CHAPTER-I
RESEARCH DESIGN

“There is nothing certain in the world except death and tax: yet death and tax are uncertain as nobody knows when he will die or when the tax will change”
--- Benjamin Franklin.

INTRODUCTION:

Insurance is the business of indemnification of the loss suffered by the beneficiary. Insurance business can be broadly classified into life and non life insurance business. Insurance deals with the business of offering risk management solutions either in an Individual’s life or to any business organization. The risks in a human life can be broadly classified into two categories i.e. 1) Risk of early death and 2) Risk of living longer. Life insurance business addresses these two risks by providing a variety of solutions. The life insurance industry has developed a range of products to address these risks and life insurance business works on the basic tenet of “Loss of one shared by many “We live in a risk world-forces that threaten our financial well-being constantly surround us and are largely outside our direct control Some people experience the premature death of their near and dear ones, loss and destruction of their property from both man-made and natural disasters.¹

Risk Management is generally regarded as a method of managing property and liability loss exposures, and it is rarely associated with life and health insurance of individuals as a method of managing personal loss exposures. This is not called for, inasmuch as risk management provides a framework that can be used to analyze almost all types of loss exposures, including life and health. The far-reaching significance of risk management approach to individual life insurance in the complex, post-industrial, and post-modernist society can hardly be exaggerated. To cite a classic instance, the most devastating terrorist attack ever against the World Trade Center in New York on September 11, 2001. resulted in a catastrophic loss of life and property values². The Terrible Tuesday factor would have thrown thousands of families into financial disaster but for the modern, sophisticated methods of risk management through insurance.
Since time immemorial men have sought ways of controlling the risks to which individuals and business ventures are exposed. However, only in the later part of the twentieth century has risk management emerged as a distinct subject and as an arm of practical management in its own right. It brings together ideas and techniques drawn from different disciplines in order to provide a sound conceptual foundation and a set of tools for the analysis and control of risks. In its broadest sense, risk management embraces all efforts, on the part of individuals and risk managers, to minimize the impact of uncertain events. The risks to which an individual or a business firm is exposed extend to the uncertainties associated with every type of activity and, what is more, differ in the nature of their potential outcomes. Hence the need for, and relevance of, the application of risk management concepts and principles to all types of risks, including personal risks that can be identified, quantified, and controlled.

Traditionally, risk management has been synonymous with annual budgeting for insurance premiums, and hedging. This has been especially true in Indian environment, and the corporate risk manager has the sole responsibility of negotiating insurance contracts. In a recent international research programme, conducted with a view to understanding the future market for risk management, most respondents, while offering commendable definitions of risk management, had little to say, by way of explanations, as to how in practice they would operationalise their grand risk management ambitions. Whatever an individual’s attitude towards risk may be, if he/she is to maximize his/her welfare, the first step must be to identify and evaluate the risks to which he/she is, or may become, exposed.

Risk management, as a set of techniques for surviving loss, comes in more or less five forms. First, we can restrict our decisions to those over whose outcomes we have some control, thereby managing the probability of loss. Second, we can diversify in order to reduce the consequences of loss. Third, we can insure as a collective method of diversification. Four, we can change our minds and evade a commitment before all is lost. The only other method available to us is to refuse to play when the risks are unacceptable.
NEED FOR THE STUDY:

Surprisingly enough, no systematic research work has been reportedly done in India on life insurance as a method of risk management, much less as a technique of managing personal risks associated with death, disability, sickness, unemployment, and old age, let alone as a producer of wealth. Moreover, the interrelationship between life insurance and human capital has not been properly recognized and acknowledged. It has not been realized for long that human resources have not only quantitative dimensions of physical property, but also qualitative characteristics of ethical behaviour, good health, man-making education, and creative ability. The simple truth that people can invest in themselves and that these life-long investments could be substantial and meaningful has been rarely stressed, perhaps, not being aware of the fact that the monetary worth of the income forces are incorporated within one’s being.

No doubt, it is difficult to think in terms of lifetime earnings, which appear to be abstractions. But, when “the catastrophe of death or total disablement occurs this abstraction becomes a stark reality”, and only then do we normally realize that “the surviving family has suddenly lost a lifetime of earning&’. Therefore, the head of the family who is planning his/her estate should try to fund that lifetime support for the family, so that in the event of his/her untimely death or disability, the assets provided and prudently handled will replace the lost earnings. In other words, by going through this process of converting a future stream of earnings into a lump sum of present value, he/she is, in effect, capitalizing it, thereby expressing the economic value of a person’s future earnings. The increased productivity arising from investment in human capital demands a conceptual framework for estimating human life value which provides an economic rationale for life and health insurance planning, thereby giving rise to optimal life insurance protection. Hence the need for an in-depth study of a relatively simple, but reasonably accurate method of estimating economic value of an individual to his or her family and, consequently, the extent to which he or she should capitalize earnings for life and health insurance purposes to determine optimality. This obviously involves the present value of future net earnings allowance for trends in income, certain deductions, inflation, and discounting for interests.
REVIEW OF LITERATURE:

In his work Purcal (1999) examined the question of lifetime personal financial planning and how should individual investors determine their optimal consumption, portfolio selection and life insurance needs. Human Life Value (HLV) model as a preliminary step to developing a relevant model for financial planning has been analysed. The life insurance purchasing behaviour implied by the model was also examined, showing that, optimal life insurance purchase is related to consumption levels. This finding calls into question the usefulness of the HLV concept of financial planning, which focuses on future income streams. In addition, the model provides details about optimal annuity purchase around retirement, suggesting a hump shaped pattern of annuity receipts.

Shriram Mulgund (2002) in his article on “From Single to Sophisticated – Risk Based Solvency Margins for the Indian Life Insurance Industry” discusses the background to the risk-based capital approach for setting up the required solvency margins and its application to the Indian insurance industry. He suggests that the Required Solvency Margin (RSM) level cannot be determined independently of the level of the reserves set up by the insurer. It is the total of the Reserve and RSM which is more important and relevant rather than just the level of RSM.

Ramesh Lal Dhanda (2002) in his thesis on “Divisional Performance Evaluation of LIC Business in North Zone” states that the factors affecting policy purchase decisions of the insured are the risk cover and also the tax benefits. The ratio of management expenses to total premium income, the productivity analysis for agents, the average percentage of death claims settled and the overall outstanding claims ratio are found important yard sticks for measuring the Divisional performance of LIC.

Mark S. Dorfman (2002) in his book on “Introduction to Risk Management and Insurance” reviews the salient features of the insurance industry and also the role played by the private enterprise. The different types of insurance intermediaries are also discussed at length with suitable illustrations incorporated wherever necessary.
Rejda, G.E. (2002)\textsuperscript{10} in his book on “Insurance and Risk Management” analyses the relationship between insurance industry and risk management techniques. The concepts of Enterprise Risk Management and Risk Based Capital are discussed mainly to highlight the importance of managing risks by insurance companies in such a manner to enable them to minimize the loss of their risks.

Ramachandran, K. (2004)\textsuperscript{11} in his article on “Exit Clause Needed – A.C. Mukherji Committee Report” analyses the recommendations of the IRDA Committee headed by Shri A.C. Mukherji who submitted the report in 2003. The recommendations were in three parts: i. transition to pure risk rating; ii. Commission structure; and iii. Basic structure of broking firms. He opines that the transition to pure risk rating is apparently useful to facilitate each insurer to move towards experience rating under supervision of the Tariff Advisory Committee. The commission structure is clearly geared in the insurer’s favour for all firms with paid-up capital exceeding Rs. one crore but less them Rs.25 crores and also in respect of fire and engineering insurances. There is also a sharp and perceived diminution of remuneration opportunities to brokers in these recommendations.

Deloitte & Touche Tomhatsu India (2003)\textsuperscript{12} the Global Management Consultancy, advises the LIC of India, to ramp up its long-term strategies by closely linking them with the short and medium-term plans and to strengthen them both asset-liability machinery and also risk management system. The Consultant expresses satisfaction over the guaranteed products offered by LIC and mentions that there was no comparison with Unit Trust of India. The Report further touches upon major restructuring issues like corporatisation, removal of sovereign guaranties and increasing the paid-up capital from Rs.5 crores to Rs.100 crores.

Srujan, A (2004)\textsuperscript{13} in their book on “Risk Management and Insurance” provide a brief overview of major life insurance and annuity products which are very much suitable to the lower and middle class customers. The tax benefits available to these products and also their pricing procedures are discussed.
John C.Hull (2007)\textsuperscript{14} in his book on “Risk Management and Financial Institutions” explains in detail the various aspects of risk management in different companies. The important derivative factors are discussed with reference to risk business along with necessary illustrative examples.

Gupta, P.K. (2008)\textsuperscript{15} in his book on “Insurance and Risk Management” analyses the different aspects of insurance and also the related risk management components. The comparative cost-benefit analysis of insurance is also depicted comprehensively in the book.

Inderjit Singh (2009)\textsuperscript{16} in their Book on “Insurance and Risk Management” analyze the different facets of the privatization of Indian Insurance Sector. The different approaches of managing risk based capital are discussed.

**STATEMENT OF THE PROBLEM:**

The study addresses itself to the task of establishing a conceptual framework for estimating the value of assets in the form of human capital. It seeks to show how, approached from human life value (HLV) concept viewpoint, life insurance assumes a creative role in man’s economic affairs. It is upheld that in its economic mission, life insurance is not limited to the indemnification of the loss of life and property values. The study shows that although it is very important for the benefit of dependents, life insurance should not be viewed merely as a tool of protection. It is highly productive and creative to the insured himself/herself in that it enables him/her more conveniently and quickly than any other scheme to accomplish his/her economic purposes. What is more, by relieving the insured of his/her anxiety, providing an overt and constructive outlet for his/her emotional concerns, and freeing him/her from worry and fear, optimal life insurance protection enables him/her to take initiative and develop efficiency and enhance peace of mind. Above discusses review of literatures and all factors promote to the researcher to take of the research work entitled **“Risk management and optimal life insurance in Rural Karnataka: A Study in Raichur Division”**.
OBJECTIVES OF THE STUDY:
1. To arrive at a systematized approach to the insurance purchase decision.
2. To provide an economic rationale for the purchase of life insurance through a normative economic approach.
3. To estimate the value of funds that the family will get for the purpose of maintaining its financial well-being at their current level in the event of the breadwinner’s premature death or disability.
4. To find out the capitalized value of an individual’s future net earnings, thereby measuring the economic human life value (HLV) of an individual.
5. To suggest alternative ways and means to improve the Risk management in life insurance in LIC of India in general and division of Raichur in particular.

HYPOTHESES OF THE STUDY:

The present study seeks to test two hypotheses;
1. The human life value (HLV) concept provides only an economic rational, not an economic explanation, for the purchase of life insurance.
2. The life insurance purchase in India is not based on the HLV concept, as a result of which the typical life policyholder is inadequately insured.

METHODOLOGY OF THE STUDY:

The following research methodology has been employed for the case study undertaken. Sufficient emphasis has been laid on a full contextual analysis of select Indian life policyholder. Although hypotheses are used, the reliance is more on the quantitative data than on qualitative data. The emphasis laid on detail has provided valuable insight for problem solving, evaluation, and strategy.

Sampling:

The sample consists of 100 Indian life policyholders. Stratified simple random sampling is administered. The stratified sampling is expected to be based on dividing a population into several mutually exclusive sub-population or strata, and then randomly sampling from each of these strata. But, owing to constraint of time and resource, this
could not be done. So, sampling is used to the study characteristics of a cross-section of income group. Respondents belonging to deferent income groups are chosen for the study.

**Sources of Data:**

The present study has been conducted with the help of both the primary secondary data.

**Primary data**

The study is mainly based on the primary data. The primary data has been collected through the communication approach by means of a schedule questionnaire along with a data sheet, and interview technique, the communication approach survey respondents and records their responses for analysis. The questionnaire was pre-tested through a pilot study. Necessary modifications were made in the questionnaire on the basis of pre-testing. The questionnaires schedule has been designed keeping in view the objectives and hypostasis formed for the research study.

**Secondary data**

The secondary data has been collected from various published and unpublished records of the office of insurance administration. It is also collected from textbooks on the subject under study, articles’ literature in the form of books, journal, weeklies, news papers cuttings, and from the Internet websites.

**CALCULATION OF HUMAN LIFE VALUES:**

The economic value of human life, defined as the present value of the family’s share of the deceased policyholder’s future earnings, has been estimated by taking the following steps:

**First,** the number of years from the policyholder’s present age to the contemplated age of retirement is determined by subtracting the present age from contemplated age of retirement.
Second, the annual earnings of the select life policyholders over their productive lifetime are estimated on the assumption that there will be an increase of 10 per cent in the annual income.

Third, the annual personal expenditure which includes income taxes, insurance premiums, and costs of self-maintenance is yearly inflated, and then deducted from the annual earnings so as to arrive at the amount of the income that goes to use for the family.

Fourth, the present value of the family’s share of future earnings is determined by using a reasonable yearly discount rate for the remaining earning years of the policyholder concerned.

However, it is difficult to predict the future of any individual in the present ever changing, risk-ridden world. Hence the need for depending on certain reasonable assumptions. The human life value of the policyholders under study has been estimated assuming that.

1. The earnings for the past year were regular, typical annual earnings. Other sources of income such as investment income and any unusual earnings cannot be included.
2. The fundamental relationship between age and earnings, though it varies with occupation, education and work experience, will continue.
3. The policyholders under study are full time year-round workers, and they will continue to work in their present occupation.
4. The increase in earnings over time in the future (resulting from increased productivity and economic growth) will be substantially offset by the discount factor for reduction to the present worth and normal mortality.
5. The annual personal expenditure of the policyholder is increased by yearly projected inflation rates through the technique of regression analysis.
6. The family’s share of income of the policyholder is discounted by yearly projected interest rates through the technique of regression analysis.
To estimate the human life value of the Indian life policyholders under the case study, a data sheet comprising four items -- (a) family information (b) occupation information (c) financial information, and (d) insurance information-- has been prepared and administered to the chosen hundred policyholders, dividing them, on the basis of their monthly income, into three distinct groups -- (i) lower group (with monthly income below Rs.10,000), (ii) middle group (with monthly income between Rs.10,000 and Rs.20,000), and (iii) upper group (with monthly income above Rs.20000).

The collected data has been processed, laying emphasis on a full contextual analysis of the items relating to family information, occupation information, financial information, and insurance information about the select policyholders, and their interrelations Following the four steps in estimating human life value, and depending on the reasonable assumptions mentioned above, the HLV of all the hundred life policyholders under different income groups has been finally estimated, as shown individually in the tables. The HLV thus estimated is compared with the amount of insurance owned by the policyholders concerned. And then, the insurance percentage of the HLV is calculated for every policyholder.

**LIMITATIONS OF THE STUDY:**

However, the study is not free from certain limitations, given the complex nature and profundity of the chosen subject, and the constraints of the secondary sources, on the other. The complexity and profundity of the subject emanate from the rosy characteristics of the HLV concept - ethical behavior, good health, willingness to work, investment in the mind by way of education and training and experience, creative ability and judgment, patience, and ambition-that have to be measured along with the quantitative characteristics in order to estimate the human life value of an individual. But, in the present study, the human life value of the select Indian life policyholder is estimated on the basis of the quantitative characteristics of the HLV concept only, in the absence of any established inventory to measure its qualitative characteristics. There has hardly been any significant research work in this in India that could have provided some insights for present study. The study is also circumscribed to some extent by the limited sampling. Nonetheless, the study has its own significance.
PRESENTATION OF THE STUDY:

The study is presented in seven chapters.

- The **First Chapter** deals with research design which embraces introduction, need for the study, statement of the problem, objectives, hypotheses, methodology and limitations of the study. It also presents the existing literature available on the topic.

- The **Second Chapter** is devoted to provide brief information, about the origin and development of life insurance in India. It also depicts the profile of the Study area.

- The **Third Chapter** deals with theoretical concepts associated with Risk and Risk Management.

- The **Fourth Chapter** deals with the life insurance protection and Approaches of optimal Life insurance protection.

- The **Fifth Chapter** deals with the Human Life Value approaches to Optimality.

- The **Sixth Chapter** deals with the Indian Life Insurance policy Holders: A Case study.

- The **Seventh Chapter** deals with the Summary of Findings, Suggestions, Further investigation and Conclusion.
REFERENCES:


4. Barriol, A. Revue Economique Internationale. (December 1910 and May 1911)


