CHAPTER 2

REVIEW OF LITERATURE

2.1 Introduction:

In order to make the crystal clear and in depth study proper fundamental review is necessary to gain the knowledge, literature review is necessary therefore the survey of literature has been conducted based upon that methodology for collecting data and information with reference to each representative category in the sample is formulated while carrying out the whole research. The descriptive and diagnostic studies with a stimulating insight backed by the experience covered in this chapter.

2.2 Survey of Literature:

Frequently, an exploratory study is concerned with an area of subject matter in which explicit hypotheses have not yet been formulated. The researcher's task then is to review the available material with an eye on the
possibilities of developing hypotheses from it. In some areas of the subject matter, hypotheses may have been stated by previous research workers. The researcher has to take stock of these various hypotheses with a view to evaluating their usefulness for further research and to consider whether they suggest any new hypotheses. A researcher working in the field of sociology will find that such publications as the Sociological Journals, Economic Reviews, the Bulletin of Abstracts of Current Social Science Research, Directory of doctoral dissertations accepted by Universities, etc. afford a rich store of valuable clues. In addition to these general sources, some governmental agencies and voluntary organizations publish listings or summaries of research in their special fields of service. Professional organizations, research groups and voluntary organizations are a constant source of information about unpublished works in their special fields. It could be too narrow an outlook, however, to restrict one's bibliographical survey to studies that are directly relevant to one's area of interest. The most fruitful means of developing hypotheses is the attempt to apply to the area in which one is working, concepts and the theories developed in quite different contexts. Thus, the theory of perception developed in the area of psychological problems may provide stimulating clues for researchers desiring to work on the problems of group morale or group tensions. The
sensitive descriptions to be found in the works of creative writers or novelists may also provide a fertile ground for the generation of hypotheses.

2.3 Earlier Research in the above subject:


2) Investment in Human Resource Development towards technological development in selected industries in and around Pune by Mr. Mohammed Jaffer Shrinath Guide Name Dr. Kalpana Moses, Year: Nov. 1994.

3) Concept of Human Resource Development in Buddhism by Mr. Detchat Tresap, Guide Name Dr. (Mrs.) Kalpana Bhoite., Year: 1999.

4) Human Resource Management Systems in Multinational Companies, A case study of Philips India Limited, By Mr. R. R. Manjeshwar, Guide Name: Dr. K.G. Pathan, Year: 1996

The above are the researcher has done a detailed and scientific study about the HR policies and practices. However a need has arisen since the research did not stretch up to the pharma industries. As said earlier, a detailed study about the HR policies and practices in the pharmaceutical
industries are the need of the day. It has been rightly said that there is always a room for improvement. Although an earlier study has been day, the present day scenario demands for a detailed and scientific study, with the growing science and technology, the expectations of the consumers are also growing. Hence to meet these demands, the organization should be functioning smoothly and for their smooth operation of any organization, it is essential that there should be proper study about the HR polices that have to be implemented.

2.4 Pharmaceutical Industry in India and its growth:

Pharmaceutical industry as an essential part of the health care sector has a tremendous responsibility in regard to the health of people of the country. It has shown an eye catching growth during the last four decades. This is a result of the enactment of the Indian Patents Act 1970 which came into effect 1972; further Government of India in their five year plan has prioritized the health care of a common citizen. Accordingly, Indian companies could make and sell patented products without a license from the foreign patentee. Further provided protection to the domestic manufacturers by restricting imports through licensing. Also the development of process technology along with refined capabilities in Chemical engineering enables
Indian to go ahead with the production of synthetic bulk drugs maintaining high quality at competitive prices.

However many drugs catalyzing the ailments of certain diseases [e.g. heart break, diabetes, impotency, AIDS, hypertension, sciatica, lumbago pain etc. to name a few] are not within the reach of common man; forget about economically depressed classes of people.

There are around 300 medium and large drug units, along with approx. 1000 small scale units, in the mount producing a complete range of formulations and medicines ready for consumption by patients suffering from diseases. For then about 350 bulk drugs consisting of chemicals having therapeutic content and value are made use of in the production of various formulations. But these efforts are insufficient because the impact of diseases on the urban and rural populations in challenging. No doubt, some progress in health care has reduced maternal and child mortality. But this is inadequate to meet the health requirements of over crowded populations in urban areas and diseases prone populations in rural areas. People in rural areas due to poor nutrition are susceptible to infections diseases such as tuberculosis and malaria. Therefore nutrition's food supplemented by appropriate minerals and vitamin is necessary to promote health care. In large cities on account of over crowding and unhealthy living atmosphere
the incidence of hypertension, AIDS, cancer and cardiovascular diseases is showing an increasing trend. This necessitates a boost to pharmaceutical industry and as well as increase in investment in medical research and promotion of excellence in drug formulations.

Contribution to the Health Care development and growth could be traced to the increasing number of primary health centres and hospitals throughout India. Improvement in the existing hospitals, development of professionalized systems of medicines through the efforts put in by medical personnel and also qualitative production and distribution of essential drugs. Much progress is being achieved through campaigns and programmes relating to immunization against diseases such as tuberculosis pertussis and rubella. According to Survey of Indian Industry (The Hindu 2003) the Indian pharma industry has shown remarkable growth and maturity during the last four decades, unparalleled in any other industrial segment. Further Mr. M.D. Nair, a consultant to Pharma Industry writes in the Hindu Survey of Indian Industry 2003 that “in 1960-61, 41.2 which rose to 64 in 1999-2000, infant mortality came down from 146 per 1000 live births to 69, death rate decreased from 22.8 to 8.9 and birth rate from 41.7 to 26.4 per thousand. While public measures such as provision of safe-drinking-water and sanitation, better food and nutrition and shelter have also contributed to this
improvement in basic health parameters, the role played by medical interventions through drugs, doctors and hospitals can not be overlooked”.

Also “Capital investments grew from Rs.140 crores in 1965-66 to over Rs.3000 crores in 2000-01; during the same period bulk drugs from Rs.18 crores to over Rs.4,000 crores, formulations from Rs.150 crores to Rs.20,000 crores, exports from Rs.3 crores to Rs.8,000 crores and R & D expenditure from Rs.3 crores to Rs.400 crores. In spite of such phenomenal growth in value terms, India, which has 16 percent of the world's population produces only 1.2 percent of global output of pharmaceuticals and the annual per capital, consumption of drugs in India is one (if the lowest in the world at $3. Though well equipped ultra modern, manned with talented doctor and hospitals are available, their prime and primitive object is to earn profit. This leads to squeezing of common man.

2.5 Pharma Trends and Expectation :

Over 20,000 pharmaceutical companies in the country engaged in the production of bulk drugs and formulation are facing competition. Companies with better economies of scale, improved technology and aggressive marketing are flourishing whereas some of the companies on account of high cost, poor marketing and inadequate technology are facing problems. Not only this, but branding a particular product, unfair
selling/marketing tactics, results adversely on the basic principle – availability of generic pharma product in right quantity of right quality at a right place, at a right price and at right time. A restructuring of the pharma industry with the merger of small and medium companies or their acquisition by large companies would pave the way for becoming major suppliers for the global genetic markets and also for patented products. “Post 2005, if India is to emerge as the third or fourth largest pharmaceutical force in the world, at least the leading companies need to reinforce their commitment to new drug discovery research. Considering that even the largest Indian Company will be unable to develop new drugs from concept to global markets, the licensing and collaboration route for drug development after a candidate molecule has been identified and patented will be the answer (M.D. Nair)”.

Today India is facing a shortage of personnel with specialized skills and technical expertise for developing new drugs on the front of “geilerics” expertise is no problems but for making new products it is necessary to attract talent by encouraging people of Indian origin from overseas and obtain their expertise in drug production as consultants and employees. Biotech institutes in this country have to take the lead. Further agro-biotech products manufacturing companies need Government assistance.
However the Indian biotech sector is doing well and is growing at the rate of 30 to 40 percent every year. Further the expectation is that this sector may grow from over $ 2 billion at present to $ 5 billion by 2010. The present-day challenges in the pharma sector in this country can be effectively faced by recruiting expert man-power.

Limited resources, uncontrolled population growth, galloping inflation, illiteracy, blind faith in black magic, use of obsolete techniques, plants, equipments – surface level approach for effortising- create innumerable problems.

Undoubtedly and unquestionably the policies, principles, programs of Government are excellent. But problems arise due to wrong implementation and static approach of concerned.

2.6 Research and Development in the Pharma Sector:

The “life-breath of pharmaceutical industry is ‘research’ and 'development' in its longevity. Research or discovery skills necessitate the requirement of a well-established infrastructure and an effective collaboration between the Government, Private Sector and Academia. Pharma markets are governed by 3 segments consisting of patented segment, the generic segment and the branded formulation segment. The branded formulation necessitates research through new drug discovery system.
According to Mr. Surendra Somani, M.D, of Kopran Pharmaceuticals, the R&D functions among India. Pharma companies are still at a nascent stage. Even well entrenched players allocate as low as 2.5 percent of their total turnover for Research and Development. This compares poorly with multi-national pharma companies whose R&D accounts for 15 to 20 percent of their turnover.

Sixty percent of all the illness in developed countries arises from viral infections that consist of influenza, common cold, bronchitis, hepatitis and rabies. Fifteen percent of illness is due to bacterial infection. In India, apart from the water-borne diseases such as jaundice, cholera etc we find that Malaria (parasitical) AIDS (Viral) are reaping epidemic proportions. It is strange that even though 60 years passed after independence we find no comparable remedy for viral infections.

2.7 Human Resources Development in the Pharma Sector:

“One machine can do the work of fifty ordinary men. No machine can do the work of one extraordinary man” (Elbert Hubbard)

Even though technology may gallop and triumph still human effort is indispensable. Well-trained personnel can man the machines for achieving productive results. Human Resource Development is a continuous phenomenon that is dependent on training feedback and counseling, career.
planning, job-rotation and performance appraisal. In pharmaceutical industry development of skilled and technical manpower is of paramount importance. HRD should fundamentally aim at the development of the individual in the context of his job and responsibility. Development of team-work and the inter-team collaboration is essential. The recognition of talent, skill, funding of knowledge and commitment are imperative for effective performance. The health of an organization gets promoted if the superior-subordinate relationship is safe-guarded with the ultimate objective of promoting the capabilities of all the employees. Technical and managerial along with promotion of appropriate result-oriented research can positive lead by the Indian Pharmaceutical industry to greater heights of performance and peaks of perfection. It is also imperative to enhance creativity. Creativity is thinking in different way. Creativity capsules a combination of ‘materialism’ approach along with ‘spiritualization’. This undoubtedly encircles ceaseless efforts in proper direction and leads to tightening the belt and putting the heart and soul in the cause of good. There is a wider scope for regulating the medicinal formulae under generic name. This will ensure availability of appropriate alternatives for the medicines used for common illness classified by medical practitioners as ‘nothing abnormal detected’. (NAD) Some measures are seriously needed for arresting maximum retail price for
patented drugs. As in the case of industries the objectives of pharma industries are expansion during the boom period [for pharma industries there is always boon], survival during recession [seasonal ailments] penetration in the existing market [going to the micro interior of rural market, expanding horizons, creation of good will and ensure reasonable return on investment. However the word ‘reasonable’ is subjective term. Hence pharma industries ought to define in the proper perspective with long term vision, as I opine.

In this regard; before detailing the project; the synopsis was drafted so that the endeavor will be channelized in the proper perspective and I will be in a position to give the justice to the cause already drafted and defined.

Apropos the above; the papers submitted for presentation in synopsis focusing the outline / strategy is appended here below for perusal and pondering.

The literature survey has revealed that the existing H.A. practices, gaps and global H.A. practices. In light of this the researcher has made research based logic action of framing the integrated, descending priority based objectives mix, and hypothesis. Further an exhaustive analysis of methodology is carried on. The main focus of methodology is a random sampling and structured questioner. For collecting the functional primary data of H.R. personnel.
The role of Human Resource Development in the Pharmaceutical Industry is paramount importance when these companies have to score higher on effective economy efficiency and innovation from their present levels. Indian Pharmaceutical Companies should move from comparative to competitive advantage in the health care industry. Just as the Indian IT and BPO exports are seeking tax sops in order to compete against other software exporting countries, Indian Pharmaceutical sector by raising its levels of qualitative human resources management can contribute remarkably to enable India to be the third largest economy after China and US by 2050. In this respect organizational effectiveness in the Pharmaceutical Companies that depend on the R & D and innovative efforts of Scientists, Managers, Executives, Supervisors, Workers, Systems and Technology, has to be geared up.

For the Purpose of finding to the extent to which the HRD practices adopted in the pharmaceutical industries in and around Pune are appropriate following objectives have been framed.

1. To study the HR policies in the selected pharmaceutical companies.

2. To Study the HR Practices followed in the selected pharmaceutical companies.
3. To examine HR practices and appraise the same in the light of HR policies.

4. To study the Organizational set-up and structure of the HR department in the selected pharmaceutical companies.

5. To study the impact of the changes of (a) Improved Technology (b) Global HR Practices and policies as role model for HR practices in India


Each objective stated above has realism and justification. The first objective aims in finding out how far the H. R. policies are at variance from company to company. Whether the variance can be attributed to the requirements of production, logistics, maintenance, quality control etc. The fact as to whether these policies necessitated changes and modifications from year to year required special study with respect to the selected companies.
Policies, programs are basically the blue prints, which originates action. Implementation assist to bring the programmed plans in reality Congruence between policies and practices is necessary in the interests of harmonious functioning and efficiency. However, this aspect necessitates scrutiny and verification with reference to the HR policies and practices followed in the selected companies. The second and the third objectives are focused on a careful examination of the deviational features between policies and practices. The fourth objective aims at examining the efficiency of the organization set up in the selected companies, for ensuring the effective implementation of the HR policies. Further, the purpose of this objective is to evaluate the extent to which the organizational set-up was appropriate for ensuring an integrated network of personnel from A to Z. The fifth objective focuses on the impact of the changes, on the HR policies caused by technological improvements and development and also by the economic features of 'globalization' and 'liberalization'.

A careful study of this objective is imperative especially due to the far-reaching consequences of sky rocking technological advances and result oriented economic policies on human resource development. The Sixth objective aims at suggesting ways, means, remedies and solution for solving HR related Problems brought out by certain H.R. policies and resultant
practices in the selected pharmaceutical companies. While H.R. Policies deserve strict implementation, it is necessary to over-haul them in accordance with the exigencies of time and circumstances and hence the justifiable need is for appropriate reflection, rectification and re-statement of such policies with references to situational aspect.

2.8 Need for improving the image of the Indian Drug Sector:

With appropriate skilled man-power the Indian Pharma Sector can march towards excellence, it is imperative to take urgent steps to eliminate fake, counterfeit and spurious drugs from the local markets. These drugs are produced and marketed by unscrupulous elements. According to a recent Press Report the Drug Controller General of India Mr. G. Venkateswarulu, said “we have a rough estimate of Rs.2.5 crore (fake drug survey) and the industry has already offered their help in testing and analyzing of the collected samples”.

Hence a nation-wide survey to ascertain the presence of fake drugs has been planned by collecting 1 lakh to 1.5 lakh samples of drugs across the country. Further Mr. Valerio Reggi W.H.O's co-ordinator (for medicines regulatory support, technical co-operation for essential drugs and traditional medicines) is reported to have said that there were no constraints on the organization to offer help to the Government of India to get an accurate
picture on the fake drug market in the country. It is interesting to note that the term "fake drugs" is being widely misunderstood in the country as well as overseas markets as only "spurious drugs". According to Mr. Valerio Reggi "The majority of fakes are counterfeits, which contain active pharmaceutical ingredients and are not really harmful. Counterfeits are the brands which are sold in the market by faking the name and label of established brands of drugs mostly prescribed by the physicians. And it is often found that the size of the counterfeit and spurious drugs market in countries like India is exaggerated".

However the office of DGCI has now set up six zonal cells within the regulatory department to coordinate with 300 independent consultants who have been given the job of collecting medicine samples from wholesale and retail trade outlets, pharmacies, dispensaries, hospitals etc. This action is in the right direction as it would strongly present the evil of counterfeit drugs which violate patent and copyright- rules by mimicking packaging and faking the brand names and thereby tarnishing the fair image of the Indian drug sector.

However there must be a balanced approach because along with branding there is a fear of price escalation subsequently leading to exploitation of the consumers of medicines.
Further it may happen that scrap dealers may collect substandard
drugs from the, premises of some of the drug companies and may recycle for
sale instead of destroying the same as per FDA regulation. Recycling and
sale of sub-standard, mislabeled, expired drugs is a potential danger to the
precious lives of the consumers. Consumer Organizations such as ACASH
which is a member of International Organization of Consumer Unions, can
strongly deal with such scrupulous dealers in fake drugs. Though the
regulating authority endeavors strict adherence to the rules, regulations what
is needed is transformation in thinking and change in morality. However
morality and ethics are becoming only the topics of academic interest.

2.9 The Design of Research :

In the course of the present chapter, we shall be concerned with the
problems of how the various phases of research can be brought under
control. The problem of control can be handled by 'designing' the research.
Let us therefore approach the meaning of 'design' and understand what all is
involved in 'designing'. An architect is said to 'design' a building. In the
process of 'designing' he considers each decision that is required to be made
in constructing the building. Bearing well in mind the purpose for which the
building is to be used, the architect takes decisions, such as, how large the
building will be, how many rooms it will have, how these rooms will be
approached, what building materials will be used and so on. The designer engages himself in, such decision-making well before the actual construction begins. He then proceeds in this manner because he wants to get a picture of the whole before starting the construction of a part. This picture helps him to visualize clearly the difficulties and inconveniences that its users would face when the building would come up according to the plan. On the basis of this paper-picture, he can effect corrections or modifications and make improvements before the actual commencement of construction. It is obvious that the building may inhere many defects and engender many inconveniences for its users and thus the very purpose for which it is to be constructed may be defeated if careful thought was not given to the matter at the 'designing' stage. The professional architects in India often complain, indeed with justification, that people often think it an unnecessary wastage of funds to hire the services of architects. They would better 'utilize' this fund for adding a few more rooms to their building. More often than not, these self-styled architects realize almost immediately that their 'economy', in terms of saving the fees of a professional architect was misplaced and that it would now cost them a lot more for now they would be required to effect drastic modifications to remove the inconveniences that they had not paused to anticipate. Despite this unnecessary and avoidable expense of money,
time and energy, they are lucky who can really 'save' the worth of the building.

Designing by forewarning us to the difficulties to come, ensures against wasteful expenditure of money, time and energy, so we can be armed against them in good time. To design is to plan, that is, designing is the process of making decisions before the situation arises in which the decision has to be carried out. Designing is thus a process of deliberate anticipation directed toward bringing an expected situation under control.

The lesson we have learnt from the foregoing discussion applies with equal force to any research. If we anticipate before we conduct a research inquiry, the various difficulties that may have to be encountered in the course of this exercise and decide what to do about these, then, we increase to that extent our chances of rationally controlling and articulating the research procedure and forestalling the-possibilities of failure.

The research designer understandably, cannot hold all his decisions in his head. Even if he could, he would have difficulty in understanding how these are interrelated. Therefore, he records his decisions on paper or record disc by using relevant symbols or concepts. Such a symbolic construction may be called the research design or model. The model makes possible an overall evaluation of the total plan. It is on this basis that the researcher can
appreciate the whole study structure as also the operations, the place and importance of the successive steps that he will be required to take in the total scheme.

The research design results, as was said, from certain decisions taken and ordered in a certain sequence by the scientists. The major design decisions are in reference to the following aspects:

(a) What the study is about and what are the types of data needed?

(b) Why the study is being made?

(c) Where the data needed, can be found?

(d) Where or in what area the study will be carried out?

(e) What periods of time the study will include?

(f) How much material or how many cases will be needed?

(g) What bases will be used for selection of cases?

(h) What techniques of gathering data will be adopted?

(i) How will the data be analysed?

(j) How best can these above questions be decided upon and decisions articulated in a manner that the research purpose will be achieved with minimum expenditure of money, time and energy?

As Selltiz, Jahoda, Destsch and Cook describe, “A research design is the arrangement of conditions for collection and analysis of data in a manner
that aims to combine relevance to the research purpose with economy in procedure.”

The decisions in respect of the data to be collected, the sample to be selected, the manner in which the collected data are to be organized etc. which constitute the trunk of the research design, must be based on good grounds. In the interest of science, the design decisions must be based on an accepted methodology. The researcher must investigate or make investigable the method of making design-decisions. To the extent he does it, he is methodologically designing the research. It must be remembered, however, that no inquiry is completely methodological just as none can be completely unmethodological. Researchers vary between these two extremes. A completely methodological design is a scientific ideal which the researcher may never attain but which he is obliged to constantly try approximating.

Let us now turn to consider the need for methodologically designed research.

(1) In many a research inquiry, the researcher has no idea as to how accurate the results of his study ought to be in order to be useful. Where such is the case, the researcher has to determine how much inaccuracy may be tolerated. In quite a few cases he may be in a position to know how much inaccuracy his method of research will produce. In either case he should
design his research if he wants to assure himself of useful results. A researcher gets into trouble not only when he fails to obtain results which are accurate enough but also when he gets results that are much too accurate. If the required degree of accuracy can be obtained with little trouble, and greater accuracy only with very great difficulty, then the researcher would only be wasting time, efforts and funds in working for greater accuracy.

(2) In many research projects, the time consumed in trying to ascertain what the data mean after they have been collected is much greater than the time taken to design a research which yields data whose meaning is known as they are collected. Modern research suffers a great deal from a 'lust' for fresh data. Researchers rush off to collect data without a concern for what they mean, until they are collected. At this stage it is often very late to improve them. It is true that in some cases the delay produced by research-planning may result in obtaining stale data. But it should be remembered that failure to plan a research may produce more inaccuracy than a designed research project run later. For example, suppose the researcher rushes to make observations before he has developed adequate instruments. The errors produced by his inferior instruments may be greater than the degree of inaccuracy he would have obtained, had he waited to develop better instruments even at the obvious risk of his data getting a bit stale.
A scientist owes certain obligations to the institution of science. His right to the title 'scientist' rests in part on the ability to develop better and still better ways of inquiring. This is true of all sciences but particularly so of social sciences to-day. The hope of any future for sciences of society may well depend on the extent to which the social scientists demonstrate how major social problems can be solved effectively in a scientific way. The scientist cannot afford to remain complacent with his methods. As a scientist he is obliged to question each and every phase of his method, opening up in effect, the possibilities of continuous improvement. We cannot wait for a lucky discovery to improve our methods. We must improve upon them systematically and take what luck has to offer as a bonus.

Once the research problem is formulated in clear cut terms, the researcher is in a position to consider how he will try to solve it. The first step toward obtaining a solution should advisedly be in the nature of designing an ideal research procedure; that is, the procedure the researcher would have liked to adopt for solving a problem if he was completely unrestricted by practical exigencies and limitations. This is the idealized research design. Ackoff defines the idealized research design thus: “The idealized research design is concerned with specifying the optimum research procedure that could be followed were there no practical restrictions.”
At first glance, such a step, i.e., of designing an idealized plan, might seem very impracticable and even an unnecessary one. The researcher may be inclined to ask why he should bother himself with procedures that can not be carried out. Why dream idly of realizing an ideal almost impossible of attainment? The answer to this can be that concern with ideal or optimum research conditions is neither idle dreaming nor wishful thinking is quite important, if we want to know how good the results are that we would eventually obtain. The ideal conditions and procedures act as a standard by reference to which we can evaluate the practical research conditions and determine their shortcomings. If these shortcomings are made explicit, it is possible in many a case to determine their effects on the observed results and thus to adjust the results with a view to minimizing the effects of the shortcomings.

The use of idealized research model or the research standard for the adjustment of actual data is common throughout the science. For example, the ideal model for determining the acceleration of freely falling bodies requires a perfect vacuum in which the bodies could fall with complete freedom. But in actual practice, the physicist can never create a perfect vacuum. Still he can conduct his experiment in such away that he can determine how a body would fall if it were in a perfect vacuum. He
determines how acceleration is affected by variations in atmospheric pressure. He calculates the relation between the changes in the atmospheric pressure and changes in acceleration. On this basis, he determines what would occur in a complete vacuum and can thus infer the acceleration of the freely falling bodies. The idealized research design then, comprises the specifications of the most efficient conceivable conditions and procedures for conducting the research. But the procedures and conditions specified in the idealized research model can seldom if ever be met in practice.

The next design-job for the researcher is to translate the idealized research model into a practical one. The practical research design has a reference to the translation of idealized design into a realizable working procedure. The practical research design is necessary because certain factors do keep the researcher from meeting the idealized conditions. In a Concrete research situation, practicality may imposed many restrictions on the researcher's activities. The number of subjects or events he may ideally want to study may be much larger than his time money and energy would allow. In such a case, he can only observe a portion of the whole. Once this restriction is imposed, the use of statistics and sampling becomes necessary. Hence, the translation of the ideal model into a statistical model is a necessary step for the actual conduct of research.
Even where there is only one subject, event or property to be observed, the researcher is aware of the fact that his observations are always subject to error and he will thus need more than one observation for each set of variable-values. He would like to make an infinite number of observations of some single subject. This is obviously impossible. Hence, he must deal with a sample of the possible observations. Thus, sampling possible observations requires a translation of the idealized model into a practical statistical model.

Even if situations existed in which the researcher could make an infinite number of observations on each subject, it might be wasteful to do so. He may not even need the degree of accuracy that such a large number of observations would yield. Therefore, if he wants to do just as much work as is necessary to get the amount of accuracy he requires, he will gain want to use only a sample of the possible observations, which means that he will render a statistical translation of the idealized research model.

In many social situations, manipulation of the totality of variables involved is not possible, hence research must be conducted in situations which differ from the idealized one. Thus, we must determine how we can infer from the result obtained in some real concrete situation what we might observe if we had managed to produce the ideal situation. This requires that
we make explicit the kind of real situation we will look for, how we will characterize it and how we will adjust the results observed so that assertions about the idealized situation can be made. This too will require the statistical translation of the idealized research design and formulation of the research operations to be actually performed.

The practical research design may be conceived of as comprising the following four phases:

(a) the sampling design, which deals with the method of selecting the subjects to be observed for the given study.

(b) the observational design, which relates to the conditions under which the observations are to be made or the data are to be secured.

(c) the statistical design which deals with the question of "How many subjects are to be observed and how the observations are to be organized with a view to securing answers to the research problem."

(d) the operational design, which deals with the specific techniques by which the procedures specified in the sampling, statistical and observational designs can be carried out.

It must be remembered that none of these sub-designs and the resultant models is autonomous vis-à-vis the others. A decision in respect of
any one phase of the design may influence or affect a decision subsumed under any other phase. Consequently, these phases generally overlap.

As should be clear now, the practical research design represents a compromise prompted by a number of practical considerations that are related to the actual conduct of social research. As E.A Schuman puts it, “Research design is not a highly specific plan to be followed without deviations but rather a series of guide-posts to keep one headed in the right direction.”

Research designs differ depending on the research purpose just as the plan of a building would depend upon the purpose for which it is intended to be used. The research purposes may be grouped broadly under the following four broad categories:

(a) To gain familiarity with the phenomenon or to achieve new insights into it, often in order to formulate more precise research problems or to develop hypotheses. Studies having this purpose are known generally as Exploratory or Formulative studies.

(b) To portray accurately the characteristics of a particular situation or group or individual (with or without specific initial hypotheses about the nature of these characteristics). Studies characterized by such aims are known as Descriptive studies.
(c) To determine the frequency with which something occurs or with which it is associated with something else (usually but not necessarily, with a specific initial hypothesis). Studies having this purpose are known as Diagnostic studies.

(d) To test a hypothesis suggesting a causal relationship between variables. Studies characterized by this purpose are called Experimental studies.

It must be remembered that a fixed typology of the studies suggested above is inevitably arbitrary in as much as the different types of studies are not absolutely separable from one another and therefore, for purposes of classification, the 'major intent' of each becomes the basis for assigning them to different categories. In this connection it needs to be recognized that the development of knowledge rarely progresses in a direct step-wise manner. Each step forward in the resolution of a problematic situation is, at the same time, a step in the direction of posing new questions and of reformulating older ones. As Max Weber has said: "Every scientific fulfillment raises new questions it asks to be surpassed and outdated."

In the formulative or exploratory studies the premium is on discovery of ideas and insights. Therefore, the research design corresponding to such
studies must have enough flexibility to permit consideration of different aspects of a phenomenon.

In the descriptive and diagnostic studies, the major concern is with accuracy. Hence, the research design for such studies must be such that the bias will be minimized and the reliability of the evidence collected maximized. These two studies, namely, descriptive and diagnostic, though somewhat different in their aims, present similar requirements with respect to the research design.

Studies which aim at testing causal hypotheses, i.e., the experimental studies, require procedures that will not only minimize bias and increase, reliability but also permit inferences about causality. Experiments are particularly suited to this end.

In practice, however, these different types of studies or research are not always sharply separable. Any given research may have in it elements of two or more types of the functions we have described above. In a single study, however, the primary emphasis is usually on only one of these functions and the study can be thought of as falling into the category corresponding to the major function implied by it.
2.10 Representation of each Category in the sample:

<table>
<thead>
<tr>
<th>Category</th>
<th>Calculation</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Level -</td>
<td>12/216x100</td>
<td>= 5.55</td>
</tr>
<tr>
<td>Middle Level</td>
<td>36/216x100</td>
<td>= 16.67</td>
</tr>
<tr>
<td>Skilled Personnel</td>
<td>108/216x100</td>
<td>= 50.00</td>
</tr>
<tr>
<td>Unskilled Personnel</td>
<td>60/216x100</td>
<td>= 27.78</td>
</tr>
</tbody>
</table>

2.10.1 Percentage of each category (Sample break-up):

![Pie Chart](image)

Figure 2.1

2.10.2 Justification in regard to the adequacy of representation of each category in the sample size of 216.

a) The top level Management constituted 5.55% of the sample, because the ratio of the top level Managers to the total number of employees in
all the companies is always very much less. This percentage therefore is adequately representative. However, the top level Management is very significant as it is the directional force in policy-making and decision-taking roles of an organization. The interviews and discussions with the 12 the top level Management authorities were frank and free from any bias or reservations.

b) The middle level Management formed 16.67% of the entire sample. This is a very significant part as the middle level Managers plays a crucial role in the implementation of the H.R. Policies. The responses to the Questionnaire provided by 36 middle level Managers from the 12 companies were quite informative.

c) The skilled employees of the 12 companies, consisting of operators and technicians and other related personnel, formed 50% of the entire sample. This part of the sample plays a dominant role as it is mostly involved in the practical aspects of human resources development. The responses of all the 108 persons to whom the 'Questionnaires' were administered, have contributed to the trend in the research process. Their responses were characterized by free and frank expressions of their views and opinions.
d) The unskilled force is of much relevance in the context of human resources. This vital element in the research investigation contributes to 5% of the sample. Accordingly 60 unskilled persons were asked to express their views and provide responses to the questions in the 'Questionnaire'. Their responses added to the enrichment of the primary data, in this investigative research.

2.10.3 Secondary Data :

Secondary data pertaining to certain HRM aspects were obtained from the IT Commissioner, food & Drugs Administration, Pune. The annual general reports and financial statements of the 12 companies were also referred to. Some informative details were also sought from the office of IDMA (Indian Drugs Manufactures Association). Data was also obtained from certain journals pertaining to Pharmaceuticals & drugs.

In addition, to the above sources of information, discussions and interviews with prominent H.R. Managers have thrown light on many new aspects and practices in the area of H.R. Development.

Question No. 10 to Question No. 19 of the questionnaire related to manpower planning. Answer to question No. (10) stated that the estimates of manpower requirements in these pharmaceutical companies were essentially prepared by the HRD Department. However in two companies the
departmental incharge of the concerned department was responsible. With reference to Question No. (11) 90% of the companies pointed out that manpower requirements were determined on the basis of work study sampling and planned productivity estimation only. Other statistical methods were not of common use.

Answer to Question No. (12) indicated a positive aspect in the sense that 80% of the companies frequently analyzed manpower resources in their organization in a continuous manner. Further these requirements were analyzed on the basis of requisition from the concerned departments. Some companies pointed out that they bi-annually analyzed their requirements.

The answer to Question No. (13) indicated that corporate business plans and changes is a result of technology trends in productivity. Also changes in Government rules and regulations were essential factors for manpower planning in most of the companies.

With reference to Question No. (14) the response indicated that the job specifications varied from category to category and from company to company and there was no regularized scheme for specification.

Answer to Question No. (15) was very satisfactory. The following percentages indicate the encouraging attitude of most of the companies to their officers, in extending appropriate benefits as mentioned below:
Table 2.1

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Percentage of the companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Housing loans</td>
<td>80%</td>
</tr>
<tr>
<td>B Interest subsidy on housing loan</td>
<td>15%</td>
</tr>
<tr>
<td>C Medical reimbursement</td>
<td>40%</td>
</tr>
<tr>
<td>D Conveyance reimbursement</td>
<td></td>
</tr>
<tr>
<td>i) For officers 80%</td>
<td>80%</td>
</tr>
<tr>
<td>ii) For workers 50%</td>
<td>50%</td>
</tr>
<tr>
<td>E Leave Travel Concession</td>
<td>70%</td>
</tr>
</tbody>
</table>

Analytical explanation relating to Housing Loan, pointed out that HA Ltd. Provided as many as 1000 quarters to their staff. Other companies provided a fair amount towards housing loans. With reference to medical reimbursement some of the companies were graceful in providing 80% of medical expenses. Regarding leave travel concession some of the companies provided concessions to their officers. Some companies stated that the concessions L TC were provided by their companies rules as per rules with reference to Question No. (16).
40% of the response indicated that their sources of manpower consisted of internal sources and also 40% of the companies pointed out that their sources of manpower were consisted of only external. Where as 20% pointed out both internal and external sources of manpower for their companies. Amongst the internal sources the responses indicated the following.

With reference to Question No. (17) 50% of the companies used internal advertisement whereas 40% used promotional and 10% used technique of transfer from other departments. Further some companies adhered to the policy of confirmation of management trainees and other apprentices. Amongst the external sources the following is the position of methodology of fulfilling manpower requirements.

(a) through employment exchange 90%
(b) through open advertisements in leading newspapers 100%
(c) through campus recruitment 60%
(d) through ex-service men's agencies 20%
(e) any other (placement agencies) 20%

Answer to Question No. (19) was highly affirmative because 95% of the companies adopted a policy of transfer of managerial personnel from one unit to another in accordance with exigencies of their requirement.
Recruitment and Selection:

With reference to procedure of selection Question No. (20) was answered affirmatively stating that almost at all times they followed the same method of selection for all categories of employees. The response to Question No. (20) was 70% positive response.

With reference to Question No. (22), 90% of the companies stated that they preferred internal candidates for selecting and promoting them after proper screening with reference to Question No. (23) the following are the details of the answers.

1. Almost all the companies stated that they gave 100% importance to the subject knowledge and work experience for the selection to a particular post.

2. Physically abilities and psychological attitudes were also carefully scrutinized during the selection process.

With reference to Question No. (24) the probation period for employees in 90% of the companies was prescribed as six months for workers and twelve months for Officers.

In regard to Question No. (25) the following are the various factors that are considered by all the organizations for the purpose of regularizing
the appointments of the trainees and employees undergoing probation. The procedure, is that,

(i) After satisfactory performance during the probation period, the employee’s appointment is regularized.

(ii) Also the performance of trainee and his resourcefulness and integrity are taken into account before confirming the appointment of the concerned trainee.

All the companies verify the character and other credentials at the time of appointing a candidate.

Placement and induction : The following answers were provided by the companies to Question No. (27)

(i) Differential placement method was adopted by 90% of the companies

(ii) Job training was provided by 80% of the companies.

With reference to Question No.28 all the companies provided an affirmative reply stating that they offer formal training to all the new entrants. To Question No. (29) 70% of the companies stated that the formal induction training, lasted for two weeks. 30% of the companies stated that such a formal training lasted for only three days.

Answers to Question No. (30) were provided in the following manner:
(a) Introduction to the organization was provided by all the companies.

(b) Business ethics a strong sense of mission was emphasized to the trainees by 90% of the companies.

(c) The ideals and objectives of the organization were stressed by all the companies.

(d) 60% of the companies initiated specific job training procedures.

The answer to Question No. (31) clearly indicated that 95% of the companies carried out follow-up measures, for evaluating the effectiveness of the induction training to the employees.

With reference to Question No. (32) the answers provided by the employees was positive because they stated that they emphasized on the induction training for all the categories of their results.

Question No. (33) was answered in detail as stated below:

(a) 90% of the companies provided in-house training of their officers.

(b) In-house training was provided through the services of external consultants and senior experts

(c) The training responsibility was entrusted by 40% of the companies to the external agencies.
(d) 60% of the companies, provided effectively, on the job training (OJT) to certain employees.

(e) Only 10% of the companies stated that they do provide training in special cases to certain employees by sending them abroad well-known companies or academic institutions.

With reference to Q.No. (34) the following answers were provided in regard to the duration of job review in their respective organizations.

(i) 80% of the companies stated that they review once in a year.

(ii) 20% of the companies stated that they took a review as and when required.

Q.No. 35 was answered affirmatively stating that every change in job description was followed by appropriate training.

With reference to Q.No. (36), as to whether the concerned organization prepares their executives in accordance with technological changes, the following was the response.

(a) 90% of the companies state that they provide necessary job training.

(b) In-house training and as well as specialized training was provided by 80% of the companies.
Q.No. (37) relating to human resource information, was answered encouragingly by 80% of the organizations, affirmatively. The questions and answers are:

(i) Do you have Human Resource Information System? 90% state yes.

(ii) What are the details that are included in the HRS format for covering the HR is following aspects.

(a) Personnel bio data’s of officers 90%

(b) Training Programmers attended 70%

(c) Performance Records 80%

(d) Potential appraisal 40%

(e) Accomplishments 40%

Q.No. (38), related to the frequency of updating information.

(a) Continuously 90%

(b) Once in a year 30% answered yes

(c) As and when required 80% answered yes

With reference to Q.No. 39 How is the data on HRIS utilized? And for what purpose? The answers were as under:

(a) For increments by 100% of the companies

(b) For consideration for special projects by 40%

(c) For training requirements by 80%
(d) For higher level jobs by 50%

(e) For transfers by 30%

(f) For planning HRD activities by 20%

(g) and As per Governments rules by 20%

Performance Appraisal: Details relating for 'Performance Appraisal' were sought through Q.No. (40) to (58). The following were the various facts that were obtained during the process of collecting information pertaining to above questions.

It was stated that the following were the authorities responsible for initiating and ensuring the administration of performance appraisal.

(a) The immediate supervisor was responsible in 90% of the companies.

(b) The next level of supervisor along with immediate supervisor was responsible in 80% of the companies.

(c) The HRD department was responsible in 90% of the companies.

(d) The concerned committee was responsible in 20% of companies.

The performance appraisal system was common to all level officers in 80% of the companies and its was different in 20% of the companies.
The periodicity of performance appraisal in 90% of the companies was once in a year. The following qualities and characteristics were taken into consideration in the course of an appraisal.

(i) Integrity, Intelligence, Honesty, Achievements in sales, achievements in production and also grown and development achieved by an employee.

The performance appraisal system is of the following types in an organization.

(a) Confidential appraisal system was adopted in 60% of the companies.

(b) Open appraisal system was used in 30% of the companies.

(c) Semi confidential appraisal system was adopted in 10% of the companies.

The companies stated that the appraisal system in their organizations provided opportunities for self appraisal to the appraisers.

The performance appraisal system was found to be helpful by the companies in respect of matters relating to:

(a) Promotion 90% agreed with this fact

(b) Salary decision 100% agreed with this fact

(c) Transfer 300/r.agree with this fact

(d) Job enrichment 70% agreed with this fact

On the Job and career Development Training:
By and large in only 40% of the companies there existed separate training departments and the heads of such departments were either training managers or Deputy Managers (Personnel).

The staff strength in the training department in 30% of the companies consisted of two Managers, two Officers and two Clerical staff and two Assistant Managers. The manager in charge of training is required to report to the General Manager Personnel.

The qualifications of most of the training Managers consisted of Masters Degree in Management or a Bachelors degree with about 20 years of experience in HR.

Also persons with Engineering, Pharmacy and Science background were considered for various positions in most of the organizations. With reference to Q.No. (74), 60% of the companies stated that their range of expenditure varied from 50,000 to Rs.50 lakhs.

In regard to Q.No. (75) the volume of training budget was decided:

(a) by Chief Executive in 20% of the companies.
(b) by a team of top Managers in 30% of the companies.
(c) by training in charge alone in 20% of the companies.
(d) by training Incharge in consultation with the Chief Executive in 30% of companies.
Q.No. (76) was answered in the following manner:

(a) Straight features in 90% of the companies.
(b) Features cum discussion in 90% of the companies.
(c) Role play in 90% of the companies.
(d) Close video recording unit in 90% of the companies.
(e) Educational films in 90% of the companies.
(f) Simulation techniques in 90% of the companies.
(g) Computer games in 90% of the companies.
(h) Group exercises in 90% of the companies.
(i) Sensitivity training in 90% of the companies.
(j) Sensitivity training in 90% of the companies.
(k) Plant visits in 90% of the companies.

With reference to Q.No. (79) all the companies answered that they did not sponsor any employees to any training programme abroad during the year 2003.

With reference to Q.No. (80) it was noted that generally, companies did not sponsor their employees to foreign training programmes.

Q.No. (81) was answered in the following manner.

The training needs of their Manager were identified:

(a) From performance appraisals reports by 30% of the companies
(b) Through potential appraisal by 10% of the companies

(c) During performance review meetings by 20% of the companies

(d) Managers themselves indicate the nature of training needed by 20% of the companies

(e) Subject to longer changes in the Organization by 20% of the companies

(f) By doing frequent surveys of the training needs by 30% of the companies.

With reference to Q.No. (82) it was observed that in some few cases (30%) executives were asked to report their assessment of training programmes conducted by their training departments.

Q.No. (83) was answered in the following manner.

Feedback reports by employees were used:

(a) in deciding whether to repeat the programmes by 40% of the companies

(b) to change duration of the programme by 30% of the companies

(c) to modify contents. by 50% of the companies

(d) to drop the programme by 20% of the companies

(e) to change the faculty by 20% of the companies
In reference to Q.No. (84), 90% of the companies stated that during all these years they were reviewing the effectiveness of their training activities regularly.

Career Planning:

Q.No. (88) was answered affirmatively by 80% of the companies. Answer to Q.No. (89) indicated that career planning opportunities were offered to their employees.

The following were the detailed answers:

(a) Sponsoring facility for higher educational programmes was extended by 80% of the companies

(b) Education training abroad in exceptional cases by 10% of the companies

(c) Facilities for joining coaching Classes for professional courses were provided by 80% of the companies

(d) Grand of study leave was considered by 40% of the companies

(e) Preference for internal candidates for new projects etc. was given by 30% of the companies

With reference to Q.No. (90) the following answers were provided by various companies. They pointed out that they rewarded their managers who acquired additional qualification in the following manner.

(a) by giving additional increment by 60% of the companies
(b) by giving monetary incentives by 40% of the companies
(c) by promotion by 30% of the companies
(d) by letters of appreciation by 70% of the companies

**Job Satisfaction and Related Questions:**

In regard to the job satisfaction aspects amongst the employees in all the selected pharmaceutical companies, a list of 38 statements was administered to them. They were given five alternatives and were asked to (tick) their choice alternative. These alternatives are.

5. almost true
4. mostly true
3. sometimes true
2. rarely true
1. not at all true

The following were the responses.

1. 70% of the employees stated that their top management goes out of its way to enable them to enjoy their work and this they said was mostly true. About 30% said that sometimes the top management is found to be helpful in enabling them to enjoy their work.

2. With reference to statement (2), 50% of the employees stated that it is sometimes true that the top management believed in the philosophy
that Human Resources are extremely important and therefore employees have to be treated humanly. But only 20% of the employees stated that this philosophy is almost always true as it was implemented by their management. It is strange to note that 30% did not feel very much satisfied with the philosophy even though they said that sometimes the treatment was humanly.

3. With reference to the statement 'development of subordinates is seen as an important part of their job by the managers and officers here'. To this statement responses were: 20% agreed totally with the statement as almost always true, 40% agreed that the statement was mostly true whereas another 40% said the statement is true only sometimes.

4. With reference to the statement "The Personnel Policies in this organization facilitate employee development". The employees' response was 20% said almost always true, 50% said mostly true and 30% said sometimes true.

5. This statement was meant for finding out whether "the top management is willing to invest a considerable part of their time and other resources to ensure the development of employees".
In this regard 30% agreed with the statement and said that the statement was always true, further 50% said this statement is more or less true, only 20% said that this statement is true only sometimes.

6. This statement was "Senior Officers/executive in this organization take active interest in their juniors and help them to learn their job". 60% of the employees whole heartedly agreed that this statement is 100% true, 20% said this statement cannot always be said to be true and another 20% of the employees said that this statement was true sometimes.

7. Statement was "People lacking competence in doing their jobs are helped to acquire competence rather being left unattended". In this regard 40% agreed with statement as mostly true, 300(0 agreed with sometimes true and 30% agreed with rarely true.

8. The statement was "Managers in this organization believe that employee behavior can be changed and people can be developed at any stage of their life". In this regard 20% agreed with almost always true, 40% agreed with mostly true and 30% agreed with sometimes true.
9. The statement was "people in this organization are helpful to each other". In this regard 30% agreed with almost always true, 50% agreed with sometimes true and 20% agreed with mostly true.

10. The statement was "Employees in this organization are very informal and do not hesitate to discuss their personal problems with their supervisors". In this regard 20% agreed with almost always true, 60% agreed with mostly true and 20% agreed with sometimes true.

11. The statement was "the psychological climate in this organization is very conducive for any employees interested in developing himself by acquiring new knowledge and skills". In this regard 10% agreed with almost always true, 70% agreed with sometimes true and 20% agreed with mostly true.

12. Statement was "seniors guide their juniors and prepare them for future responsibilities/roles they are likely to take up". In this regard 90% agreed with mostly true and 10% agreed with sometimes true.

13. Statement was "top management of the organization makes efforts to identify and utilize the potential of the employees".
In this regard 70% agreed with sometimes true, 30% agreed with mostly true.

14. Statement was "Promotion decisions are based on the stability of the promotee rather than on favourism".
   In this regard 20% agreed with almost always true, 40% agreed with sometimes true. 40% agreed with mostly true.

15. Statement was "There are mechanisms in this organization to reward any good work done or any contribution made by employees".
   In this regard 60% agreed with mostly true and 40% agreed with sometimes true.

16. Statement was "When an employee does good work his supervising officers take special care to appreciate it".
   In this regard 20% agreed with almost always true. 50% agreed with sometimes true. 30% agreed with mostly true.

17. Statement was "Performance appraisal reports in our organization are based on objective for assessment and adequate information and not on favoritism".
   In this regard 20% agreed with almost always true, 30% agreed with mostly true and 50% agreed with sometimes true.
18. Statement was "People in this organization do not have any fixed mental impressions about each other".

In this regard 30% agreed with mostly true, 30% agreed with sometimes true, 40% agreed with almost always true.

19. Statement was "Employees are encouraged to experiment with new methods and tryout creative ideas".

In this regard 20% agreed with almost always true, 30% agreed with mostly true and 50% agreed with sometimes true.

20. Statement was "when any employee makes a mistake his supervisors treat it" with understanding and help him to learn from such mistakes rather than punishing him or discouraging him". In this regard 60% agreed with mostly true, 40% sometimes true.

21. Statement was "weaknesses of employees are communicated to them in a non- threatening way".

In this regard 70% said sometimes true, 20% mostly true, 10% rarely true.

22. Statement was "when behaviour feedback is given to employees they take it seriously and use it".

In this regard 50% said sometimes true, 30% mostly true, 20% rarely true.
23. Statement was "Employees in this organization take pains to find out their strengths and weakness from their supervising officers and colleagues".

In this regard 60% agreed with sometimes true, 40% mostly true

24. Statement was "when employees are sponsored for training, they take it seriously and try to learn from the programmes they attend".

In this regard 50% agreed with sometimes true, 50% mostly true.

25. Statement was "employees returning from training programmes are given opportunities to try out what they have learnt".

In this regard 60% agreed with sometimes true, 40% mostly true.

26. Statement was "employees are sponsored for training programmes on the basis of genuine training needs".

In this regard 20% said sometimes true, 70% mostly true, 10% almost always true.

27. Statement was "people trust each other in this organization". In this regard 60% said sometimes true, 30% mostly true, 10% almost always true.

28. Statement was "employees are not afraid to express or their feelings with their supervisors".
In this regard 40% said sometimes true, 40% mostly true, 20% almost always true.

29. Statement was 'employees are not afraid to express or discuss their feelings with their subordinates".

In this regard 70% said sometimes true, 20% mostly true, 10% almost always true.

30. Statement was "employees are encouraged to take initiate and do thing on their own without having to wait for instructions from supervisors".

In this regard 60% agreed with sometimes true, 40% mostly true.

31. Statement was "Delegation of authority to encourage juniors to develop handling higher responsibilities is quite common in this organization."

In this regard 50% said sometimes true, 40% mostly true, 10% almost always true.

32. Statement was "when seniors delegate juniors use it as an team spirit in this organization".

In this regard 50% said sometimes true, 40% mostly true, 10% almost always true.
33. Statement was "team spirit is of higher order in this organization". In this regard 50% agreed with sometimes true, 50% mostly true.

34. Statement was "when problems arise people discuss these problems only and try to solve them rather than keep accusing each other behind the back". In this regard 50% agreed with sometimes true, 50% mostly true.

35. Statement was "career opportunities are pointed out to juniors by senior officers in the organization".
In this regard 50% agreed with sometimes true, 50% mostly true.

36. Statement was "the organization's future plans are made known to the managerial staff to help them develop their juniors and prepare them for future". In this regard 50% agreed with sometimes true, 50% mostly true.

37. Statement was "this organization ensures employee welfare to such an extent that the employees can save a lot of their mental energy for work purposes.
In this regard 50% said sometimes true, 40% mostly true, 10% almost always true.

38. Statement was job-rotation in this organization facilitates employees’ development".
In this regard 50% agreed with sometimes true, 50% mostly true.

2.11 Available support to complete above Research Project:

The researcher has liaison with pharmaceutical industrial in and around Pune as he has worked in pharmaceutical industries for more than 4 years in Human Resource Development Department also access to library is available. The pharmaceutical industries HR professionals also have shown their keen interest to enhance their HR function.

The pharmaceutical industries are growing in the Pune industrial area. The Manager and administrating officers are showing their consent and interest in helping researcher in research projects. The research project will ultimately help these Managers of the pharmaceuticals industries in implementing the HR polices and utilizing the available manpower. In addition to this assistant provided by the corporate public, facilities like book over-the subject, conclusive environment and basic qualification of the researcher relevant to the project have further supported and enhanced the research work.

India has been marching one the path of progress, prosperity, promotability along with industrial & economic development. Health care quality of human life & as a result to its indispensable & essential for the function & human welfare.
From the in depth study as elaborated in the preceding paragraphs it is inferred that in the changing extremely dynamic environment that the research which I have undertaken will throw the light on new parameters where the greater thrust is necessary to boost up the efficiency, effectiveness of the pharma organizations.