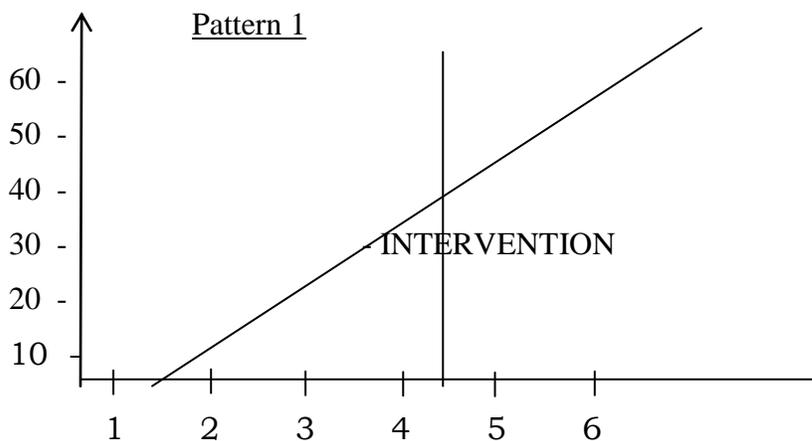


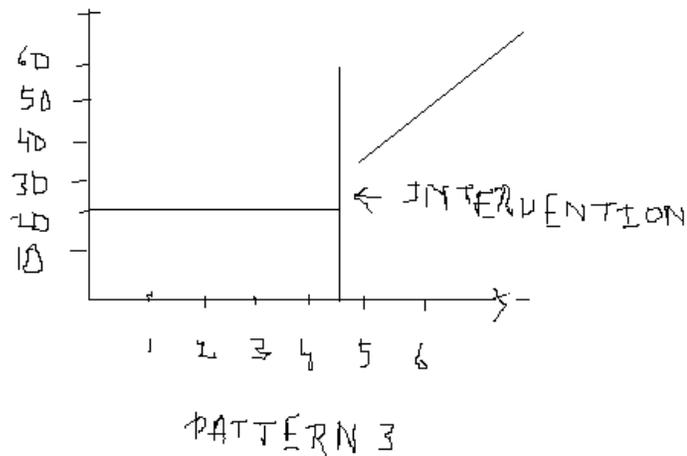
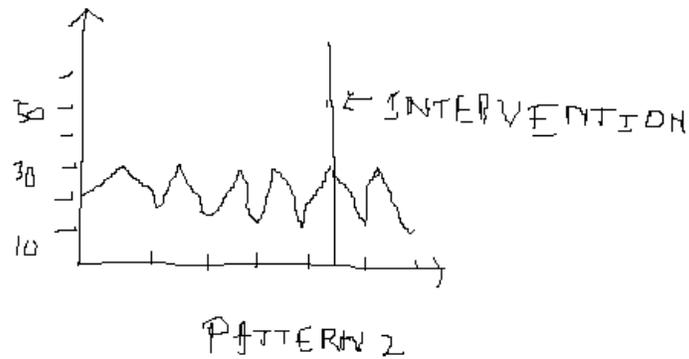
The increasing baseline trend indicates that the problem is worsening and requires immediate intervention.

e) **Intervention Strategies** : The management needs to sit for discussion with the union leaders at regular intervals to ensure that no unpleasant situation arises in the wake of any new management policy implementation, in the terms of the benefits of the workmen, both financially and otherwise. The pros and cons of the policies to be implemented, or the details of any situation that may have arisen in the organization and is a cause of concern for either the workmen or the management, should be discussed in detail and the minutes of the discussion be carefully documented. The details of the discussion should be mentioned in the document and the same should be signed by the representation of the workmen's union and management, for any immediate relief. The promises of concession made by the management, or any deadline agreed by the union leaders and the management should be explicitly mentioned and documented. Similarly, any relief measure for any purpose, taken by the management and the views of the union leaders should be well-expressed to avoid any ambiguous problem at a later stage. If necessary, the minutes of the intervention should be circulated among the workmen and employees of management cadre to prevent any speculative behavior, that may pollute the work environment.

f) **Intervention Assessment** : It was observed that in none of the samples, there was intervention by any third party or neutral agency. So the process of conciliation, mediation and arbitration were not followed. There was enough time and goodwill on both sides.

The three possible effects of Intervention may be depicted by three chronological graphs given below :





Let us consider the three different patterns of data for intervention assessment. Pattern 1 suggests that the problem is on the increase before the intervention and continues to be unaffected even after the intervention. It suggests that the trend would have occurred without the intervention also.

Pattern 2 indicates that the problem has been cyclical throughout the process. Sometimes, it increases from one point of observation to the other point of observation

and sometimes it decreases. The intervention was introduced at a time when the data were on decreasing trend, because we can see that data show increasing trend.

Pattern 3 indicates that the intervention has affected the problem. As we can see from the observation that the problem was studied before the intervention and not only the curve shows increasing trend after the intervention but it also continues to show the same trend.

If we take a look at Data Findings of Sample 1, we observe that the industrial dispute history is nil. But the pending demands of the workmen for salary revision from 2007, revision of LTA, introduction of new grades for better career progression, stoppage of outsourcing to contractors and wage agreement on 5 yearly basis continue to plague the management and cause a straining of relationship with the workmen's unions. The exercising of supreme tact by the management in handling the recognized and unrecognized unions, and good personal relationship with the unions have prevented the aggravation.

In the Data Findings of Sample 2, we observe that the union of workmen, though unrecognized by management have expressed demands for uniform salary hike, uniform rate of incentive and overtime and commencement of recruitment of new workmen. They had resorted to non-cooperation and go slow movements and the management has exercised supreme tact in handling the union and introduced medical facilities with salary hike for all the workmen to alleviate the tension and the gradual degeneration of the situation towards the call of a general strike.

In the Data Findings of Sample 3, we observe that the unrecognized unions of workmen have demanded uniform salary hike and increment, restarting LTA that was stopped from 2009, introducing overtime and providing transport for late working hours. The management had exercised supreme tact in handling the grievances and introduced salary hike and uniform increment. But the unions still resorted to go-slow tactics and non-cooperation movement against management. The management then, tactfully

brought the situation under control by deputing the agitation leaders and other skilled employees for a stint at their overseas office in USA.

In the Data Findings of Sample 4, we observe that the workmen's unions have demanded the payment of overtime to meet the benchmark level of production, 20% festival bonus and increase in the number of days of annual leave, though they were guided by the Minimum Wages Act 1948. They resorted to non – cooperation movement and other go – slow tactics but management had ruled that the failure to meet the benchmark level of production, as given by the Minimum Wages Act 1948, warranted the closure of the factory and had declared a lock – out for six months.

In the Data Findings of Sample 5, we observe that the unrecognized union had objected to the poor business tactics adopted by the management, that led to an annual loss of huge proportions and resulting in the stoppage of salary of the employees. When the union resorted to agitation tactics due to the stoppage of salary, and stoppage of transport as well as other benefits; the management declared a lock – out and declared the agitation of the employees to be illegal as the organization was under severe financial crunch caused by the global recession.

The Questionnaire for the sample is enclosed in Annexure A, and has six section included in it,

The Data Collection Report and the Data Findings are enclosed in Annexures B and C.

We now utilize the scores obtained by the workmen and the employees in answering the questions of the Questionnaire during the testing of various observations. We also utilize the Data Findings for the testings to arrive at a definite conclusion of the research.

The tests performed are the 'Test of Significance by Two – standard Deviation Method', 'Parametric Tests of Difference' and 'Non – Parametric Tests of Association'. We have also performed a 'Measure of Association' by 'Rank Difference Method of Correlation'.

CHAPTER- 4

RESULTS

1. TEST OF SIGNIFICANCE BY TWO STANDARD DEVIATION METHOD

This method is used when the data points are not dichotomous. The method is based on a presumption that if baseline is extended indefinitely, then 95 percent of the data would be less than two – standard deviation away from the baseline mean.

The procedure is given as follows :

1. We compute the arithmetic mean of the baseline score
2. We find the standard deviation (SD) of the scores by using the

$$\text{formula SD} = \sqrt{\frac{\sum d^2}{n-1}}$$

3. We multiply the SD by 2
4. Find out $X \pm 2SD$
5. Calculate the difference between the baseline mean and intervention mean

Let us take the examples of scores obtained by a workman in the six sections of the questionnaire :

baseline Scores (X)	Intervention Scores (Y)
54	51
56	51
56	50
58	49
59	49
60	48

Analysis of Scores

Observation No (n)	Baseline Score(X)	Intervention Score (Y)	Deviation from mean (d) D = x - (-x)	d ²
1	54	51	54-57.2=3.2	10.24
2	56	51	56-57.2=-1.2	1.44
3	56	50	56-57.2=-1.2	1.44
4	58	49	58-57.2=0.8	0.64
5	59	49	59-57.2=1.8	3.24
6	60	48	60-57.2=2.8	7.84

$$\begin{aligned} \Sigma N &= 6 & \Sigma X &= 343 & \Sigma Y &= 298 & \Sigma d^2 &= 24.84 \\ \bar{X} &= 343 \div 6 & \bar{Y} &= 298 \div 6 \\ &= 57.17 & &= 49.67 \\ &= 57.2 & & & & & & \end{aligned}$$

$$\begin{aligned} SD &= \sqrt{\frac{\Sigma d^2}{n-1}} \\ &= \sqrt{\frac{24.84}{6-1}} = \sqrt{\frac{24.84}{5}} = \sqrt{4.968} = 2.29 \end{aligned}$$

$$\begin{aligned} 2SD &= 2 \times 2.29 \\ &= 4.58 \\ &= 4.6 \\ &= \bar{X} \pm 2SD \quad (\bar{X} = \text{Mean Baseline Score}) \\ &= 57.2 \pm 4.6 = 61.8 \text{ or } 52.6 \end{aligned}$$

Inference : The principle followed in inferring whether the intervention effects are statistically different, is if the mean intervention score is at least two standard deviations away from the mean baseline score, the effects are said to be statistically significant at the 0.05 level. In this analysis, the mean intervention score is more than two standard deviations away from the mean baseline score, hence the effect is statistically significant.

Alternatively, even if at least two consecutive intervention scores go beyond two standard deviations away from the mean baseline score, the effect is considered as statistically significant at 0.05 level.

2. PARAMETRIC TESTS OF DIFFERENCE

Parametric Tests are based on the assumption that the population is normally distributed. In addition, these tests use higher measurement levels, intervals and ratio.

T- Tests : There are two types of t-tests; one is called t-test for independent samples, and the other is called paired t-test. The first test is used for the scores of one group and is independent of the scores of the other group. That means there is no logical relationship between the scores that have been obtained for one group when compared with the other group. However, both the tests are used to assess the significance of difference.

- i) The Paired T-test : A group of 10 workmen is randomly selected from the 5 samples. We want to list the effects of intervention to improve the self-esteem of the workmen. A rating scale before the intervention assesses the self-esteem, of the workmen. The scale has a scoring range from 5 to 15. After the intervention, we administer the same rating scales. The pre-intervention and post-intervention scores are shown below in the table :

Self-esteem scores of 10 workmen

Workmen	Scores (X) of Pre-intervention	scores(Y) of Post-intervention	D=(Y-X)	D ²
1	9	12	3	9
2	8	10	2	4
3	15	15	0	0
4	12	14	2	4
5	8	14	6	36
6	4	11	7	49
7	6	10	4	16

8	3	8	5	25
9	3	8	5	25
10	2	8	6	36
n=10			$\Sigma D=40$	$D^2=204$

We establish a null hypothesis that there is no difference between pre-intervention and post-intervention scores to list whether there is a statistically significant difference. The research hypothesis is that post-intervention scores will show improvement in self-esteem over pre-intervention.

The calculation of 't' is given below :

Step	Procedure	Application to Table
1	Find out the difference (D) between the post-intervention and pre-intervention scores	$D=Y-X=12-9=3$ $10-8=2 \dots\dots$
2	Compute mean Difference (-X)	$\frac{\Sigma D}{n} = \frac{40}{10} = 4$
3	Compute square of difference(D^2)	$D^2 = 3^2 = 9; 2^2 = 4 \dots\dots$
4	Find the sum of squares of difference	$\Sigma D^2 = 204$

Step	Procedure	Application to Table
5	Compute sum of squares (SS)	$SS = \frac{(\Sigma D)^2}{n} - \frac{(\Sigma D^2)}{n}$ $= \frac{(40)^2}{10} - \frac{204}{10}$ $= 160 - 20.4 = 39.6$
6	Find out degree of freedom (df)	$Df = n-1=10-1 = 9$
7	Compute variance (S2)	$S^2 = \frac{SS}{df} = \frac{39.6}{9} = 4.4$
8	Compute 't' by using the standard formula	$t = \frac{\bar{D} - X}{\sqrt{S^2/n}} = \frac{4 - 4}{\sqrt{4.4/10}} = \frac{0}{\sqrt{0.44}} = 0$

		$= \frac{4}{0.699} = 5.7225$
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Now, that the value of the paired t-test has been calculated, we have to see if the null hypothesis can be rejected. It is assured that the intervention is likely to improve the post – intervention scores. That means there is directionality in the data. Hence, we will use one-tailed test. We refer to the table of ‘Critical Values of the t Distribution’ and look at the 0.05 level of significance for our tailed test. At the intersection of 9 degree of freedom (df), the critical value of ‘t’ is 1.833, that is less than the calculated value of 5.7225 of ‘t’. Hence the null hypothesis can be rejected, and we can say that there is statistically significant difference in the self-esteem of the workmen before intervention and post-intervention.

ii) The T-test for Independent Samples : The t-test for two independent samples examines the difference between their means to see how close or apart they are. We select two groups of workmen randomly from the recognized union and the unrecognized union and administer the questionnaire. We are interested in studying whether there is significant difference among the two groups of workmen with regard to their attitude.

The scores at the interval level of measurement are presented in the Table below :

Serial No	Scores obtained by workmen of recognized union(x)	X ²	Scores obtained by workmen of unrecognized union(Y)	Y ²
1	8	64	12	144
2	11	121	9	81
3	9	81	6	36
4	12	144	5	25
5	16	256	8	64
6	10	100	12	144
7	7	49	11	121
8	16	256	10	100

9	6	36	10	100
10	5	25	7	49
n=10	$\sum X=100$	$\sum X^2=1132$	$\sum Y=90$	$\sum Y^2=864$

The procedure for calculating 't' is given below :

Step	Procedure	Application to Table
1	Square the scores of X and Y column to get X ² and Y ² values	8 ² =64, 11 ² =121 12 ² =144, 9 ² =81
2	Find the sum of column X, Y, X ² and Y ²	$\sum X = 100$, $\sum Y = 90$ $\sum X^2 = 1132$, $\sum Y^2 = 864$
3	Compute Mean Scores for column X and Y	$\bar{X} = \frac{100}{10} = 10$ $\bar{Y} = \frac{90}{10} = 9$
4	Compute Variance sum of squares for X and Y column (SS _x) and SS _y)	$SS_x = \sum X^2 - \frac{(\sum X)^2}{n}$ $= 1132 - \frac{(100)^2}{10} = 1132 - 1000$ $= 132$ $SS_y = \sum Y^2 - \frac{(\sum Y)^2}{n}$ $= 864 - \frac{(90)^2}{10} = 864 - 810$ $= 54$

Step	Procedure	Application to Table
5	Find out the sum of squares	$SS_c = SS_x + SS_y = 132 + 54 = 186$
6	Find out the combined SS degrees of freedom for two sets of data (dfc)	$Df_x = n - 1 = 10 - 1 = 9$ $Df_y = n - 1 = 10 - 1 = 9$ $Df_c = df_x + df_y = 9 + 9 = 18$
7	Compute combined variances S _c ²	$S_c^2 = \frac{SS_c}{df_c} = \frac{186}{18} = 10.33$

8	Compute 't' by using the standard $\bar{x} - \bar{y}$ formula : $t = \frac{\bar{x} - \bar{y}}{\sqrt{S_c^2 \left(\frac{1}{nx} + \frac{1}{ny} \right)}}$	$T = \frac{10-9}{\sqrt{10.33 \left(\frac{1}{10} + \frac{1}{10} \right)}}$ $= \frac{1}{\sqrt{10.33 \times 0.2}} = \frac{1}{\sqrt{2.066}}$ $= 1/1.43 = 0.699$
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Before we take the decision we have to check whether the scores of the two groups show any directionality. Since there is no indication that either set of scores has influence over the other, this is non-directional hypothesis. We shall have to look for the critical value of 't' for two-tailed tests at 0.05 level of significance for 18 degree of freedom. Referring to the table of 'Critical Values of the t Distribution', we find that the corresponding critical value of 't' is equal to 2.101.

Since our calculated value 0.699 is not larger than the critical value of 2.101, the null hypothesis cannot be rejected. That means there is no significant difference between the attitudes of the workmen of recognized union and unrecognized union.

3. NON-PARAMETRIC TEST OF ASSOCIATION

A very important and powerful, non-parametric statistic is observed from the Mann-Whitney U test. It is used for examining whether two independent samples differ significantly. The test is used when the researcher draws two random samples from the same population, introduces a treatment to one group while holding the other without the treatment, and then compares the groups to see whether there is a statistically significant difference between the groups. It is one of the most appropriate tests used by management researchers while evaluating the effects of intervention, to see if there is significant difference resulting from the two different interventions introduced to two groups drawn from the same population.

Let us hypothesize that the workmen of the recognized unions will be more empathetic towards overtime victims than the workmen of the unrecognized union. In

order to test the research hypothesis, we would establish the null hypothesis, that, there is no difference in attitude among the recognized unions' workmen and the unrecognized unions' workmen towards overtime victims.

The first step is to order the attitudinal scores for both the groups, and select the scores on a random basis, in proportion to their presence. The scores are ordered from high to low and then assigned ranks, in the two subsequent tables.

Scores on an Attitudinal Scale Given to two Groups of
Workmen to assess the Workmen's Empathetic Feelings
Towards Overtime Victims (% scores)

Group 1 (Recognized Union)			Group 2 (Unrecognized union)	
4	18	34	3	16
6	22	35	5	29
7	23	38	6	20
9	25	40	8	21
15	28	41	10	24
17	29	42	11	26
	30		12	27
	32		13	
			14	n2 =16
		n1 =20		

Combined Empathy Scores and their Ranks for two groups of
Workmen from two Different Union categories

Score	Rank	Score	Rank
41	1	19	20
40	2	19	21
38	3	17	22
35	4	16	23
34	6	15	24
32	7	14	25
30	8	13	26
29	9	12	27

28]	10	11	28
27	11	10	29
26	12	9	30
25	13	8	31
24	14	8	31
23	15	7	32
22	16	6	33
21	17	5	34
20	18	4	35
	19	3	36

Next step is to place the scores back into their original groups with its assigned rank. The ranked scores of group 1 are listed under the column of rank 1. We do not need to rank the score of group 2. The table below shows the groups as they were originally constituted with group 1 ranks.

The scores for Group 1 and Group 2, with the Ranked Values for the Scores in Group 1

Scores for Group 1	Rank 1	Scores for Group 2
4	35	3
6	33	5
7	32	6
9	30	8
15	24	10
17	22	11
18	21	12
22	17	13
23	16	14
25	14	16
28	11	19
29	10	20
30	9	21

32	8	24
34	7	26
35	6	27
38	4	
40	3	
41	2	
42	1	
	$\sum R = 305$	
$n_1 = 20$		$n_2 = 16$

From the table, we obtain the sum of all the rank values. The sum of ranked values for group 1 is 305. We have now three values, $n_1 = 20$, $\sum R = 305$, and $n_2 = 16$

The Mann – Whitney U formula is :

$$U = n_1 n_2 + \frac{n_1 (n_1 + 1)}{2} - \sum R$$

Where, n_1 = number of scores in the first group

n_2 = number of scores in the second group, and

$\sum R$ = the sum of the ranks for group 1.

Putting the values into the formula we get,

$$\begin{aligned}
 U &= [(20 \times 16) + \frac{20(20+1)}{2}] - 305 \\
 &= [320 + \frac{420}{2}] - 305 = 320 + 210 - 305 \\
 &= 225
 \end{aligned}$$

Now we need to have the critical value to see if the null hypothesis can be rejected.

The null hypothesis is that there is no difference between the attitude scores of the workmen of the recognized unions and the workmen of the unrecognized unions, as far as overtime victims are concerned.

We suppose that we wish to test the null hypothesis at 0.05 level of significance. We then refer to the table of 'Critical Values for the Mann – Whitney U when Alpha is 0.05 on a one-tailed test and 0.10 on a two-tailed test'. In our test, the largest n is 20, so we go down the nL column to 20. Then, we go across nS (smaller number) row to the n for the smaller group, which is 16. The intersect gives a critical value of 107.

Following the principle that if our calculated value is equal to or smaller than the critical value, the null hypothesis is rejected. Since the calculated value is 225 and the critical value is 107, the null hypothesis can not be rejected. Hence we infer that there was no statistically significant difference at the 0.05 level, between the attitudes of the workmen of the recognized union and the workmen of the unrecognized union as far as overtime victims are concerned.

4. MEASURE OF ASSOCIATION

In management research, we often wish to know the relationship among different variables in the data with one another. The most frequently used measure of estimating association among variables is the coefficient of correlation 'r'. Coefficient of correlation is calculated to identify the extent or degree of correlation between two variables. It does not mean that their relationship is functional or constant. In other words, correlation in two sets of data need not always be the result of mutual interdependence. Changes in one set of data may be the cause of changes in the other set of data and there may be a cause and effect relationship between the two sets. But, it is also equally possible that the changes in the two sets of data are the effects of some third factor, which affects both these sets of data. As such, the study of correlation, particularly in management, has an extremely limited field of operation.

a) **Rank-Difference Method of Correlation** : Where the direct qualitative measurement of the phenomenon under study is not possible, for example, efficiency, intelligence etc., rank-difference method of correlation is applied for finding out the degree of correlation. The formula for computing rank correlation is :

$$R = 1 - \frac{6 \sum D^2}{N(N^2 - 1)}$$

Where R denotes coefficient of rank correlation between paired ranks, D denotes the difference between the paired ranks and N stands for the number of pairs.

Ranking of workmen according to their efficiency by
Two Different Personal Managers

Workman	Ranking of Manager A	Ranking by Manager B
A	3	4
B	9	7
C	6	6
D	5	8
E	1	1
F	2	3
G	4	2
H	7	5
I	8	10
J	10	9

Workman	Ranking by Manager A (R ₁)	Ranking by Manager B (R ₂)	D (R ₁ -R ₂)	D ²
A	3	4	-1	1
B	9	7	+2	4

C	6	6	0	0
D	5	8	-3	9
E	1	1	0	0
F	2	3	-1	1
G	4	2	+2	4
H	7	5	+2	4
I	8	10	-2	4
J	10	9	+1	1
N = 10				D ² = 28

$$6\sum D^2$$

$$R = 1 - \frac{\quad}{N(N^2 - 1)}$$

$$= 1 - \frac{6 \times 28}{10(10^2 - 1)}$$

$$= 1 - \frac{168}{10(100 - 1)}$$

$$= 1 - \frac{168}{10 \times 99}$$

$$= 1 - \frac{168}{990}$$

$$= 1 - 0.1696969$$

$$= 0.83$$

b) Calculation of the coefficient of correlation by Rank Differences (spearman's Rho 'P') : If there is more than one item with the same value, a common rank is given to such items. This rank is the average of the ranks, which these items would have got, had there been a slight difference in their values. Thus the coefficient of rank correlation

needs some correction, because the formula is based on the presumption that the ranks of various items are different.

Where there is more than one item with the same value, a correction factor $1/12(t^3 - t)$ is added to the value of 'sigma d square', where t stands for number of items whose ranks are common. This correction factor is added as many times as the number of items with common ranks.

We calculate the coefficient of rank correlation from the following data of marks of workmen before and after the intervention, on attitude.

Workmen	Marks obtained before Intervention (X) (%)	Rank (R1)	Marks obtained after Intervention(Y) (%)	Rank (R2)	R1-R2 (d)	(d ²) D ²
1	50	9	60	6	3	9
2	60	5	65	4	1	1
3	60	5	66	3	2	4
4	60	5	70	1.5	3.5	12.25
5	75	1	58	7	-6	36
6	55	7	48	10	-3	9
7	68	2.5	62	5	-2.5	6.25
8	68	2.5	70	1.5	1	1
9	48	10	52	9	1	1
10	52	8	56	8	0	0
N=10						$\Sigma d^2=79.50$

From the above, it is observed that in the X series, figure 60 occurs thrice. The rank of all the three items is 5, which is the average of 4, 5 and 6, the ranks which these items

would have got had they differed slightly from each other. Other figures 68 and 70 in the X-series and the Y-series respectively, have occurred twice. Their ranks are respectively 2.5 and 1.5. Thus,

$t_1 = 3$, for 60 correction factor would be $1/12$ (cube of $3 - 3$)

$t_2 = 2$, for 68 correction factor would be $1/12$ (cube of $2 - 2$)

$t_3 = 2$, for 70 correction factor would be $1/12$ (cube of $2 - 2$)

The modified formula for coefficient of rank correlation would be :

$$P = 1 - \frac{6 [(\sum D^2) + 1/12 (t_1^3 - t_1) + \dots + 1/12 (t_n^3 - t_n)]}{N(N^2 - 1)}$$

Where n stands for the number of items repeated. So, for the above data, the formula would be :

$$P = 1 - \frac{6 [(\sum D^2) + 1/12 (t^3 - t) + 1/12 (t^3 - t) + 1/12 (t^3 - t)]}{N(N^2 - 1)}$$

$$= 1 - \frac{6 [(79.5 + 1/12 (3^3 - 3) + 1/12 (2^3 - 2) + 1/12 (2^3 - 2)]}{10(10^2 - 1)}$$

$$= 1 - \frac{6 [(79.5 + 1/12 (24) + 1/12 (6) + 1/12 (6)]}{10(99)}$$

$$= 1 - \frac{6[79.5 + 2 + \frac{1}{2} + \frac{1}{2}]}{990}$$

$$= 1 - \frac{495}{990} = 1 - 0.5 = 0.5$$

The statistical convention decrees that the coefficient of correlation ranging from 1 to 0.7 (+) is an indication of 'high' correlation, that ranging from 0.7 to 0.4 (+) as substantial, 0.4 to 0.2 (+) as low, and that below 0.2 as negligible.

5. UNIVERSALIZATION

When the samples tend to consider that their problem is unique, it will be helpful to bring them back to reality, by projecting that the other samples are facing the same problem. By universalizing the problem, the anxiety may be reduced in intensity. Under the direct influence; clarification and corrected perception are analysed, and facts are interpreted to the clients.

6. GENERALIZABILITY OF THE RESEARCH DESIGN

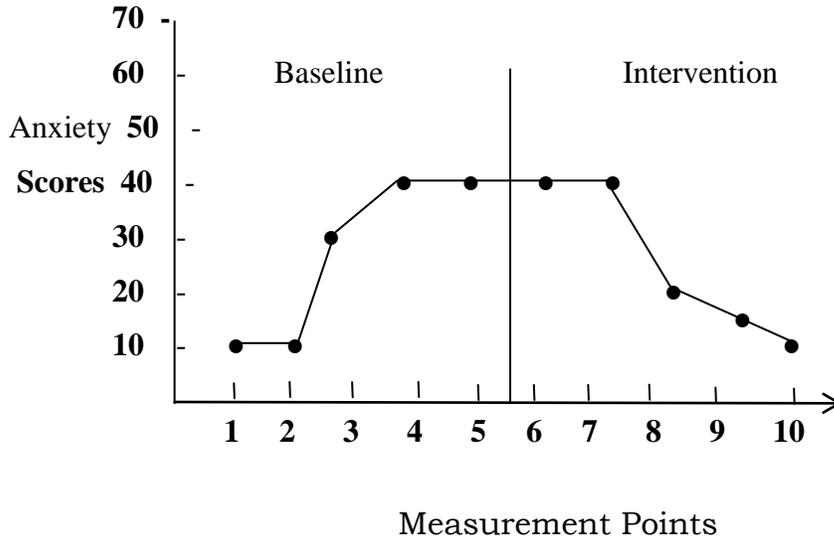
The ultimate goal of this research is the generalizability of the findings of the study. In this research, findings which are generalizable to a considerably large number of situations and cases can only contribute to the knowledge base of management practice.

Interestingly, in single – subject design research, even if it is proved that the interventions were effective, there is no guarantee that the same intervention would be effective on other samples in different settings. This limitation of single-subject design research, does not discourage the researcher because generalizability of findings can be achieved through repeating the study by taking more measurements.

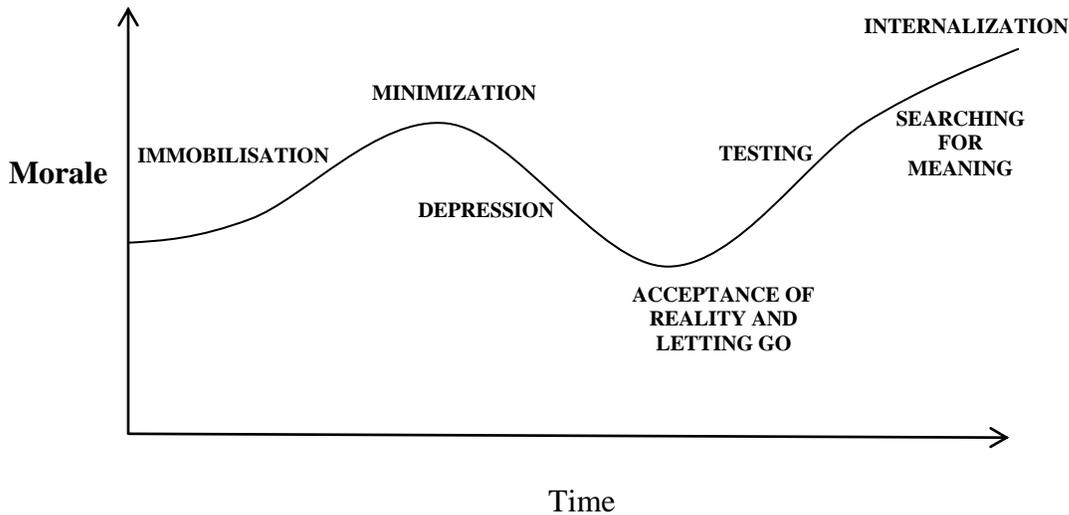
7. POST INTERVENTION EFFECTS

These are a number of theories which suggest that an individual has to work through a series of stages in the process of adjusting to a major change in behaviour or circumstances. The stages are the same, however the change is brought about – whether self-initiated or imposed. While there is little empirical evidence to support stage theories, we have found them to be useful in helping people to understand and cope with the change.

**Hypothetical Baseline followed by
Successful Intervention**



Post intervention Effect with the Different Stages



We shall start with a brief description of each of the effects.

a) **Immobilization** : The basic problem of adapting to change is that of maintaining some stability while achieving the change. If the rate of change is not too fast, people do not have great problems in adapting . Change becomes a process of gradual evolution. If the change is dramatic or fast, the normal process of adaptation may, for a short time, be

overwhelmed. The initial reaction of many people when faced with such dramatic changes is to 'freeze up'. The freezing is, however largely cognitive. Behaviourally, the individual in this stage will still continue to function but may appear to be on 'auto-pilot'. Many surrounding cues may generally remain unchanged and continue to initiate routine behaviours. The individual may thus respond by carrying out routine tasks, apparently not having recognized or considering the fact that circumstances have changed. The length and severity of this reaction depends upon such factors as the size of change and the person's ability to cope.

b) *Minimization* : The immobilization stage, by its very nature, is a passive stage. The minimization stage, on the other hand, is an active stage, although at times, this may not be apparent. While recognizing that change has occurred, the person minimizes the importance of the change. Cues that minimization may be taking place are statements, such as, 'It's not really going to make that much difference', or, 'it is only a minor reorganization', when objectively, quite a big change is going on. Periods of minimization or denial alternate with bursts of recurrent concerns about the change. This is evidence that the stage is active rather than passive. The individual is actively trying to cope with the change, although it is in small chunks. The data from experience is being processed and gradually internalized. Both the immobilization and minimization stages were previously seen as undesirable and dysfunctional. It is now generally accepted that they are necessary stages in the adaptation to change. However, they may become dysfunctional if their length or depth become excessive.

c) *Depression* : The depressed individual lacks motivation, is lethargic, and their mood is generally negative. This is a not uncommon state during periods of major change. In organizations, the most usual manifestation is that people are 'fed up', show low involvement and morale is generally low. It may appear to be dysfunctional and may well be so, if it lasts for a long time, but it is a sign that the individual is beginning to accept that the change has occurred. So, on the positive side, it should be seen as the start of the process of adjustment.

d) Letting go : At this stage, the individual has come to accept the reality and the permanence of the change, and begun to accept the new reality. This acceptance also leads to a 'letting go' of the past and a beginning to prepare for the future. People start to feel more positive. The attitude becomes that they might as well make the best of it.

e) Testing : Although the individual may have let go of the old reality, they may well not have a clear idea (or indeed any idea) of how to behave in the future. There is, therefore, a process of testing out new possibilities. This may either be by actually trying out new behaviours or imagining what the new behaviours, might be like. The testing stage is one, in which there is increasing energy and motivation. The individual is keen to develop and try out new skills and behaviours.

f) Searching by meaning : Eventually, following the activity of the testing stage, the individual finds time in which to reflect on the changes that have taken place and their own reaction to that change. Positively, the search for meaning concentrates on unforeseen, but positive outcomes. If all goes well, this can lead to individuals feeling that they are more effective and expert as a result of their experience. They begin to have the feeling that life is not so bad after all.

g) Internalization : In the internalization stage, the new thoughts, feelings and behaviour become stabilized as part of the normal functioning of the individual. While we have tended to concentrate on the effects of changes that are perceived as negative, there are also applications to positive changes. These still require adjustment. Examples from everyday life, which illustrate such changes, are happy events like marriages, birth of a baby, etc. Similarly events in the industry throw a positive light internally.

8. EXPLANATION OF THE POST-INTERVENTION EFFECTS

We can now interpret each of the stages of the Post-Intervention effects from the perspective of the behavioural approach.

The length and severity of the 'immobilization' stage will be determined, to a large extent, by the threat the change in question is perceived as presenting. Whether the change is perceived as threatening will depend upon the individual's assessment of the threat, and their perceived ability to cope. If the individual feels competent in their ability to cope, the immobilization phase may be very short. Obviously, therefore, change may be seen as more or less threatening, but the question arises as to why such threat should lead to denial and minimization? This reaction is entirely understandable in terms of reinforcement. Threats are unpleasant. Any strategy, that removes this unpleasantness will, therefore, be, negatively reinforcing. Denial removes the anxiety and hence will likely to occur again. This removal of anxiety by the process of denial may also explain the bursts of apparent euphoria that often occurs in this stage. Activity also has the effect of reducing anxiety. The activity of resisting any reduction in one's area of control, is, therefore, also, negatively reinforcing.

The stage of 'depression' has a number of interpretations. It projects the concept of learned helplessness. A feature of this syndrome is the persistence of 'fixed behaviour patterns'. These consist of patterns of behaviour that have, in the past, been effective, but are now inappropriate. Despite its inappropriateness, at least as perceived by bystanders, the behaviour continues. Many managers are familiar with this situation. Individuals continue to operate old systems, even though new systems have taken over. Often employees will insist on maintaining the old, even while operating the new. This pattern of learned helplessness and fixed behaviour, have considerable similarities with reactive depression. In behavioural terms, things that were reinforcers before the onset of the reactive depression, appear to lose their force. One possible explanation for this is that the memory of the past reinforcement becomes distorted. This is consistent with current theory and research in industrial psychology, that suggests that depression is associated with memory function, while anxiety is associated with the functioning of perception. The question however remains, as to why depression, generally seen as an unpleasant experience, should continue for any length of time. A part of the answer would appear to be that, although, depression is, by and large, unpleasant, it certainly provides some benefits. First, it enables the individual to maintain a safe, and largely,

unassailable, view of the world. This consistency allows the individual the illusion of being able to predict what is likely to happen, even if what is going to happen will be bad. This prediction allows them the perception of control .

Even though there may be nothing they can do to change negative events, at least they know what will happen. The second advantage is that it protects the individual against further experiences of the loss that initiates depression. If we take action and produce or acquire something, there is always the chance that this will also be lost. If we do nothing, then nothing can be lost. Except in the most extreme cases, people eventually cease to self-focus in this way, and instead, direct their attention, outward. This has two effects. First, it removes the negative self-evaluative forces, and second, it focuses attention on the processing of information about the new reality.

During the ‘letting go’ stage, the individual realizes that the old behavior will not lead to reinforcement. The ‘testing’ stage, therefore, involves a search. Either new reinforcers would have to be found, or new behaviours have to be developed, which will lead to a recovery of the original reinforcers. The ‘search for meaning’ is more difficult to explain in behavioural terms, but then all the theories have their limitations and strengths. ‘Internalization’, however, can be seen as the integration of the new behaviour or the reinforcement patterns.

9. CONSEQUENCES OF THE POST-INTERVENTION EFFECTS

Both individuals and organizations are aware of the likely personal consequences of change. Understanding the process itself has a value, individuals realize that they are not alone in their experience and feelings. They also become aware that each of the stages often fulfills a necessary function in the process of adapting to a change. Organizations also need to recognize these elements of the change process and accept that different people will progress through the stages at different rates. But, while acceptance of the change process is useful, individuals and organizations can also take action to help ease the passage through the stages.

The most important advice that the behavioural approach can offer involves 'control' and 'self-efficiency'. Threat to perceived personal control is one of the common factors that appears throughout the literature on adaptation to change in industrial psychology . To take an extreme case, one of the main problems of those managers suffering from 'post traumatic stress disorder' is loss of control. Those subjected to 'confinement' for a long time, for example, need to re-establish control over their lives. Those who believe they have control over their environment are more likely to have higher levels of self-efficiency.

In the everyday work concept, change (either personal or organizational) often means that new skills have to be acquired in order to cope. Skill acquisition will have to be arranged such that early failures are avoided and success encouraged. The new rewards that the changes will bring will have to be made clear. If possible, intrinsic reward should be built into the new working arrangements. These are matters for which the individual and the organization will need to take joint responsibility.

Much change, is inevitably driven from the top management. However, it is only initial policy decisions regarding change that need to be made at this level. Decisions about the prices and the nature of the change should often be made lower down the organization. If it is not possible to give individuals actual control over their environment, then they should at least be kept fully informed. Being informed allows people to make predictions. This, in itself, allows individuals a form of control.

Organizations should accept the fact that change takes time and that people should be supported and encouraged to help themselves. In particular, the reward system that encourages changes should not be devised so as to encourage competition. Self-improvement goals are generally more effective than competitive goals when new skills are being acquired. Organizations, by their reward systems, can influence goal orientations, that people will adopt. Rewards should be individually tailored so as to achieve high levels of self-development. In order to ensure progress in personal

development, success should be measured in terms of self-improvement, encouraging cooperation more than competition.

10. INTERVENTION AS A TOOL TO GAIN COOPERATION

Human beings tend to become competitive in situations, where they feel threatened. Competition leads to low trust and by definition , low cooperation. For example, there is often rivalry and low trust between shifts and between shop floor and management. In most situations, this leads to lowered effectiveness. It will certainly lead to a less than smooth introduction of change. The situation will be made worse if there is suspicion concerning the activities of any consultant involved. It is important, therefore, to be aware of any sign of competition and to know how to deal with it, or better still, know how to avoid it in the first place. There are a number of factors which determine how well people work together. Three such factors are of particular importance :

- a) The extent to which people trust each other – the level of trust can vary from very high to very low.
- b) How open people or groups are with each other – the level of openness can be high or low.
- c) Whether there is cooperation or competition – there can be high cooperation or high competition.

All three of these factors can have significance for the relationship between the participants and whoever is implementing the scheme. They are also important aspects of the relationship between managers and subordinates in the organization. Depending on past experience of consultants, there may be low trust in outside experts. It is also not uncommon for levels of trust between managers and workers on the shop floor to be low. The issue is not only how much people believe what is said but also how much confidence they have that others will deliver what they have promised.

For a variety of reasons, managers may not communicate openly and so subordinates feel that they are being left ill-informed. Competition between different departments or shifts is also a common phenomenon in organizations. Obviously, for any change intervention to be effective, trust and openness should be high, which will lead to cooperation rather than competition.

A further complication is that the three factors interact with each other. If trust is low, people tend to be less open and do not communicate and so become suspicious of each other's motives, this leads to low cooperation or competition. This in turn, makes the workmen more suspicious and interaction goes into a downward spiral (or, vicious circle) of lowered trust and communication and increasing competition. This is not uncommon in times of change in organizations. If trust is high, people tend to be more open, this openness creates more interaction leading to greater trust, which in turn, increases cooperation. This raises the level of trust still higher, leading to an upward spiral (or virtuous circle). In practice, the best advice is to maintain, as far as possible, complete openness, as this is the best way to build trust and reduce competition.

In case it is assumed that we are advocating a trend of 'love and trust' for all ills, it is worth pointing out that we are not saying that openness and trust are appropriate in all situations and that one should always go for cooperation. Whether cooperation or competition is most appropriate, depends on the type of situation – whether it is zero sum or non-zero sum.

A zero sum situation is one where one person's losses are the other person's winnings and vice-versa.

A non-zero sum situation is one where there is some outside influence, which can add to, or subtract from, the total gains available. In zero sum situations, competition can be appropriate. In non-zero sum situations, competition will always lead to both sides losing (lose-lose). Cooperation will lead to both sides winning (win-win). Most 'real

life' situation are non-zero sum. If people cooperate, both sides gain. This applies to everything from war to trade union negotiations. In almost every industrial dispute that has reached the stage of strike action, both sides have lost more than was gained by the strike. In the final settlement, the strikers rarely recoup their losses in terms of lost pay or if they do, it takes a considerable time. Management also loses heavily in lost production and subsequent lost profits. If they could have cooperated and reached a quick agreement, both sides could have gained. Similar considerations apply to change initiatives . If a spirit of cooperation can be maintained, a successful conclusion can be reached quickly and with minimum cost. If low trust and competition develop, time is wasted, and the whole process can be jeopardized.

Most real life zero-sum situations are relatively trivial. In these situations, competition is appropriate . There is, in fact, little point in doing otherwise. However, it is better not to get involved unless we are better at the game than the other person, otherwise we would surely lose. We are unaware of any such situation within the work of an organization.

CHAPTER- 5

DISCUSSION

1) THE FORMAL MODEL

To explain and justify the ‘tact’ model used to obtain the solution, we must say more about the general assumptions about the situation facing the two individuals, or what it amounts to, about the conditions under which the ‘game’ is to be played.

Each individual is assumed to be fully informed on the structure of the ‘game’ and on the utility function of his colleague (the other individual). These information assumptions may be noted, for they are not always perfectly fulfilled in actual situations. The same goes for the further assumption we need, that the individuals are intelligent, rational individuals.

A common device in ‘tact’ is the threat. The threat concept is really basic in the model developed here. It turns out that the solution of the ‘game’ not only gives what should be the utility of the situation to each individual, but also tells the individuals what threats they should use in exercising tact.

If one considers the process of making a threat, one observes that its elements are as follows : A threatens B by convincing B that if B does not act in compliance with A’s demands, then A will follow a certain policy T. Supposing A and B to be rational beings, it is essential for the success of the threat, that A be compelled to carry out his threat T, if B fails to comply. Otherwise, it will have little meaning. For, in general, to execute the threat will not be something A would want to do, just of itself.

The point of this discussion is that we must assume that there is an adequate mechanism for forcing the individuals to stick to their threats and demands once made; and to enforce the bargain, once agreed. Thus, an umpire is also required , who will enforce contracts or commitments.

In order that the description of the ‘game’ is complete, we must also assume that the individuals have no prior commitments that might affect the ‘game’. We must be able to think of them as completely free individuals.

2) THE FORMALITIES OF THE MODEL

Stage One : Each individual (i) chooses a mixed strategy t_i , which he will be forced to use if the two cannot come to an agreement, that is, if their demands are incompatible. This strategy t_i is the threat of individual ‘i’ .

Stage Two : The individuals inform each other of their threats.

Stage Three : In this stage, the individuals act independently and without communication. The assumption of independent action is essential here, whereas no special assumptions of this type are needed in Stage One, as it turns out. In Stage Three, each individual decides upon his demand d_i , which is a point on his utility scale. The idea is that an individual ‘i’ will not cooperate unless the mode of cooperation has at least the utility d_i to him.

Stage Four : The pay-offs are now determined. If there is a point (u_1, u_2) in B such that $u_1 \geq d_1$, and $u_2 \geq d_2$, then the pay-off to each individual ‘i’ is d_i . That is, if the demands can be simultaneously satisfied, then each individual gets what he demanded. Otherwise, the pay-off to individual ‘i’ is $p_i(t_1, t_2)$; i.e. the threats must be executed.

The choice of the pay-off function in the case of compatible demands may seem unreasonable, but has its advantage. It cannot be accused of contributing a bias to the final solution and it gives the individuals a strong incentive to increase their demands as much as it is possible without losing compatibility. But it can be accused of picking points that are not in the set B. Effectively we have enlarged B to a set including all utility pairs dominated $(\mu_1' \leq \mu_1, \mu_2' \leq \mu_2)$ by a pair in B.

What we have designed is actually a two-move ‘game’. Stages two and four do not involve any decision by the individuals. The second move choices are made with full information about what was done in the first move. Therefore, the ‘game’ consisting of the second move alone may be considered separately (it is a ‘game’ with a variable

pay- off function determined by the choices made at the first move). The effect of the choice of threats on this ‘game’ is to determine the pay-offs, if the individuals do not cooperate.

Let N be the point $[p_1(t_1, t_2), p_2(t_1, t_2)]$ in B . This point N represents the effect of the use of the threats. Let μ_{1N} and μ_{2N} abbreviate the coordinates of N . If we introduce a function $g(d_1, d_2)$ which is $+1$ for compatible demands and 0 for incompatible demands, then we can represent the pay-offs as follows :-

$$\text{To individual one :} \quad d_{1g} + \mu_{1N} (1 - g)$$

$$\text{To individual two :} \quad d_{2g} + \mu_{2N} (1 - g)$$

The demand ‘game’ defined by these pay-off functions will generally have an infinite number of unequivalent equilibrium points. Every pair of demands, which graphs as a point, on the upper-right boundary of B and which is neither lower nor to the left of N will form an equilibrium point. Thus the equilibrium points do not lead us immediately to a solution of the ‘game’. But if we discriminate between them by studying their relative stabilities, we can avoid the non-uniqueness.

To do this, we make the ‘game’ “smooth” to obtain a continuous pay-off function and then study the limiting behaviour of the equilibrium points of the ‘game’ made “smooth”, as the amount of “smoothness” approaches zero.

To make the game “smooth”, we approximate the discontinuous function ‘ g ’ by a continuous function ‘ h ’, which has a value near to the value of ‘ g ’, except at the points near the boundary of B , where ‘ g ’ is discontinuous. The function ‘ h ’ (d_1, d_2) should be thought of as representing the probability of compatibility of the demands d_1 and d_2 . It can be thought of as representing uncertainties in the information structure of the ‘game’, the utility scales, etc. For convenience, let us assume that ‘ h ’ = 1 on B and ‘ h ’ tapers off very rapidly towards zero as (d_1, d_2) moves away from B , without ever actually reaching zero. Another simplification can be had by assuming the utility functions properly transferred, so that $\mu_{1N} = \mu_{2N} = 0$. Then we can write the pay-off functions for the ‘game’ made “smooth” as $P_1 = d_1h, P_2 = d_2h$. The original ‘game’ ‘ h ’ is replaced by ‘ g ’.

A pair of demands (d_1, d_2) viewed as a pair of pure strategies in the demand 'game', will be an equilibrium point if p_1 , which is d_1h , is maximized here for constant d_2 and if $p_2 = d_2h$ is maximized for constant d_1 . Now suppose (d_1, d_2) is a point where d_1d_2h is maximized over the whole region in which d_1 and d_2 are positive. Then d_1h and d_2h will be maximized for constant d_2 and d_1 , respectively and (d_1, d_2) must be an equilibrium point.

If the function 'h' decreases with increasing distance from B in a wavy or irregular way, there may be more equilibrium points and perhaps even more points where d_1d_2h is a maximum. But if 'h' varies regularly, there will be only one equilibrium point coinciding with a unique maximum of d_1d_2h . However, we do not need to appeal to a regular 'h' to justify the solution.

Let P be any point where d_1d_2h , or the same thing, $\mu_1\mu_2h$ is maximized, and let P be the maximum of $u_1 u_2$ on the part of B lying in the region $\mu_1 \geq 0$, $\mu_2 \geq 0$. The value of $\mu_1 \mu_2$ at P must be at least P since $0 \leq h \leq 1$ and since 'h'=1 on B. Figure 1 illustrates the situation. In it, Q is the point where u_1, u_2 is maximized on B (in the first quadrant about N) and $\alpha \beta$ is the hyperbola, when $u_1 u_2 = P$, which touches B at Q.

The important observation is that P must be above $\alpha \beta$, but still be near enough to B for 'h' to nearly equal 1. As less and less effort is made to make the game "smooth", 'h' will decrease more and more rapidly on moving away from B, hence any maximum point P of $\mu_1 \mu_2 h$ will have to be nearer and nearer to B. In the limit, all such points must approach Q, the only contact point of B and the area above $\alpha \beta$. Thus Q is a necessary limit of equilibrium points, and Q is the only one.

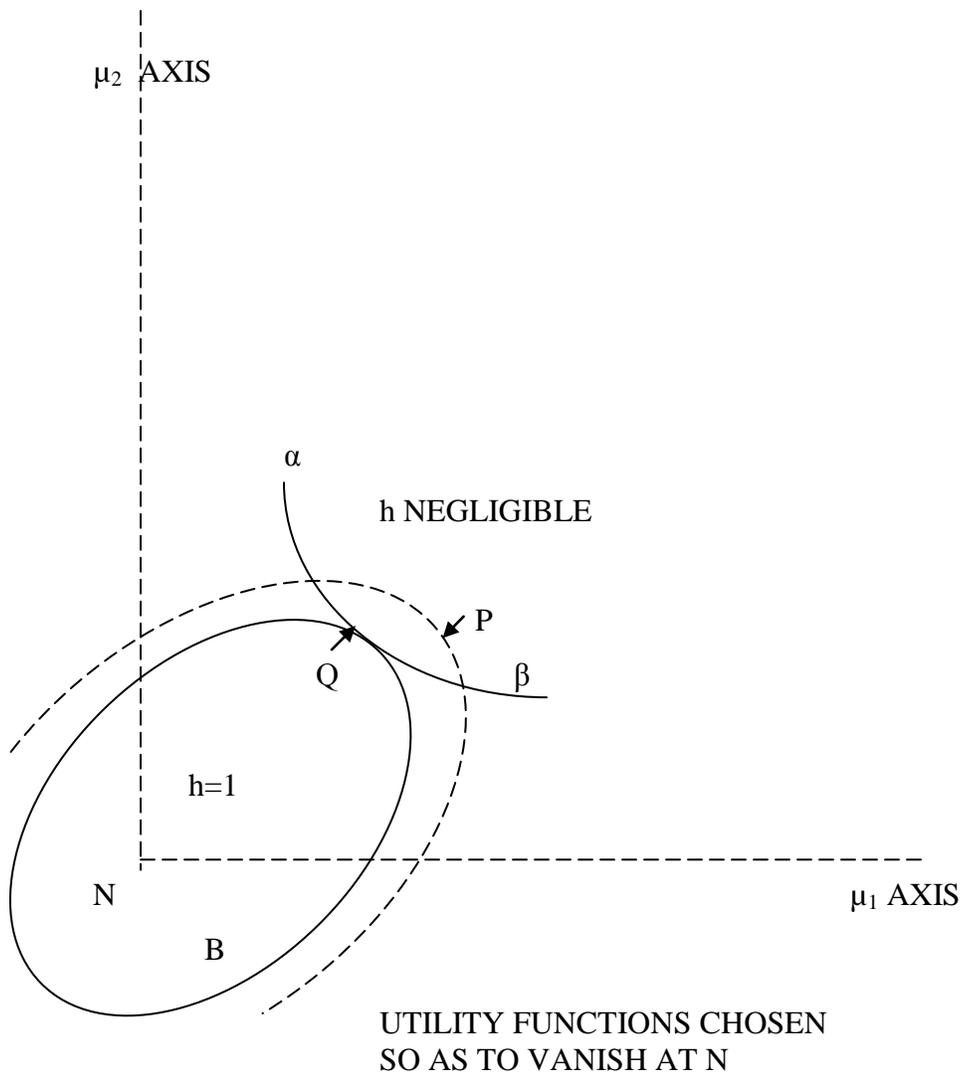


FIGURE – 1

We take Q for the solution of the demand ‘game’, characterized as the only necessary limit of the equilibrium points of the ‘game’ made “smooth”. The values of μ_1 and μ_2 at Q will be taken as the values of the demand ‘game’ and as the optimal ‘demands’.

This assumes that B contained points where $\mu_1 > 0$, $\mu_2 > 0$ (after the normalization which made $\mu_1 = \mu_2 = 0$ at N). The other cases can be treated more simply without resource to a process being made “smooth”. In these ‘degenerate cases’ there is only one point at B which dominates the point N and is not itself dominated by some other point of B . This gives us the natural solution in these cases.

One should note that the solution point Q of the demand ‘game’ varies as a continuous function of the threat point N . Also there is a helpful geometrical characterization of the way Q depends on N . The solution point Q is the contact point with B of a hyperbola whose asymptotes are the vertical and horizontal lines through N . Let T be the tangent at Q to this hyperbola. Figure 2 illustrates the situation.

If linear transformations are applied to the utility functions, N can be made the origin and Q the point $(1, 1)$. Now T will have slope -1 and the line NQ will have slope $+1$. The essential point is that slope $T = (-)$ slope NQ , because this is a property that is not destroyed by the linear transformation of the utilities. T will be a support line for the set B (that is, a line such that all points of B are either on the lower left side of T or are on T itself).

We can state that the criterion is that if NQ has a positive slope and a support line T for B passes through Q with a slope equal but

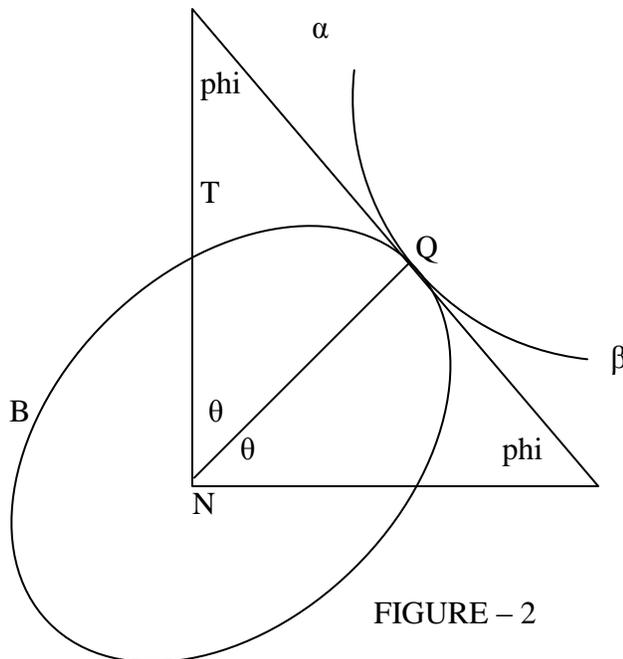


FIGURE – 2

opposite to NQ 's slope, then Q is the solution point for the threat point N . If NQ is horizontal or vertical and is itself a support line for B and if Q is the rightmost and

uppermost of the points common to B and NQ, then again Q is the solution point for N, and one of these cases must hold if Q is N's solution point. This is depicted in Figure 3. This criterion is a necessary and sufficient one.

Any support line of B with a contact point Q on the upper-right boundary of B determines a complimentary line through Q with equal but opposite slope. All points on the line segment in which this complimentary line intersects B are threat points, which, as threat points, would have Q as corresponding solution point. The class of all these line segments is a ruling of B by line segments which intersect, if at all, only on the upper-right boundary of B. Given a threat point N, its solution point is the upper-right end of the segment passing through it (unless N is on more than one ruling and hence is on the upper-right boundary and is its own solution point).

We can now analyze the threat 'game', the 'game' formed by the first move and with pay-off function determined by the solution of the demand 'game'. This pay-off is determined by the location of N, specifically by the ruling on which N falls.

Now if one individual's threat is held fixed, say individual one's at t_1 , then the position of N is a function of the other individual's threat, t_2 . The co-ordinates of N, $p_1(t_1, t_2)$ and $p_2(t_1, t_2)$ are linear functions of t_2 . Hence, the transformation (t_2 goes to N), defined by this situation is

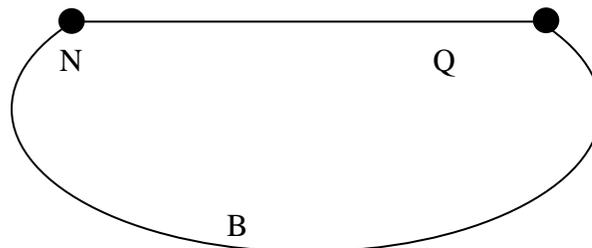


FIGURE - 3

a linear transformation of the space S_2 of individual two's threats to B. That part of the image of S_2 that falls on the most favourable (for individual two) ruling, will contain the image of the threats that would be best as replies to individual one's fixed particulars

threat t_1 . This set of best replies must be a convex, compact subset of S_2 because of the linearity and the continuity of the transformation of S_2 into B .

The continuity of N as a function of t_1 and t_2 and the continuity of Q as a function of N insure that the pay-off function defined for the threat 'game' by solving the demand 'game' is a continuous function of the threats. This is sufficient to make each player's set of best replies, an upper semi-continuous function of the threat being replied to. Now, let us consider any pair of threats (t_1, t_2) . For each threat of the pair, the other individual has a set of best replies. Let $R(t_1, t_2)$ be the set of all pairs which contain one threat from each of the two sets of replies. R will be an upper semi-continuous function of (t_1, t_2) in the space of opposed pairs of threats and $R(t_1, t_2)$ will always be a convex set in the space, $S_1 \times S_2$.

The Kakutani Fixed Point Theorem tells us that there is some pair (t_{10}, t_{20}) that is contained in its set $R(t_{10}, t_{20})$, which amounts to saying that each threat is a best reply to the other. Thus we have obtained an equilibrium point in the threat 'game'. It is noted that this equilibrium point is formed by pure strategies in the threat 'game', as a mixed strategy could involve randomization over several threats.

The pair (t_{10}, t_{20}) also has minimum and maximum properties. Since the final pay-off in the 'game' is determined by the position of Q on the upper-right boundary of B , which is a negatively sloping curve, each individual's pay-off is a monotone decreasing function of the other. So, if individual one sticks to t_{10} , individual two can not make one worse off than he does by using t_{20} , without improving his own position and he cannot do this because (t_{10}, t_{20}) is an equilibrium point. Thus t_{10} assures individual one the equilibrium pay-off and t_{20} accomplishes the same for individual two.

The threat 'game' is now established very much like a zero-sum 'game', and one can readily see that if one individual were to choose his threat first and inform the other, rather than simultaneously choosing threats, this would not make any difference, because there is a 'saddle-point' in pure strategies. It is however different with the demand

'game'. The right to make the first demand would be quite valuable, so the simultaneity here is essential.

To summarize, we have now solved the tact model, found the values of the 'game' to the two individuals, and shown that there are optimal threats and optimal demands (the optimal demands are the values).

3) THE MEASURE OF TACT

The research is aimed to study the magnitude of tact necessary to prevent Industrial Disputes leading to loss of productivity – with reference to the industries in South Bengal. We have successfully established the tact model. We now go ahead to establish the measure of the tact as required.

Let us examine the 'Data Findings' of Annexure C, that portrays the Industrial Dispute History of the samples and the reason of occurrence or non-occurrence. The brief reports on the data collection of the samples (Annexure B) inform us of the nature of tact exercised by each of the samples to prevent Industrial Disputes leading to loss of productivity – that was either successful or unsuccessful.

In Sample 1, we find that the Industrial Dispute History is Nil and the reason attributed to the same is the good personal relationship of management with the union leaders. There are however a number of pending demands, but the skillful usage of tact has prevented any Industrial Dispute.

In Sample 2, we find that the Industrial Dispute History indicates non-cooperation and go-slow tactics. The reasons attributed to the same are salary hike demands and demands of medical facilities. There are however a number of pending demands, but the skillful usage of tact has prevented further deterioration in the employer – employee relationship. The skillful usage of tact has prevented any untoward situation like indefinite strike etc.

In Sample 3, we find that the Industrial Dispute History again indicates non-cooperation and go-slow tactics of the workmen. The reasons attributed to the same are again salary like and increment. Though there are a number of pending demands, that are related to salary and other perquisites, the skillful usage of tact had ensured that differences were amicably resolved and that there was no scope of aggravation of the dispute in any possible way.

In Sample 4, we find that the Industrial Dispute History indicates lock-out. The reason attributed to the same is the failure of the meeting of the bench mark rate of production, as given by Minimum Wages Act, 1948. Though the pending demands of the employees were unjustified, the skillful usage of tact has restored production at a rate jointly agreed by the union and the management. The union has exerted supreme pressure on management through government representatives to replace the old machinery, citing the same as the reason for the failure to meet benchmark level of production, and demanding refresher training of the workmen on both old and new machinery. However the skillful usage of tact has resulted in the signing of a Memorandum of Understanding (MOU) between the union and the management, on production level and the partial payment of wages, as the organization is guided by Minimum Wages Act, 1948.

In Sample 5, we find that the Industrial Dispute History indicates lock-out. The reason attributed to the same is the agitation of the employees, due to the stoppage of salary caused by recession. The skillful usage of tact has prevented violence and the destruction of property, as management has failed in every possible way, to keep any promise, including the payment of interim relief. Though the management has failed to reopen the organization, and still keeps the employees in the lurch, there is a feeling of optimism and a positive effect is prevalent among the employee. The usage of multi-skilled tact has prevented the employees from losing faith and trust in the management.

4) ANALYSES OF THE USAGE OF TACT

Let us now analyze the usage of tact by the management of the five samples, being considered herein, and the skills that are inherent in the usage of tact. We find that the inherent skills in the usage of tact in the five samples, can be broadly classified as, (a) own effectiveness (b) interactive skills, and (c) intervention skills. We shall now briefly examine these skills.

(a) Own Effectiveness : The skills involved in maximizing own effectiveness is very important as they underpin all the other skills involved in working with people. If we are unable to manage ourselves, we will be in a much weaker position in terms of managing situations involving other people. Let us now examine a few aspects of this feature broadly.

- i) *Self Specialization :* This feature involves the understanding of our characteristic responses to situations so that we can build our positive qualities and be wary of any negative ones that may get in the way of effective usage of tact. Having a greater awareness of who we are, and what our strength and weaknesses are, can be a tremendous source of confidence that can allow us to operate from a much stronger position.

It inspires confidence in the people we are working with. If we give people the impression that we lack self-specialization, then it is unlikely that they will have much faith in us. In this way, confidence can be seen as infectious – it is passed from one person to another. In order to be attuned to other people's feelings, we need to be aware continuously of our own feelings, and aware of how situation are affecting us. Making judgements about other people can be a barrier to effectiveness and so it is necessary to have a positive regard for the people we work with, regardless of any possible judgement we might make of them. Unconditional positive regard requires a degree of self-control and discipline, which, in turn, rely on a degree of self-specialization.

In addition to recognizing the impact of our own behaviour on others, we also need to be conscious of the other people's actions and attitudes on us. Self-specialization is also relevant in term of dealing with prejudice, discrimination and oppression. In order to maximize the effectiveness of our interactions, we used to be 'tuned in' to what effect we have on others, and what effect they have on us.

- ii) *Time Management* : Time is a scare resource and therefore needs to be used to maximum effect and certainly not wanted or channeled into efforts that get us nowhere.

If we are not careful, work can expand to fill the time available. If we are not sufficiently time conscious, tasks can take longer to complete than they need to. This is important in terms of motivation. If motivation is low, tasks can take more than their fair share of time, and this, in turn, can sap motivation.

By making the efforts to complete work tasks in a reasonable period of time, we can obtain a sense of achievement, greater control and confidence. In this way, the effort to avoid the 'expanding workload' problem can be repaid by increased motivation, rather than the drain on motivation associated with it.

Energy levels and motivation can be maintained and enhanced by a positive attitude. A negative outlook, by contrast, contributes to low morale and less job satisfaction. This can become a vicious circle in which negativity and low morale reinforce each other and, over a period of time, make each other worse.

Being positive, on the other hand, can produce an optimistic circle, in which a positive outlook leads to a higher level of job satisfaction and morale and these, in turn, contribute to a positive outlook.

The essential ingredient is 'confidence'- in two senses. First, we need confidence in ourselves that we can learn, and that we can develop new skills. Second, we need confidence in the technique that we are using. If this confidence can be mustered, then the scope for improved 'own effectiveness' is immense. Working together, can be of benefit in terms of organizing our time, so too can it be of help in terms of energy and motivation. Teamwork, collaboration and mutual support, can pay dividends with regard to generating positive feelings of : a) Security and confidence (safety in number) , (b) commitment to supporting others, (c) group identity and a sense of belonging (d) enhanced pride and pleasure in joint success.

iii) *Assertiveness* : Own effectiveness, depends to a large degree , on the extent to which we are able to assert ourselves. If we are too shy or retiring, people may take advantage of us or have little faith in us. At the other end of the spectrum, if we are too pushy or overbearing, we run the risk of alienating people who may prefer to keep their distance from us. In this respect, own effectiveness can be seen to hinge on success in achieving a healthy balance between the two extremes.

This is the basis of assertiveness, finding a constructive balance between the two extremes of being submissive and being aggressive. This involves a number of skills that can be developed through practice in general and the use of certain techniques in particular. The assertive balance is portrayed below :

Aggressive	Assertive	Submissive
Bullying others	Seeking a	Allowing others

into submission	cooperative and constructive balance	to bully you into submission
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Being non-assertive in our dealings with other people means :

- Not expressing our own needs
- Allowing others to have their own way at our expense; and
- Saying ‘yes’ when we mean ‘no’

By contrast, being aggressive means :

- Disregarding the needs of others.
- Having our own way at the expense of others
- Generating a great deal of resentment and ill-feeling

Both the situations can be described as 'win-lose' scenarios. While one person gains from the situation, there will inevitably be a loser, who ends up worse off than was previously the case. In effect, these are lose-lose scenarios, in the sense that both parties lose out either directly or indirectly.

The aim of assertiveness is to produce 'win-win' scenarios, situations from which all parties emerge positively, with none losing out. This is a central feature of effective tact, as it makes a significant difference to the outcome of interpersonal relations. The challenge is to capitalize on those opportunities to maximize the personal effectiveness by making interpersonal interactions as positive as possible.

v) *Beating the Bully* : Being able to withstand or avoid the problem associated with bullying and harassment is an important aspect of 'own effectiveness', as being bullied is likely to have a significantly detrimental effect on an individual's ability to perform to the best of their ability. Being able to 'beat the bully', if or when we encounter one, is therefore an essential part of 'own effectiveness'. We need to clarify the nature and basis

of bullying and harassment before moving on to consider what can be done to deal with the problem at the levels of the individual, the team and the organization.

There are four levels at which we can deal with bullying and harassment :

- Individual responses – this involves skills of not allowing people to intimidate us or put us in position where we feel unduly compromised. It also involves skillful personal responses , with broad assertiveness skills and interpersonal skills.
- Team Support – A team response can take many forms. It can be the agenda of team or staff meeting, though it could be a confrontational approach, if the bully is an active member of the team. Mass signature could be obtained and sent to a position of authority.
- Organizational Responsibility – The organization should check strong leadership, that is often looked down as bullying. The employing organization should be monitoring the behaviour of its managers and staff.
- Legal Remedy – There are several avenues for staff affected by bullying to seek remedy or redress through the legal system. It is always advisable to seek specialist legal advice if we consider taking a case to court, and the trade union or the professional association is likely to be our best bet for preliminary consultation.

v) *Being Creative* : Being creative is the ability to be imaginative and explore a range of possible ways of addressing the situation. This process enables us to draw on a much wider range of potential solutions and is also a much greater source of interest and job satisfaction than simply following set patterns.

Habit is a powerful force that tends to be a very strong influence on behaviour. Adopting a creative approach therefore involves making sure that we do not allow habit

to dominate our practice and compel us into dealing mechanically with unique, complex situations, in simple, standardized ways.

The most important part of being creative involves being prepared to venture outside the comfort zone. Comfort zones have considerable value, but they also have significant limitations. They may prevent us from having new experiences, trying new approaches or developing our knowledge and skills.

Primarily, being creative amounts to be able to change perspectives, see situations from different angles on points of view, so that we develop our understanding of the situation by appreciating the different elements. This enables us to explore a range of potential solutions, rather than be limited to what we normally do. Thus, it gives us an opportunity to expand our repertoire. The five strategies necessary for being creative are :

- changing angle – seeing situation from other people's point of view.
- Developing a vision – have clear objectives to prevent drift and vagueness
- Stepping back – put some distance between ourselves and the situation
- Letting go – avail of the technique of brainstorming to garner ideas
- Provocation – creating an unstable idea so that we move on from it to a new idea.

vi) *Realistic Approach* : We have two main sets of challenges to deal with; dealing with our own problem and challenges (our personal challenges) and dealing with other people's (our professional challenges). Being realistic can be helpful on both counts. It ensures that we do not live our lives based on a delusion – whether that be an optimistic delusion or a pessimistic one. It can also help us to assist other whose lives may be blighted by such delusions. It gives us the opportunity to develop over time the skills we need for achieving such a balance and helping other people do so. A realistic approach offers the benefits of a balanced approach to life, and so, as a self-management skill, being realistic should be an important part of every worker's repertoire of skills.

Changing deeply ingrained habits – whether our tendency is towards an optimism that risks neglecting life's challenges or towards a pessimism that blinds us to life's joys and rewards – is not easy, but the rewards for developing the realistic approach are quite significant. A realistic approach affords a much stronger basis for tackling the very significant challenges we encounter in our professions.

In practical terms, the realistic approach means :

- Not being pessimistic : not seeing negatives where they do not exist or being unduly negative about situations that are partly positive as well .
- Not being naively optimistic : not trying to see the world through rose – tinted spectacles, as it is a distortion of reality.
- Weighing up risks and opportunities : being able to capitalize on the positives of our lives while being tuned into the dangers.
- Having self-belief : having confidence in ourselves to be able to deal with whatever life throws at us, positive or negative.

b) Interactive Skills : The interactions at a work place can be the focal point of work, and crucial determinants of success or failure. It is therefore important that we explore the range of processes and skills that have a bearing on interpersonal interactions in the context of our work. The interactive skills include the skills involved in exercising tact and handling aggression. These are essential skills in terms of both helping others and protecting ourselves from harm. Let us examine a few aspects of this feature broadly.

i) *Valuing Diversity :* When we interact with others, we do not start from a neutral standpoint . We bring with us a whole range of values, beliefs and assumptions. These are linked to the person we are, the range of social factors that influence and shape identity.

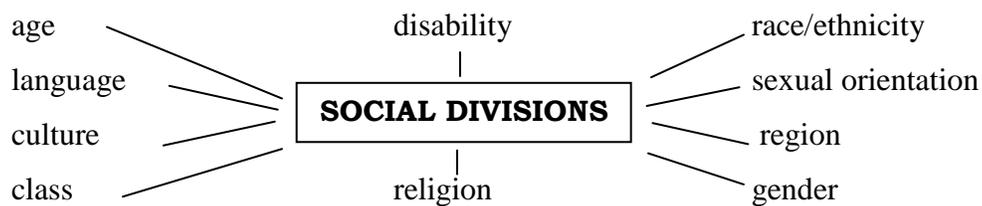
Working with people involves empathy, the ability to appreciate the feelings and circumstances of others, even though we do not necessarily share those feelings

or circumstances. In order to develop and maintain empathy, we need to be able to understand, and respond appropriately to the different cultural, linguistic and other aspects of a person's background. That is, we need to be sensitive to the role of diversity in shaping the situations we encounter in our work. In particular, we need to be aware of the ways in which difference comes to be seen in negative terms – we need to understand the discrimination and oppression that many people encounter in their lives.

Ignorance of diversity runs the risk of :

- Alienating people : making certain groups feel that they do not belong to a society.
- Invalidating people : arousing the feeling of differing from mainstream
- Missing key issues : not noticing crucial factors for our insensitivity
- Becoming part of the problem : failing to challenge discrimination and oppression.

The illustration shown the social divisions :



ii) *Non-verbal Communication* : It is the ability to give very powerful messages through our body language, in addition to the words we speak. Our body language adds an extra layer of communication, an additional set of signals above and beyond the verbal messages given. The aspects of non-verbal communication include :

- Facial expression – conveys signal or message
- Eye contact – a balanced amount is socially most significant
- Posture – the way we hold our body indicates the frame of mind
- Orientation – this refers to the direction we face when we converse

- Prominency – how close we get to people physically when conversing
- Touch – very effective in providing comfort, showing respect, etc.
- Fine Movement – gestures and mannerisms that accompany spoken language
- Gross Movements – bodily movements on a larger scale in tense situations
- Artefacts – the way of usage communicates much information about the person
- Dress – the clothing says a lot about us
- Setting – the physical environment in which communication occurs is important
- Direct work – these are communications through interactive activities

There are six particular ways in which non-verbal communication strengthens the interactions at a work place. These are repetitions, contradictions, substitutions, complementing, accentuation and regulation. Non-verbal communication responds to the need of a sharper focus on interpersonal dynamics and a greater sensitivity to the subtle, but influential processes, that occur when people interact.

iii) Influencing Power : Influencing is one of the basic building blocks of industrial interaction. When people are together, the chances are that somebody is trying to influence somebody else, or indeed that they are seeking to influence one another. Influencing skills are the basic components of working life. They are very important in helping us achieve our objectives and make progress. The power lies in what is involved in one person seeking to influence one or more others in a particular direction and highlights a number of strategies that can be used to maximize our effectiveness. The various strategies involved in influencing others include :

- Connection – The strategy is to smile or build a rapport with some one.
- Putting cards on the table – The strategy is to be open about what we are trying to achieve and encouraging others to do likewise
- Giving solutions not problems – The strategy is to solve problems and not identify problems.
- Giving feedback – The strategy is to give negative feedback appropriately and constructively

- Speaking the same language – The strategy is to speak to someone in his or her first language, that is something one is likely to value.
- Dealing with objections – The strategy is to recognize early the resistance to the handling of objections.
- Listening and empathy – The strategy is to engage in active listening and put ourselves in the other person's shoes.

iv) Handling Feelings : The emotional dimension is often one that may be neglected and, where it is considered, the feelings of others may be well addressed. Feelings can often have a subtle effect on our practice without our realizing. They can colour our perception and shape our actions. Feelings act as motivators, but they can also demotivate us and stand in the way of achieving our goals.

The emotional dimension of human experience raises a number of important issues for the workers. A better understanding of the role of feelings can help to equip us for the demands of the job. The first point that is emphasized is the importance of being able to recognize feelings and to be able to detect the subtle influences. We need to use sympathy and empathy judiciously. Sympathy entails sharing the same feelings as the other person at a particular time or in particular circumstances. Empathy, by contrast, refers to recognizing the other person's feelings (and responding accordingly) without actually feeling them ourselves.

Empathy rarely occurs in a pure form. It is inevitable at times that we feel at least a hint of the feelings the other person is displaying. The essential task is to remain sensitive to people's feelings, so that we do not become unfeeling, but without being so sensitive that we become disabled by the welter of emotions that we come face to face with. That is, we need to nurture the skills of empathy, rather than run the risk of allowing sympathy to disempower us, thereby rendering us of little use or value to people at the very point when they may need us the most.

The danger associated with the failure to grasp the nettle of feelings should, by now, be quite clear. If we turn our back on the emotional issues involved in the workplace, we not only reduce our chances of being effective, but also run the risk of doing more harm than good, to ourselves and to the people we are trying to help.

v) *Handling Conflict* : Work often involves an element of conflict, that can be a significant source of anxiety. It is therefore important that we have the skill of handling conflict.

Often conflict is resolved through skilful negotiation. The skill involved is to have the process of negotiation started automatically in the situation of conflict, even if we do not begin it deliberately. The task is then to become more aware of what happens during negotiations, so that we are better equipped to handle them constructively.

But we also need to consider what happens when negotiation fails and an aggressive response ensues. We need to identify the key factors that apply in situations characterized by aggression and violence, and identify strategies for dealing effectively with the challenges that such situations present. This is a key task in terms of :

- Ensuring that aggressive responses do not undermine our effectiveness by sidetracking us from pursuing our agreed goals.
- Protecting ourselves from harm in potentially volatile situations
- Boosting our confidence in dealing with such situations in future.

There has to be two main focus areas. The first deals with the process of negotiation and therefore has a preventive focus (preventing conflict from overflowing into aggression). The second deals with the issues of aggression and violence, and offers guidelines on how to respond appropriately when faced with aggression, and actual or potential violence.

Where negotiations break down, or do not have the opportunity to get stated, an aggressive or violent response is the likely outcome. Careful handling is important to

avoid potentially violent situations where possible, anticipate likely aggressive responses, defuse tense situations, and respond positively and supportively in the aftermath of such incidents.

(vi) *Multidisciplinary Working* : Multidisciplinary collaborations involve a number of differences that can easily clash. Being able to work effectively in a collaborative fashion, require us to have the skills of working with differences positively and constructively, rather than allowing them to stand in the way of progress. These differences include:

- Values – different professional groups have a lot in common in terms of their values, but there can also be major differences.
- Perspectives - While someone’s perspective will owe much to one’s values, there can also be other ways in which one’s perspective differs.

The other important differences are priorities, expectations, norms, budgets, protocols and experiences.

Multidisciplinary working is important because of the need to avoid the following three sets of problems :

- Falling between stools – People may lose out in situations where they could potentially receive help from two or more places, but may actually end up not receiving help from anywhere.
- Wasteful overlap – This refers to situations where people may be receiving overlapping help from more than one source, leading to an inefficient use of resources, as well as other potential problems in terms of the respective organizations getting in each other’s way.
- Pulling in different directions – Where there is a need for more than one agency to be involved, then there can be significant problems if representatives of these agencies are not ‘singing from the same hymn sheet’.

The resulting conflicts and tensions can be quite unpleasant and difficult to deal with. But what we have to remember is that it is even worse for clients where they are not receiving the help they need because of the failure of the professionals involved to 'get their act together' in terms of effective partnership working.

c) Intervention Skills : The skills focus specifically on developing anti-discriminatory practice, being systematic and demonstrating the value of being clear about the outcomes, planning as an important aspect of attempting to meet people's needs and address their problems, exploring the areas of decision-making skills, managing risk, exploring the process of reviewing and evaluating intervention, identifying key issues associated with ending intervention, and relating to the importance of integrating theory and practice.

i) Being Systematic : A systematic approach is one that is clear and focused, with little or no tendency to vagueness or drift. The systematic practice involves having clear objectives and a firm focus on the action being taken and their effects. Drift refers to the tendency to lose sight of what we are doing and why we are doing it, that is, to 'lose the plot'. Systematic practice is an important 'antidote' to the destructive effects of drift and vagueness .

The framework of systematic practice hinges on three key question, a) What are you trying to achieve ? b) How are you going to achieve it ? c) How will you know when you have achieved it ?

The systematic approach offers the significant benefits, like :-

a) Greater control over one's work and therefore greater confidence in being able to deal with it appropriately and effectively, b) greater professional credibility, and with it, the respect and trust, that can be so important in influencing others, c) more opportunities for learning and thereby maintaining a profile of continuous professional development.

The most important benefit is that it can give a degree of confidence, faith and trust – and therefore a greater degree of security.

ii) *Decision Making* : The skill of decision making consists of working through five different stages :

- Define objective – specifying the aim or objective, having recognized the need for a decision.
- Collect information – collecting and organizing data, checking facts and opinions, identifying possible causes, establishing time constraints and other criteria.
- Develop options – listing possible courses of action and generating courses of action.
- Evaluate and decide – listing the pros and cons, examining the consequences, measuring against criteria, testing against objectives, and selecting the best.
- Implement – acting to carry out the decision; monitoring the decision and reviewing.

Decision making is something we cannot avoid, and so it is important that we are as well equipped as possible to make the decisions that fall on us. It is a process of wrestling with the uncertainties and making the wisest choice possible in the circumstances. Effective decision making is more of an art than science and it is certainly something that can be developed with time and experience.

An important part of the process is confidence. Making decisions involves taking risks. Sometimes we make wrong decision and face the consequences. We should learn from such situations than let them deter us. Effective decision making requires clear thinking ; and the anxiety associated with an approach based on fear and low confidence will only serve to make the process more difficult, and potentially, at least, more stressful. It is therefore important to think carefully about what is involved in decision-making, learning as we go along, from both our own experiences and the help and support we can enlist from more experienced colleagues.

iii) *Managing Risk* : Dealing with risk is challenging work and coping with risk is a major feature of human experience. To oversimplify what is involved, would be a significant disservice not only to the important work we do, but also to the complexity of our lives that we become involved with. A skilled worker is somebody who has a good knowledge of and sensitivity to, the risk factors, involved in any situation. He or she has the confidence to deal with the risk issues constructively and effectively without going to either unhelpful extreme of (i) neglecting the significance of risk on one hand, or (ii) becoming overly rigid or paranoid about risk factor on the other. If we are not careful, we could do more harm than good by leaving people in vulnerable situations when we could have helped, or, at the other extreme, of stifling people's options, creativity and potential for growth by being unduly protective in term of the risks involved.

When it comes to managing risk, it is important to begin with an assessment of the key factors involved. One important issue that needs to be recognized is that informed risk taking is the basis of person-centred work in the people's profession. It involves finding the balance between, on the one hand, not wrapping people up in cotton wool, nor, on the other hand, leaving them vulnerable. Finding this balance is quite a skilled undertaking and quite a challenge.

In order to meet the challenge successfully, we need to avoid both the extremes. Naivety about risk fails to appreciate the dangers involved, leaves vulnerable people unprotected, gives customers no confidence in their level of understanding or awareness and prevents realistic plans from being developed. Paranoia about risk overemphasizes the dangers involved, can be oppressive and disempowering, can undermine confidence and self-esteem, possibly lead to panic and prevent realistic plans from being developed.

iv) *Review and Evaluation* : Review and evaluation are closely linked with planning, in so far as they identify a range of issues that can have a significant bearing on future work. The lesson to be learnt from review and evaluation can provide useful insights to guide the planning of further work. Both are closely linked with assessment, as they

continue the process that assessment initiates. While assessment is geared towards identifying what needs to be achieved, both review and evaluation consider the extent to which it has been achieved.

Review is a process that should recur during the course of intervention. It involves stepping back from what is being done and considering its effectiveness, so that any change that is necessary can be made. It is a process of monitoring and checking whether we are on course, and making the necessary adjustments if we are not.

Evaluation has much in common with review, except that it tends to occur at the end of intervention, or when somebody's performance is being examined. Evaluation involves identifying the strengths and weaknesses of the assessment and intervention stages, so that lessons for future practice can be learned.

Both review and evaluation take a backseat when the workers' workload pressures increase and yet this is precisely the time when they can be of most value in terms of clarifying process, identifying what is effective and what is not increasing the workers' sense of control and confidence, assisting in the development of cooperation and preventing vagueness and drift. These are essential elements of good practice and so we need to use our time management and assertiveness skills to ensure that they are not 'squeezed out' by the pressures of work. Evaluation seeks to measure how effective the intervention has been, and involves establishing, the extent to which objectives were met, reasons for the relative success or failure of the intervention and the appropriateness of the objectives and the strategies.

v) *Promoting healing and recovery* : The unrecognized nature of trauma in so many of the situations that workers encounter means that the tasks that we are charged with, in our profession, will often have an unacknowledged link with experiences of trauma. Such trauma can be the primary reason for the problems people are experiencing (like stress and tension), or may serve to exacerbate other problem areas (adding extra strain on relationship difficulties, for example). Having an awareness of and sensitivity to,

trauma issues, is therefore an important part of our professional knowledge repertoire – we ignore it or brush it under the carpet at our peril. We can do the workers considerable disservice if we do not recognize trauma and its implications and can actually make the situation much worse.

We can therefore see that there are two sides to responding to trauma – one open and one hidden. On the other hand, there is the challenge of working directly with those situations where trauma is clearly and openly a key factor, while, on the other hand, there is a much wider range of situations – for example, in dealing with workmen who have been abused – where the impact of trauma is less visible, but none the less very significant, despite being more hidden.

It is very important that in dealing with trauma, we take account of the following :

- Tuning in to meaning – the meanings people associate with their experience
- Working together – an immense and overwhelming sense of powerlessness
- Not getting out of our depth – stepping towards huge challenges that can be very profound in the impact they can have, both on the helpers and on the people being helped.

5) THE PARAMETERS OF THE MEASUREMENT OF TACT

The parameters of the measurement of tact, necessary to prevent Industrial Disputes leading to loss of productivity - with reference to the Industries in the southern districts of West Bengal, have now been broadly discussed.

We find that tact mainly comprises of three skills, namely, (a) own effectiveness, (b) interactive skills, and (c) intervention skills. Each of these skills has a set of sub-skills that has been discussed. Each of these sub-skills was utilized to resolve the crises, mentioned in the ‘Data Findings’ (Annexure C) of the five samples.

On careful review and evaluation of the utilization of the skills and the sub-skills, while exercising tact, to resolve the Industrial Disputes, in the five sample, we find that the skills and sub-skills, that were most frequently utilized were :

- a) Own effectiveness – time management, assertiveness, and being realistic
- b) interactive skills – non verbal communication, influencing skills, and handling feelings.
- c) Intervention skills – being systematic, decision making and promoting healing and recovery.

It is therefore established that these three skills, along with their sub-skills, are the considerable parameters of tact, necessary to prevent Industrial Disputes leading to loss of productivity – with reference to Industries in South Bengal.

We now establish the following six steps, that need to be taken for the measurement of tact, necessary to prevent Industrial Disputes, leading to loss of productivity – with reference to Industries in South Bengal :

a) ***Measure of Reading*** : For theory to be used to the best effect, it is important that we break down the barriers by challenging the assumption that reading is for students only or staff in training and not for full-fledged professionals. Unfortunately, it is commonly assumed by many people that reflecting on theory is a task for students, but not for professionals. It is important then, that such a culture of ‘reading is for students only’ is broken down. Some may argue that they do not have enough time to read. However, there are two points that need to be made in response to this. First, time spent on reading is an investment of time and can, by enhancing our practice, save time in the long run. Second, reading can increase our levels of intelligence and job satisfaction by giving us a broader perspective and greater insights into the industrial disputes. In view of this, it is necessary to devote some of our own time, outside of working hours, to read about the subjects relating to our work.

b) Measure of Asking : ‘Asking’ can apply in two ways. First, in relation to reading, much of the literature of industrial relations, is written in a jargonistic academic style that makes it difficult to understand. It can be helpful, then, to ask other people about such issues so that we can get past this barrier. The danger is that some people may give up on reading because they feel uncomfortable with the style of writing being used. Second, we can learn a great deal from other people’s practice. Students often learn a great deal by asking question like, “Why do you do it that way ?” or, “Have you any idea how I might tackle this situation ?” There is much to be gained from creating an open, enquiring, mutually supportive atmosphere in which all professionals, not just students, can learn from each other.

c) Measure of Watching : There is much to be learned from developing an enhanced level of awareness in terms of observational skills. Much of the time we may miss significant issues because we treat situations as routine and commonplace. We need to remember that every situation is unique in some ways and so we need to be attuned to what is happening and not make blanket assumptions. Practicing in a routine, uncritical way can mean, that we are, in effect, going around with our eyes, closed, oblivious to significant factors that could be very important in terms of how we deal with the situation. Theoretical knowledge can help us understand and explain our experience , but if our experience is closed off by a failure to be sensitive to what is happening, then we will not notice that there is anything to be explained. Exercising tact relies on developing a sensitivity to what is happening around us.

d) Measure of Feeling : The emotional dimension of profession, as we have seen, is a very important one. Our emotional responses, can, at times, be painful and difficult to deal with. At the other extreme, using theory can sometimes be seen as cold and technical. However, this does not mean that the two – thinking and feeling – cannot be reconciled. Thought can help us understand and therefore, deal with feeling and feelings can help bring theory to life, turn concepts into working tools, and thereby develop the skill of tact.

e) ***Measure of Talking*** : Sharing views about work situations and how these can be dealt with encourages a broad perspective. It provides opportunity for people to learn from each other's experience, to find common ground and identify differences of approach. Constructive dialogues about methods of work , reasons for taking particular courses of action, and so on, can be an excellent way of broadening horizons, deepening understanding and enhancing skills. Such dialogues also help to create an open and supportive working environment, and this, in itself, can be an important springboard, for the practice of the skill of tact.

f) ***Measure of Thinking*** : There are two main barriers to a thoughtful approach to practice. These are routines and pressure. A routinized approach amounts to working 'on automatic pilot' and is clearly a dangerous way of dealing with the sensitive issues. As mentioned earlier, dealing with situations in a routine, unthinkable way, leaves us very vulnerable to mistakes. Pressure can also stand in the way of thinking about our practice. If we are very busy, we have to be wary of allowing ourselves to be pressurized into not thinking about what we are doing. We need to remain in control of our workload so that we are able to think about our actions. Thinking time should be seen as an essential part of the development of the skill of tact, rather than a luxury that has to be dispensed with when pressure is on.

CHAPTER- 6

SUMMARY AND CONCLUSION

The skill of tact involves drawing on theory, in so far as this represents the accumulated experience and expertise of others. In this way, we can use the theory base for the measurement of tact, to avoid the need to ‘reinvent the wheel’. However, theory does not come tailor-made for practice – the cloth has to be cut to fit the circumstances. The measurement of tact, therefore, has to engage itself with theory, use it and shape itself creatively in a constructive and positive way, rather than simply wait passively for theory to provide ready-made solutions. It is a creative and proactive practice, one that casts the practitioner of tact in an active role. It is an approach to practice that is entirely consistent with the industrial work, a form of work where the situations we deal with, have many common themes, but are also in some ways, special and unique. The measurement of tact offers the use of a theory base to help us understand the common themes, and a focus on creativity to help us deal with the unique aspects of each situation we encounter. The steps mentioned herein, are not the only ones that can be taken for the measurement of tact, but they should provide a good ‘launch pad’ for working out patterns of practice, for further development of the process.

The future challenges of research include the examination of the concepts and implications of core self-evaluations for self-regulatory processes; testing of the validity of goal-setting theory and in particular the dynamics of goal setting and goal revision in field settings; comparing and contrasting the concept of a learning goal with a performance goal in terms of the mechanisms involved; integrating different theories and models of motivation with a view to developing a more coherent theoretical framework; theoretically integrating considerations of identity, commitment and psychological contract; investigating processes of psychological contracting; and investigating two-party relationships within a psychological contract framework.

CHAPTER- 7

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CHAPTER- 8

ANNEXURES

1. Annexure A

Questionnaire

1. *When was the organization started?*
2. *Is it a manufacturing unit?*
3. *What is the number of personnel in the organization?*
4. *What is the hierarchaical system in the organization?*
5. *How many personnel are there in the workmen category?*
6. *How many other categories are there?*
7. *How many recognized unions are there in the organization?*
8. *How many unrecognized unions are there in the organization?*
9. *What are the political affiliations of the recognized union or unions?*
10. *What are the political affiliations of the unrecognized union or unions?*
11. *Are all the workmen members of one union or the other?*
12. *If no, how are the workmen, who are not members of any union, looked after?*
13. *If no, can these workmen approach the top management directly?*

14. *What are the fringe benefits that are being offered to the workmen?*
15. *Did the unions, if any, ever express any resentment or grievance over their benefits or wages?*
16. *If yes, how was the grievance handled and what was the result?*
17. *Was there ever any form of agitation by the employees against the management?*
18. *If yes, what was the form and how long did it last?*
19. *Did the management initiate any disciplinary action against any employee?*
20. *How was the issue of the agitation resolved?*
21. *At present, has any charter of demands been submitted to the management by the employees or the union(s), if any?*
22. *If yes, what are the issues and how does management propose to resolve them?*
23. *How is the fixation of wage made in the organization?*
24. *Is there any policy of offering incentives or performance linked rewards?*
25. *If yes, what are the criteria and have the criteria been approved by the employees or the union(s), if any?*
26. *What are the current issues of resentment of the employees, or the union(s), if any?*

27. Did the management sit for a discussion with the representatives of employees or union leaders, if any, to resolve the issues?

28. If yes, what was the attitude of the employees, and how does the management propose to resolve the crisis?

29. What are the working hours of the organization?

30. Is overtime given to the employees? If yes, at what rate, and is it also a measure to prevent any form of agitation?

2. Annexure B

Brief Report on Data Collection of Sample 1

Date : 27.09.10

Time : 1215 IST

Venue : Indian Oil Corporation Limited (Marketing Division), Eastern Region

Lube Blending Plant, Kolkata

P – 68, Karl Marx Sarani

Paharpur, Kolkata-700043

Owner : Sri S. R. Maity, Chief Plant Manager

Telephone : 033-24391274 (D), 033-24397081, 033-24397369

Facsimile : 033-24390193

Recognised workmen's union : Affiliated to INTUC

Unrecognised workmen's union : Affiliated to CITU

The owner stated that in the calendar year 2009, the number of working days were 303 (three hundred and three only) and the number of production days were also the same. No man-day was lost due to industrial dispute.

The Plant has a strength of 31 (thirty-one only) officers and 145 (one hundred and forty-five only) workmen. The owner stated that there is ongoing resentment of the workmen on a few HR issues and he is tactfully handling them, to ensure that production is not hampered. These issues are :

1. Salary revision from 2007.
2. Revision of Leave Fare Assistance (LFA).
3. Introduction of new grades for better career progression.

4. Wage settlement for next five years and contract on 5 yearly basis in line with the policy followed for the officers
5. Stoppage of outsourcing of jobs to contractors
6. Commencement of recruitment of workmen in the organization.

The recognized union had stated that if the demands are not met in a reasonable period of time, they would resort to go-slow movement in production, followed by cease-work programmes and ultimately indefinite strike.

A discussion with the leader of the recognized union revealed that the demands were raised for the following reasons :

1. Price rise
2. Disinvestment of profit-making public sector industries
3. Employment Protection
4. Implementation of Labour Laws
5. Unorganized sector workers' Social Security Net including Contract Labour abolition and pay at par with permanent workers
6. Fulfilment of other demands.

A discussion with the leader of the unrecognized union revealed that they maintain a separate status for themselves, as they are affiliated to ruling Left Front party of West Bengal. The demands of the unrecognized union were :

1. Immediate settlement of Leave Travel Assistance (LTA)
2. All arrears to be paid wef 01.01.07
3. No curtailment of existing facilities
4. Base Year (1960) of DA should not be changed
5. Minimum salary of Grade-1 employees should be paid to the contract workers.

As the unrecognized union did not have much base in the Plant, no notice of any kind of movement was issued by them. They expected that management would sympathetically consider their demands, taking into view that the same were in the greater interests of the society.

Brief Report on Data Collection of Sample 2

Date : 28.09.10

Time : 1333 IST

Venue : Bhargab Engineering Works

(An ISO 9001 : 2000 Certified Company)

P – 292, Benaras Road

District : Howrah, West Bengal, 711108

Website : www.bhargab.com

Owner : Sri A. R. Sen, Partner

Telephone : 033-26516609, 033-26518410, 033-26512066, 98300-40589 (M)

Facsimile : 033-26512143

E-mail : bhargab@cal.vsnl.net.in

Recognised workmen's union : Nil

Unrecognised workmen's union : Two (Affiliated to CITU, and affiliated to INTUC)

The owner stated that in the calendar year 2009, no working day was lost due to industrial dispute. Any working day that was lost for any reason, was made good by working on holidays and off-days in lieu of payment of wages at the rate of overtime. The rate of overtime wage was one and a half times that of normal rate of wage. The factory manufactured and exported machinery of tea factories, and had to meet the deadlines of delivery dates of the machinery of the clients.

The factory has a strength of 6 (six only) officers, 7 (seven only) white-collar workmen, 65 (sixty-five only) blue-collar workmen and 35 (thirty-five only) contract labourers. There was no female employee in the factory. The owner stated that there is ongoing resentment of the workmen on a few HR issues and he is tactfully handling them, to ensure that production is not hampered. These issues are :

7. Salary hike every year at a uniform rate for all workmen
8. Introduction of Leave Fare Assistance (LFA) in line with workmen of government sector
9. Introduction of a fixed vertical hierarchy system for uniform career progression
10. Commencement of recruitment of workmen in the organization.

The owner stated that since there was no recognized union, he never considered the demands of the workmen to be legitimate. However, the workmen had resorted to non-cooperation movements leading to straining of relationships with the management, resulting in the management failing to meet deadlines of delivery of clients due to the refusal of workmen to work overtime.

As such, he had initiated personal discussions with every workman and discussed the problem that he was facing. The problems of the workmen were resolved on one-to-one basis. As most of the workmen were from poor financial background, they agreed to work overtime and earn money. They worked seven days a week and earned the overtime rate of wage for one day of the week. Furthermore, the working hours of the

factory were from 0800 IST to 1630 IST , with lunch break from 1300 IST to 1400 IST. However, production in the factory continued till 2000 IST, and every workman was given overtime rate of wage from 1630 IST to 2000 IST. This provided the compensation to every employee for any grievance that he might nurture against the management.

The owner further stated that he has recently introduced a mandatory salary hike of 10% to 20% for every employee, every two years. The rate of increase depended on the

performance and the skill of the employee. He also has plans of commencing the recruitment process of new workmen, to reduce the load of the existing workmen and his political commitments. He provided the normal facilities of Provident Fund, Gratuity, ESI and others to the employees of the factory. He has also introduced a hierarchaical system, and introduced new grades for deserving workmen to work with greater motivation. The contract labourers are the responsibility of the concerned hiring agency, in accordance with the agreement with the agency.

A discussion with the leaders of the two unrecognized unions revealed that though most of their demands were common and not met, they kept silent as the management was very liberal with the payment of overtime, and the same satisfied their financial needs. They hoped that their demands for uniform career progression and separate Leave Fare Assistance (LFA) would be reasonably considered by the management in the near future.

As the unrecognized unions did not have much base in the factory, no notice of any kind of movement was issued by them. They expected that management would sympathetically consider their demands, taking into view that the same were in the greater interests of the society, and hoped that they would be recognized by the management soon.

Brief Report on Data Collection of Sample 3

Date : 29.09.10

Time : 1500 IST

Venue : SARANGSoft India Private Limited

(An ISO 9001 : 2000 Certified Company)

SDF Building, Module 428 and 429

Sector – 5, Salt Lake City

District : 24 Paraganas (N), West Bengal, 700091

Website : www.sarangsoft.com

Owner : Sri A. Ray, Director

Telephone : 033-23576094, 033-23576095, 98304-88396 (M)

Facsimile : 033-23577065

E-mail : amitavar@sarangsoft.co.in

Recognised union : Nil

Unrecognised union : Two (No political affiliation but followers of separate political parties)

The owner stated that in the calendar year 2009, no working day was lost due to industrial dispute. Any working day that was lost for any reason, was made good by working on holidays and off-days. The company designed and developed software for clients of USA, for which orders were received from its Head Office in USA, and had to meet the deadlines of delivery dates of the clients.

The company has a strength of 51 (fifty-one only) personnel and all were in the executive category. The security personnel were from an outsourcing company. The owner stated that there is no resentment of the employees on any issue and he is tactfully handling any grievance that arises, to ensure that delivery is not hampered. The company has three internal departments, namely, software design, software development and Quality Assurance. All the departments are manned by highly skilled and qualified workforce, having engineering degrees or post-graduate degrees in computer applications.

The rate of attrition is 7.5% to 10%, and the reason attributed to the same is placement in more renowned companies, that would bring about greater individual fame and benefits. Only a handful of employees has completed five years in the company. The average tenure of an employee is two to three years. The working hours are from 0930 AM to 0630 PM, with a lunch break of one hour. The owner stated that the employees are expected to work till 8 PM or 9 PM out of goodwill, to ensure that client deadlines are met. No additional payment could be made for overtime, as the company is still

recovering from recession. The owner admitted that there could be internal dissatisfaction among the employees for this reason along with other reasons like stoppage of LTA (Leave Travel Assistance) from 2009, and stoppage of regular salary hike. He is exercising all his tact and negotiating skills to handle the employees on these issues. He stated that he is making regular payment of performance bonus, and has also

extended the facilities of Provident Fund, ESI and Mediclaim, which only a few companies of this sector are offering.

A discussion with the leaders of the two unrecognized unions revealed that though most of their demands were common and not met, they kept silent as the management was very kind with them and listened to their personal needs. They identified that their major demands were :

11. Salary hike every year at a uniform rate for all employees
12. Re-introduction of Leave Travel Assistance (LTA) that was stopped from 2009
13. Introduction of a fixed vertical hierarchy system for uniform career progression
14. Payment of performance bonus to the employees at a uniform rate

The owner stated that since there was no recognized union, he never considered the demands of the employees to be legitimate. However, the employees had resorted to non-cooperation movements on one or two occasions in the past, leading to straining of relationships with the management, resulting in the management failing to meet deadlines of delivery of clients, due to the refusal of the employees to work beyond working hours.

The owner further stated that there was no fixed policy on increment of salary or performance bonus. The rate depended on the performance and the skill of the employee, and the degree of the need of the employee by the company. He has also introduced a hierarchaical system, and introduced new grades for deserving employees to work with greater motivation, and also provided them the opportunity for enhancing their skills through external programmes.

As the unrecognized unions did not have any base in the company, no demand of any kind was officially raised by them or no notice of any kind of movement was officially issued by them. They expected that management would sympathetically consider their demands, taking into view that the same were in the greater interests of the company, and hoped that they would be recognized by the management soon, in line with the policy of the government. Their demands were mostly compensated by their occasional stints at the Head Office of the company in USA, as the opportunity to travel abroad greatly meets their job expectation.

Brief Report on Data Collection of Sample 4

Date : 01. 10.10

Time : 1600 IST

Venue : Gopal Hosiery

(An ISO 9001 : 2000 Certified Company)

61, Ibrahimpur Road

Jadavpur, District : 24 Paraganas (S),

West Bengal, 700032

Website : www.gopalhosiery.com

Owner : Sri S. Ghosh, Partner

Telephone : 033-24121448, 033-24136354, 98301-79341 (M)

Facsimile : 033-24140303

E-mail : gophos@cal.vsnl.in

Recognised union : One (No political affiliation)

Unrecognised union : One (Affiliated to CITU)

Manpower strength : Officers – 15

The owner stated that in the calendar year 2010, he had declared a lock-out in the factory, from the month of February to the month of May due to the following reasons :

- a) slow production rate in the factory
- b) failure of the workmen to reach the benchmark rate of production
- c) failure of the union to adhere to the government regulations of productivity, as guided by the Minimum Wages Act, as introduced from 2007-2008

The owner stated that the factory was guided by the Minimum Wages Act, with specified level of productivity per employee. It was specified that the minimum level of production would be one hundred vests per workman per day. However the level of production never exceeded sixty vests per workman per day due to slow work by the union. So a lock-out was declared and negotiations were made with the recognized union in the presence of the Labour Commissioner, Government of West Bengal. The recognized union agreed to raise the level of production to eighty vests per workman per day, citing that slow movement of old machinery was the reason of low level of production. High energy level would be required to operate such old machinery to achieve the required level of production.

The owner admitted that there could be internal dissatisfaction among the employees for this reason along with other reasons like absence of any scope of overtime if the minimum level of production was not met, not providing the facility of LTA (Leave Travel Assistance) , and stoppage of performance linked incentive bonus. He is exercising all his tact and negotiating skills to handle the employees on these issues. He stated that he has offered an incentive of 20% to the workmen for every unit of increase

in the level of production. He has also extended the facilities of Provident Fund, Gratuity, ESI, Mediclaim, and House Rent Allowance, which only a few companies of this sector are offering. At present, the factory is running at a loss of 15%. However, he is

not in the favour of declaring a lock-out, retrenching the employees and hiring younger workmen for the following reasons :

- a) non-availability of skilled workmen in the hosiery sector
- b) unable to bear recruitment costs
- c) unable to bear training costs of new workmen
- d) non-availability of the workmen at the present rate of remuneration

A discussion with the leaders of the two unions revealed that though most of their demands were common and not met, they kept silent as the management was very kind with them and listened to their personal needs. They identified that their major demands were :

- 15. Salary hike every year at an agreed rate for all employees (irrespective of the guidelines provided by the Minimum Wages Act)
- 16. Introduction of Leave Travel Assistance (LTA) that is common in other factories
- 17. Introduction of a fixed vertical hierarchy system for uniform career progression
- 18. Payment of performance bonus to the employees at an agreed rate
- 19. Payment of overtime to meet the required level of production as extra energy level was necessary to operate the old machinery that existed from 1946
- 20. Festival bonus of 25%

The owner stated that since the recognized union failed to meet the minimum level of production in accordance with the Minimum Wages Act, he never considered their demands. The demands of overtime and other benefits could only be considered if the prescribed minimum level of production was met. However, keeping in mind their past performance that brought laurels to the factory and accolades from the customers of the products, he is still offering them a festival bonus of 20%.

As the unions no longer enjoyed the confidence of the management, no demand of any kind was officially raised by them or no notice of any kind of movement was officially

issued by them. They expected that management would sympathetically consider their demands, taking into view that the same were in the greater interests of the factory.

Brief Report on Data Collection of Sample 5

Date : 05. 10.10

Time : 1100 IST

Venue : Jayshree IT Consultants Limited

(An ISO 9001 : 2008 Certified Company)

Y – 13, Block EP, Sector – 5, Salt Lake City

District : 24 Paraganas (N), West Bengal, 700091

Website : www.jicindia.com

Owner : Sri B. Ray, CEO and Director

Telephone : 033-23577214, 033-23577215

Facsimile : 033-23572577

Recognised union : Nil

Unrecognised union : Two (Affiliated to CITU and affiliated to INTUC)

Manpower strength : Executives – 15

Non- Executives – 110

Workmen – 10

It was informed that the company was closed for about a year, and the executives as well as the non-executives were asked by the owner not to report for duty. It was an international BPO, operating 24 x 7, and, dealing with outbound Voice processes of USA, UK, Canada, Australia and New Zealand. The Executives were of Finance, HR, Systems, Quality, MIS, and Business Development.. The Non-Executives were the customer service representatives. Presently, only the workmen are on duty by rotation. A discussion was made with Sri Sumanta Parida and Sri Gopal Burman, who were the

workmen on duty, and belonged to two different unrecognized unions. They stated that the reasons for the declarations of the lock-out were :

- d) slow delivery rate in the organization
- e) failure of the non-executives to reach the benchmark rate of sales
- f) failure of the management to renew the contract with the middlemen responsible for generating leads, due to economic recession in the West
- g) paucity of funds of management, resulting in the non-payment of salary of executives and non-executives for more than a year
- h) demonstration by the executives and the non-executives for the stoppage of the pick-up and drop facility
- i) inability to pay the rent of the entire premises

The workmen stated that it was informed by the management during their last bimonthly meeting, that they were hopeful that the company would reopen soon as the contracts with the middlemen for the generation of leads, were favourably disposed, as the concerned countries were slowly recovering from the economic recession. Once the contracts were signed, all the employees would be asked to report for duty.

3. Annexure C

Data Findings :

Serial Number	Union of workmen	Industrial Dispute History	Reason	Pending Demands
<i>Sample 1</i>	Recognized and unrecognized	Nil	Good personal relationship of management with union leaders	Salary revision from 2007, revision of LTA, new grades for better career progression, no outsourcing to contractors, and wage agreement on 5-yearly basis
<i>Sample 2</i>	Unrecognized	Non-cooperation and Go-Slow	Salary hike and medical facilities	Uniform salary hike, uniform rate of incentive and overtime, and commencement of recruitment
<i>Sample 3</i>	Unrecognized	Non-cooperation and Go-Slow	Salary hike and increment	Uniform salary hike and increment, restarting LTA that was stopped from 2009, introduction of overtime for working beyond working hours
<i>Sample 4</i>	Recognized and unrecognized	Lock-out	Failure to meet benchmark rate of production, as given by Minimum Wages Act, 1948	Payment of overtime to meet benchmark rate of production, 20% festival bonus, increase in the number of days of annual leave

<i>Sample</i> 5	Unrecognized	Lock-out	Agitation due to stoppage of salary caused by economic recession	Reopening of organization and payment of arrear salary
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