ENHANCING READING, WRITING, ARITHMETIC SKILLS AND BASIC KNOWLEDGE AMONG ADULTS IN TIRUNELVELI DISTRICT

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INDEX PAGE

CHAPTER - I

INTRODUCTION AND CONCEPTUAL FRAMEWORK

1.1 INTRODUCTION

The all-round development of the country, the progress of the society and the success of democracy largely depend on the extent to which its citizens are educated. Though, we have passed more than half a century of independence, illiteracy is standing as one of the stumbling blocks on the way of progress of our country.

"Without adult education and adult literacy, it is not possible to have that range and speed of economic and social development which we require, nor is it possible to have that content or quality to our economic and social development that makes it worthwhile in terms of values and welfare (Varadaraja Rao.1970). A programme of adult education and adult literacy should therefore occupy a vital role in any programme for economic and social development" (Thakre. 1991).

The sudden over dependence on technology with the emergence of Digital India has brought with it various bottle necks that need to be over come to have equity among all members of society. Literacy and skill development are two stringent veritable to be worked upon for building a participant, inclusive and vibrant community.

Literacy is a mainstream and basic path to progress. Literacy is a main element in communicating all over the world. It is the ability to translate data and helps to understand the data. Literacy is an art and proficiency (Karis. 2014). It is concerned about the achievement of reading, writing and numeracy skills, and it's helped the growth of a healthy nation,

living standards, and gender equality. The purpose of literacy should be easy to understand (UNESCO. 2006).

Literacy has been described in diverse approaches through the years. Our understanding of what it is to be literate has altered and contemporary definitions have been taken into account. Literacy is increasing abilities, such as the ability to read, write, talk and listen. Analyzing and writing, while incorporated with speaking, listening and viewing and critical thinking, constitutes valued factors of literacy in modern-day existence. Literacy is an important factor to make certain all people have the first-class hazard to reach their regular lifestyles. (Pilgrim, J., & Martinez, E. E. 2013).

Adult education is directly linked with the economic, social, cultural and political regeneration of a country. The leading nations of the world have the highest percentage of literacy. In those countries, national income is the highest per capita. Without adult education and adult literacy, it is not possible to have that range and speed of economic and social development that makes it worthwhile in terms of values and welfare." (Varadaraja Rao).

1.2 Education

"The highest education is that which does not merely give us information but makes our life in harmony with all existence".

- Rabindranath Tagore

Education is the process of acquiring knowledge and skills, building morals, values, and developing habits. Education does not just consist of these. The process of education can be said to be complete only if you are able to put the knowledge you acquire to good use. So, education is not just gaining knowledge and gathering information but developing the ability to apply what you have learned to daily life scenarios. (Krishnamurti, J.1953).

The importance of education in modern times should be correctly recognized. It is said that education is the mother of civilization. A nation is considered to be civilized in proportion to the percentage of citizens educated in it. In modern societies, knowledge is the source of energy. The days when we might be considered as right have gone. Today, society is tending towards a learning system formed on the basis of an adult franchise. It is the educated voters that can make use of the power of vote in the most discriminative manner. Educated masses can shake, break and make governments, if they fail to deliver the goods and do not keep up the promises made to the electorate at the time of elections. It is only the educated people that can play their roles effectively according to the social expectancies and acceptances. They contribute, through efficient participation, to the national development and fulfill their obligations. Democracy will be meaningless without effective popular participation in nation- building activities. It is education that can give them the needed enlightenment to develop their national character. Hence, adult education programmes.

A major part of India is covered by rural areas and a large percentage of adults in these areas have not even attained basic education. Adult education is extremely important in these areas. The more educated the population of a country is, the more that country will develop. The complete process of gaining education should not be age barred and should be considered a life time process, as that is what it actually is. However, in India, the amount of emphasis laid on adult education is not much. There are many factors that restrict adults from gaining basic education at an early age such as lack of awareness, poverty, insufficient resources, lack of good educational institutions, socio-economic factors, etc.

1.3 Types of Education

Education goes beyond what takes places within the four walls of the classroom. A child gets the education from his experiences outside the school as well as from those within on the basis of these factors. There are three main types of education, namely, Formal, Informal and Non-formal. Each of these types is discussed below. (Sewell, K., & Newman, S. 2014).

1.3.1 Formal Education

Formal education or formal learning usually takes place in the premises of the school, where a person may learn basic, academic, or trade skills. Small children often attend a nursery or kindergarten but often formal education begins in elementary school and continues with secondary school. Higher education is usually at a college or university which may grant an academic degree. It is associated with a specific or stage and is provided under a certain set of rules and regulations. The formal education is given by specially qualified teachers they are supposed to be efficient in the art of instruction. It also observes strict discipline. The student and the teacher both are aware of the facts and engage themselves in the process of education. (La Belle, T. J. 1982).

1.3.2 Informal Education

Informal education may be a parent teaching a child how to prepare a meal or ride a bicycle. People can also get an informal education by reading many books from a library or educational websites Informal education is when you are not studying in a school and do not use any particular learning

method. In this type of education, conscious efforts are not involved. It is neither pre-planned nor deliberate. It may be learned at some marketplace, hotel or at home. Unlike formal education, informal education is not imparted by an institution such as school or college. Informal education is not given according to any fixed timetable. There is no set curriculum required. Informal education consists of experiences and actually living in the family or community. (Curtis, et al., 2013).

1.3.3 Non-formal Education

Non-formal education includes adult basic education, adult literacy education or school equivalency preparation. In non-formal education, someone can learn literacy, other basic skills or job skills. Home education, individualized instruction, distance learning and computer-assisted instruction are other possibilities. Non-formal education is imparted consciously and deliberately and systematically implemented. It should be organized for a homogeneous group. Non-formal, education should be programmed to serve the needs of the identified group. This will necessitate flexibility in the design of the curriculum and the scheme of evaluation. (Matheson, N. et al.,1996).

1.4 Enhancing Skills

In order to achieve personal and professional goals, it is vital for individuals to improve the basic literacy skills of reading, writing and arithmetic. When individuals possess the basic literacy skills, they are able to generate awareness and carry out various tasks and activities in a well-organized manner. To carry out the household responsibilities, make purchases of various items from the market, carry out banking transactions,

make investments, acquire information in terms of various programs and schemes, cope with problems and challenges and sustain one's living conditions in an appropriate manner, it is essential for individuals to improve LSRW skills. These are listening, speaking, reading and writing. The most significant aspects of these skills are, they help individuals to socialize and form good terms and relationships with other individuals, within as well as outside the home. To achieve one's desired goals and implement job duties in an effective manner, it is vital for individuals to maintain good terms and relationships with others.

1.4.1 Reading Skills

A foundation in reading and writing has been the basis of our educational system since its inception and discovering new ways to increase student interest in those basic components of learning is something that every teacher struggles with at one time or another. Many educators encourage their students to read outside of the classroom in order to increase reading comprehension, vocabulary, general knowledge, and cultural awareness; however, research indicates that pleasure reading may have a greater influence on a child's overall academic performance than their socio-economic background (Pearson, 2015).

The concept of reading is understood in different ways. It means understanding, interpreting, analyzing, and assessing. When one makes use of this term in daily life or when instructors make use of this term within the classroom settings, then they not just mean that reading is observing the written materials in books, articles, newspapers, magazines, journals, documents, reports, projects and so forth, but they primarily put emphasis upon that when individuals are reading, they need to concentrate and acquire an efficient understanding of the concepts. Individuals get engaged in

reading, mainly for two purposes. One is reading to acquire information that is needed to implement one's tasks and activities in educational institutions or within employment settings and other is leisure reading. Leisure reading normally takes place for leisure purposes and individuals normally get engaged in it during their free time. In some cases, reading becomes difficult, particularly when the individuals are unable to understand the concepts. In such cases, they need to take assistance from others, i.e. teachers, fellow students or family members.

1.4.2 Basic Skills

Basic skills also known as transferable skills prepare individuals with the tools they need to prosper in life, as well as get into work and progress within a lifetime of learning. The positive impact of training in basic skills on the individual, the economy and on wider society has been supported repeatedly by evidence. These include personal outcomes such as improved self-esteem and confidence to complete everyday tasks, as well as increased employment rates, job satisfaction and pay.

A transferable skill is vital to supporting an adult's life chances. Education has the power to be the great leveler and we believe that having a foundation of basic skills is something individuals from all walks of life should be entitled to. It's about opening up access and opportunities for everyone, regardless of their status or background. We're doing what we can to work towards this reality, collaborating with stakeholders to ensure we're shaping learning solutions in these areas that make the greatest possible difference. Basic literacy and life-skills are general practical skills which are essential for our participation in the local community, for our integration into social life, for our employment, and basic skills also open the doors for us to

acquire new specific skills and professional competences. Of course, we can find different definitions indifferent approaches, but their common feature is that basic skills include reading comprehension, literacy and numeracy skills, oral communication and digital skills, but also social skills which are increasingly emphasized among workplace expectations.

Developing effective, engaging learning programs for adult learners is a challenge for many educational institutions and organizations. For one, adult learners don't have the freedom to fully devote their time to education. Adult learners may also face challenges such as financial constraints, which hinder them from fully engaging in the learning experience.

1.5 Concept of Adult Education

'Adult education' has been variously defined by different people and institutions. It is more useful for us to have a look at a few definitions quoted and analyzed by (Lakshmi Reddy 2000) from different viewpoints. According to him, some have defined it as education that starts at a particular stage or level of education.

Eyibe, (1999) defined adult education as any kind of education designed for the illiterate population, the formal school drop-outs and the skilled and semi-skilled workers and carried on outside the formal school setting". Based on this definition, adult education encompasses literacy remedial, skill training and retraining programmes planned for the adult population.

1.6 History of Adult Education

All concepts have a history of their own and it is also wise and advisable to study in their historical context for a better and thorough understanding. In India, the concept of Adult Education is adult literacy. Social education is, in fact, Adult Education with greater emphasis on its social bearings. And now

it is again Adult Education, in other countries in the world, which is known by various other names, such as continuation education or further education.

It began as a voluntary, patriotic effort the masses that were deprived of formal schooling had to be awakened if the nation was to be awakened with independence. Adult Education ceased to be a matter of just voluntary effort; it was included as a regular component of the educational system, within the framework of the Ministry of Education. At the 14th and 15th meetings of the Central Advisory Board of Education held in1945 and 1949, Adult Education was redefined as 'social education', thus infusing it with a democratic content.

The state governments and other agencies embarked upon a variety of programmes to give concrete shape to the concept of social education. These programmes were amplified and implemented along more systematic lines during the Best Three Five-year plans from 1951 to 1966. The main responsibility devolved on the state governments since education was a state subject. But voluntary organizations have been at work in every state. A few of these organizations like the Indian Adult Education Association, the State Adult Education Council of Mysore, the City Social Education Committee of Bombay, the Social Service League of West Bengal, the Literacy House of Lucknow, the Andhra Mahila Sabha of Hyderabad and the Seva Mandir of Udaipur have attained national stature.

The Union Ministry of Education gave funds to selected voluntary organizations for implementing, through the State governments, experimental pilot projects for adult literacy. The Ministry also attempted to

collect and disseminate information regarding social education programmes in different parts of the country. Until recently, the Ministry of Community Development also provided funds for promoting basic literacy and social education. The Ministry of Defence has an Adult Education and literacy programme for soldiers. The Central Social Welfare Board and the Coal Mines Welfare Organization of the Central Ministry of Labour and Employment have their own programmes.

The social education programmes have included the establishment of libraries and Janata colleges, providing recreational facilities, holding exhibitions, organizing radio groups, running youth and community centres and women's welfare projects. Social Education Organizers' Training Centres were set up in different parts of the country and a vigorous campaign launched for the production of literature and audio- visual aids for neo-literates. Among the literacy drives organised by the state governments, the Gram Shikshan Mohim Scheme of Maharashtra and the Mobile Caravan Units of Delhi were a considerable success.

The Union Ministry of Education set up the National Fundamental Education Centre to provide training facilities for key personnel in the field of social education and to organize necessary investigations and research. The Centre has now become a constituent unit of the National Council for Educational Research and Training and has been renamed the Department of Adult Education of the Council. The Ministry of Education also helped in the setting up of an Institute of Library Science at Delhi University to meet the need for more trained librarians to man the increasing number of libraries being established under the programmes of social education.

In October 1979, for the first time since its inception, the Indian Adult Education Association held its annual conference in Amritsar. At this

Conference the concept of adult education that emerged was: adult education, it means three things

- Literacy

- Socio-political awareness

- Vocational efficiency.

1.7 New Education Policy (NEP) 2020

S.N. Mukherjee. "Adult Education may be defined very broadly so as to include all instruction, formal or informal, for adults".

The New Education Policy (NEP) 2020 has been drafted to integrate lucrative output in the education system in current digital India. In particular, various impediments arising due to online banking and transaction fraud and deplorable activities make it indispensable to spread awareness, literacy and basic skills to each member a society.

Ernest Barker says "Adult Education is given on a part-time basis and therefore, given concurrently with work and the earning of a living".

Adult education is imparted in two ways:

    I. Adult literacy and

    II. Continuing education

- Adult education is education for those adults who has never had schooling before.

- Continuing education is education for those adults who have had some schooling or education before. Whereas in adult education, more stress is given on personal enrichment, in social education

social and civic efficiency, and community development are emphasized.

1.8 Philosophy of Adult Education

Adult Education does not imply only making adults' literate. It means the total personality of the adult. As a first step towards the achievement of this objective, adults should be made literate. In other words, they should acquire command over the tools of knowledge or reading, writing and arithmetic. When they succeed in acquiring this command, they may be educated about the economic, social and political problems of the day so that they may become intelligent citizens for taking the right decisions when they are faced with a number of alternatives. If they fail to acquire this skill, the mean and set-seeking people will exploit them for their own interests, consequently, democracy will fail and will yield place to dictatorship.

Thus the purpose of adult education is not merely to impart bookish knowledge. Philosophy of Adult Education aims at the development of the total personality of the adult. This will be possible only when they develop various types of skills to make them successful and socially useful members of the society. There is no limit to Adult Education. Adults should be helped to acquire useful knowledge in professional, political, economic and social spheres. This is what the philosophy of Adult Education stands for so far in India. In the field of Adult Education our main emphasis has been to make the adult literate. But Adult Education is worth the name only if it helps the adult to understand the entire social, economic, cultural and political problems and their solutions for this a well-planned programme has to be thought of and executed.

1.9 Role of Adult Education

In the context of disadvantaged or deprived groups of people, adult education has to play a diagnostic role, so that people develop a critical consciousness of their existence, identify the sources of their disadvantage, assess their current needs and eventually are able to face any problem in life with strength, courage and confidence so that the desired objective is reached. But my experience is that in most of the adult education centers, literacy is limited to the process of learning the skills of reading, writing and numeracy, and the component of social awareness and functionality is totally missing. The main reason behind this is that we do not have much choice in the selection or instruction. Our instructors are not properly trained. The training of adult educational functionaries is weak. The educational level of instructors is very low. This is the reason the masses do not see much reason why they should join adult education centers.

1.10 Importance of Adult Education in National Development

Adult Education is very much important for the development of a nation as it could seriously improve the productivity and social structure of a nation. It provides opportunities of personal growth, employment, socialization resulting in the nation's economic growth. Adult education also leads to high primary enrollments; as educated parents are more inclined to make their children educated.

An educated and skilled adult will be gainfully employed in an organization or be involved in business activities, ultimately contributing to the nation's economy. Adult educational so raises the nation's health and

hygiene level and results in higher standards of living abolishing poverty and misery.

1.11 Magnitude of Illiteracy in Developing Countries

The problem of illiteracy is quite alarming in the developing countries of Asia and the Pacific which represent about three quarters of the total illiterate adult population of the world. Amongst the Asian and the Pacific countries, India is bracketed with countries like Afghanistan, Bangladesh, Iran, Nepal, Pakistan, Papua New Guinea which have literacy rates below 50 per cent. India's position in respect of literacy is very low, the literacy rate being 36.23 per cent in 1981 (as per Census of India -1981, Series-1, and Paper 2 of1983) even after thirty years of planned development. Despite the thrust on universalization of primary education, the number of illiterates has progressively increased. There were 437 million illiterates in 1981 out of which 110 million were in the age group of 15 to 35 years.

In recent years, many countries have addressed themselves to the problem of illiteracy with determination and some have made significant advances towards elimination of adult illiteracy. Countries like China, Indonesia and Vietnam have made impressive progress in the field of adult literacy through the use of local resources. India has also made some efforts for the eradication of illiteracy, but the success has been very limited.

1.12 Magnitude of illiteracy in India

Literacy as a tool or entry point to development is measurable as well as deliverable. It is being measured specifically by the NSSO as also in the decennial censuses (starting from 1901). The provisional data from 1991 census which was attempted in February, 1991 was released by the end of that month. In the last few censuses, children below 5 years of age were treated as illiterate. As the ability to read and write with understanding is not ordinarily achieved until one has at least one or two years of schooling, it was felt that the population aged 7 years and above is to be classified as

literate or illiterate and the population below this was to be excluded while computing the rate of literacy. In view of this, in the 1991 census the question of literacy was canvassed only for a population aged 7 years and above.

1.13 Development of adult education in India

Up to the end of World War I, there had been very little progress in the sphere of adult education in India which was confined to night schools in metropolitan cities. However, some of the enlightened Indian rulers of the princely States of Baroda, Travancore and Mysore had extended financial support to night schools. They also set up rural libraries, mostly in the 19th century, and gave them patronage. The national leaders who steered the freedom movement were also concerned with the question of educating the masses as a part of the independence agenda. When the congress governments came to power in some provinces in 1937, adult literacy and education were included among the responsibilities of the government. A series of provincial mass literacy campaigns were launched during 1937-39.

But the Congress governments went out of power and the campaigns petered out.

A CABE Committee appointed in 1939 on the problem of illiteracy suggested provision of facilities for adult education on the widest scale and introduction of free and compulsory primary education, as complementary activities. Besides, the committee also suggested supplementation of official efforts by voluntary agencies interested in social amelioration. However, the Sargent Committee (1944) asserted that the state must accept the responsibility for these programmes and solve the problem within 25 years. The eradication of illiteracy has been one of the major national concerns of the Government of India since independence. During the first Five Year Plan, the programme of Social Education, inclusive of literacy, was introduced as

part of the Community Development Programme (1952).

New implementation machinery comprising male and female Social Education Organizers at grass-roots level and a Chief Social Education organizer at the project level was created. Comprehensive training support was provided through the establishment of Social Education Organizers' Training Centers (SEOTCs). Model community centers, rural libraries, Janata Colleges, youth clubs, Mahila Mandals and folk schools were encouraged. Folk schools on the Danish High pattern called Vidya peeths in Karnataka and Jagriti Vihars in Bihar provide a variety of skill-oriented adult education programmes for the rural youth. Government of India established a Council for Rural Higher Education to promote the provision of graduate-level manpower through the scheme of Rural Institutes. These gave fill up to rural development including literacy programmes.

A Standing Committee of the CABE on Social Education was constituted in 1956. A National Fundamental Education Centre was started to provide high-level training facilities and undertake research related to adult education. Efforts of varied types were made by the States for the spread of literacy. Among these, the Gram Shikshan Mohim initiated in Satara District of Maharashtra in 1959 was one of the successful mass campaigns. It aimed at completing literacy-work village by village within a short period of 3 to 6 months, through the honorary services of primary teachers and middle-school and high school students, supported by the entire community. It achieved a good deal of success but suffered from the lack of follow-up due to financial constraints and score of its good work were lost as a consequence.

In spite of these varied initiatives the programme of adult literacy did not make much headway. The Community Development Programme got weakened and was soon abandoned. It was assumed that adult literacy would automatically become universal as soon as the universal and compulsory

elementary education became a reality. The literacy rate in India, therefore, increased only from 16.67% in 1951 to 24.02% in 1961. But the Kothari Commission (1964-66) took up the threads again and emphasized the importance of spreading literacy as fast as possible. It suggested the following measures:

- Expansion of universal schooling of five-year duration for the age group 6-11.

- Provision of part-time, education for those children of age group 11-14 who had either missed schooling or dropped out of school prematurely.

- Provision of part-time general and vocational education for the younger adults of age group 15-30.

- Use of mass media as a powerful tool of environmental building for literacy.

- Setting up libraries.

- Need for a follow up programme.

- Active role of universities and voluntary organization at the State and district levels.

With the help of these measures, the national percentage of literacy could be raised to 60 by 1971 and 80 by 1976. The Resolution of NPE 1968 not only endorsed the recommendations of the Education Commission but also reiterated the significance of universal literacy and developing adult and continuing education as matters of priority. The scheme of Functional Literacy for Adult Women (FLAW) started in 1975-76 in the experiment ICDS project areas was gradually expanded in1981-82. The FLAW aimed at enabling illiterate adult women to acquire functional skills along with literacy to promote better awareness of health, hygiene, and child care.

On 2nd October 1978, the National Adult Education Programme (NAEP) was launched. The NAEP aims at the extension of educational

facilities to the entire population of approximately a hundred million illiterates, with special attention to the 15-35 age group. It has given itself about five years to do this, beginning from April 1979. The incidence of illiteracy and social disability is much higher among women and persons belonging to the Scheduled Castes and Scheduled Tribes, they are to be given priority in the organization of programmes.

In emphasizing the correlation between working, living and learning, the NAEP has borrowed heavily from Gandhi's ideas on basic education (Nai Taleem). In its methods, the NAEP incorporates the essential features of non-formal education, particularly in emphasizing the importance of its relevance to the environment and the learner's needs, flexibility regarding duration, time, location, institutional arrangements, etc., diversity of curriculum, and teaching and learning materials. In conformity with the ancient Indian adage, sa vidya ja vimuktaye ('that is true knowledge which liberates') which finds an echo in many a recent thinker, education under the NAEP is viewed as a means towards man's liberation. Again, it follows Gandhi, Tagore and Julius Nyerere in emphasizing the importance of the development of the people. It serves as the only means for the development of the country.

The conceptual framework of the NAEP has been concretized around three aspects of its programme content:

- Literacy and numeracy, at a level which would enable learners to continue to learn in a self-reliant manner.

- Functional development, functionality being viewed as the role of an individual as a producer and worker, as a member of the family and as a citizen in the civic and political system.

- Social awareness, including an awareness of the impediments to development, of laws and government policies, and the need for the

18

poor and illiterate to organize themselves in pursuance of their legitimate interests and for group action. The programme is to be implemented in the form of compact projects.

1.13.1 Adult Education and National Policy on Education (1986)

The National Policy on Education (1986) has given an unqualified priority to the following three programmes for eradication of illiteracy, particularly among women:

- Universalisation of elementary education and universal retention of children up to 14 years of age.
- A systematic programme of non-formal education in educationally backward states.
- The National Literacy Mission which aims at making 100 million adults literate by 1997.

The major thrust of these programmes is the promotion of literacy among women, members of belonging to Scheduled Castes and Scheduled Tribes, particularly in the rural areas.

The eradication of illiteracy from a nation that is set to become the most populated in the world is by no means easy. This was realized in eighties and the National Literacy Mission came into being on 5thMay, 1988 to impart a new sense of urgency and seriousness to adult education.

For the first time, an area-specific, time-bound campaign approach was implemented and the community became responsible for running its own development programmes and consequently determining its future.

The National Literacy Mission in the meantime has been revitalized with the approval of the Union Cabinet on 30th September, 1999. The Mission's goal is to attain full literacy i.e. A sustainable threshold literacy rate of 75% by 2005. The Mission seeks to achieve this by imparting functional literacy to non-literates in the 15-35 age group. This age group has been the focus of attention because they are the productive and reproductive period of life. To tackle the problem of residual illiteracy, it has now been decided to adopt an integrated approach to total literacy campaigns (TLCs) and post literacy programme (PLP). This means the TLCs and PLPs will be implemented under one literacy project to achieve continuity, efficiency and convergence and to minimize unnecessary time lag between the two. Post-literacy programmes will be treated only as a preparatory phase for launching Continuing Education with the ultimate aim of creating a learning society.

In different five year plans, literacy received special emphasis and various programmes of action were initiated. In the field of adult education, the National Literacy Mission is in place with clear focus and medium-term goals. The Tenth Plan targets for adult education are:

- To achieve full literacy, i.e., a sustainable threshold level of 75% by 2005.

- Tocoverallleftoverdistrictsby2003-2004.

- Toremoveresidualilliteracyintheexistingdistrictsby2004-2005.

- To complete the Post-Literacy Campaign in all districts.

- To launch Continuing Education Programmes in 100 districts by the end of the plan period.

1.14 National Literacy Mission (NLM)

Reckoning the weaknesses of the National Adult Education Programme government felt the desirability of a mass-movement for eradication of illiteracy and adding human resource development inputs to the literacy imparting process.

The National Education Policy of 1986 reiterated the faith of Government in adult education as an important tool for change and development of the country. It stressed the need for providing illiterate adults in the age group of 15-35 years, the basic skills of literacy and awareness to improve their lot and transform their lives. In pursuance of this policy, the Government of India adopted the mission approach to wipe out illiteracy and launched the National Literacy Mission (NLM) in 1988.

The NLM aims at imparting functional literacy to 80 million illiterate persons in the 15-35 years' age group; 30 million by 1990 and an additional 50 million by 1995. The objective of the NLM is not only to wipe out illiteracy from the age group of 15-35 years in a phased manner, but also to enable the learners to:

- Achieve self-reliance in literacy and numeracy.
- Acquire skills to improve their economic status and general well-being.
- Become aware of the causes of their deprivation and move towards their elimination through organization and participation in the process of development.

- Imbibe the values of national integration, conservation of the environment, and to promote women's equality, observance of small family norms.

1.15 Mission of Adult Education

Adult education seeks to help adults expand their knowledge and skills to

enable them to peruse other intended carrier opportunities in life. Adult education clearly brings into account carrying out the developments of intellectual powers in order to make the adult literate in all, a wider scope. Rational development of the adult fosters the use of thought and reason to focus on the matters that arise daily. Through adult education, this will embrace concepts the learner will be able to incorporate the learned ideas in intelligence and analytical thinking. The program of adult education facilitates moral and spiritual consideration for the learners.

Adult education tries to develop learners to have behavior that will guarantee the survival of society and individuals in order to encourage behavioral change that clearly suits what is fundamental in real life. It presents an opportunity for adults who missed a chance to understand basic concepts in their time to transmit culture and societal structure to support social change.

The study of practical knowledge and gaining problem-solving skills enables the growing generation to reform society. The mission of adult education is to develop people who are open to alteration and continued learning to improve their personal growth and development. This concept clearly eases the self-actualization of the adult learner who is in need of embracing the rapid changes that they never experienced.

The adult education program also develops certified adult educators who are philosophical practitioners who will be able to create essential, economic, social and political changes in society. In general, the overall aim of adult education entails putting forward a "foundation basis where more adults will be able to advance their knowledge and skills to gain insight into the current changes which they had not experienced in the past" (Jones & Patrick. 2007).

Adult education also helps adults with establishing personal and business goals. When directions become to them an instiller of their role

identities, they are able to make rational changes. Through adult education, self-confidence will be nature by the adult learners therefore; they will be able to make rational decision based on the learned experiences. Adult education being a participatory approach to education enables the member to enhance cooperative effort members of their achievements of the goals and the objectives.

The United Nations Educational, Scientific and Cultural Organization (UNESCO) has drafted a definition of literacy as;

"*Ability to identify, understands, interpret, create, communicate, compute and use printed and written materials associated with varying contexts. Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society*" (Prem Narayan & Kaushik, N.K. 2018).

The National Literacy Mission defines literacy as acquiring the skills of reading, writing and arithmetic and the ability to apply them to one's day-to-day life. The achievement of functional literacy implies (i) self- reliance in3R's,(ii)awareness of the causes of deprivation and the ability to move towards amelioration of their condition by participating in the process of development, (iii) acquiring skills to improve economic status and general well-being, and (iv) imbibing values such as national integration, conservation of environment, women's equality, observance of small family norms. UNESCO has also gone beyond the conventional definition of literacy as "a means of identification, understanding, interpretation, creation, and communication in an increasingly digital, text-mediated, information-rich and fast-changing world" an understanding that is also espoused by NEP 2020 (Prem Narayan & Kaushik, N.K. 2018).

1.16 Adult Education in India-an important step towards a stronger economy

Adult education is a type of education system that educates mature students that have already taken part in the workforce.

Learning as a mature student gives individuals the chance to gain new skills and expand their knowledge.

The concept of Adult Education is not given much importance, but we cannot ignore the impact of Adult Education in any nation. The role played by adult education indirectly influences various factors.

We cannot deny the fact that if adults have the knowledge and skills to handle any challenge; it will undoubtedly boost the economy of that nation in the long run.

Adult education plays a pivotal role in not just building a robust economy, but also plays a major role in determining the crime rate of a country. Analytical research shows why a certain country records a higher crime rate, and it clearly illustrates that the illiteracy of people has been a major factor that instigates people from committing crimes.

A major part of India is covered by rural areas and a large percentage of adults in these areas have not even attained basic education. Adult education is extremely important in these areas.

The more educated the population of a country is, the more that country will develop. The complete process of gaining education should not be age barred and should be considered a lifetime process, as that is what it actually is.

However, in India, the amount of emphasis laid on adult education is not much. There are many factors that restrict adults from gaining basic education at an early age, such as lack of awareness, poverty, insufficient

resources, lack of good educational institutions, socio-economic factors, etc.

This concept is a little different from regular and general education. It is a procedure where adults who had to drop out of school or college because of any reason and cannot continue their studies are given opportunities and facilities to resume their education.

The true meaning of adult education is chance, that's considered the last option for people who have not got a good opportunity to continue or pursue it at the right time.

It is a part-time or full-time education system for men and women of all ages organized by schools, learning centers, or other agencies which enables them to improve their general or professional knowledge, skills, and abilities by continuing their education or by resuming their initial or incomplete education of the previous years.

1.17 Advantages of adult education

- Gaining education after secondary school as a mature-aged student helps and allows adults to gain valuable skills to increase career prospects and expand their professional knowledge.

- Developing important skills like literacy and numeracy in adulthood also gives people the ability to reach their full potential. Many adult students gain additional confidence in their academic skills after pursuing adult education.

- Adult education helps individuals understand their fundamental rights and also take corrective measures against crimes like domestic violence and child marriage.

- Finally, adult education teaches students invaluable skills which they can put into action in a wide range of situations. The confidence gained with adult education is valuable both in and out of the workplace.

1.18 Objectives of NLP

- The program aims to address all aspects of adult education, including Foundational Literacy and Numeracy, Critical Life Skills, Vocational Skills Development, Basic Education, and Continuing Education.

- The use of the "Online Teaching, Learning and Assessment System (OTLAS)" will ensure that learners have access to quality education.

- The scheme also seeks to align with the National Education Policy 2020 and to provide an inclusive and equitable education to all learners, including those in disadvantaged communities.

1.19 Salient Features of the scheme

1. School will be Unit for implementation of the scheme.

2. Schools to be used for conducting survey of beneficiaries and Voluntary Teachers (VTs).

3. Different strategies are to be adopted for different age cohorts. Flexibility for States/UTs will be provided to undertake innovative activities.

4. Foundational Literacy and Numeracy will be imparted through Critical Life Skills to all non-literates in the age group of 15 years and above.

5. Use of Technologies to impart Adult Education for wider coverage of the scheme.

6. Performance Grading Index (PGI) for State/UT and district level will show the performance of States and UTs to implement the scheme and achievements on yearly basis by weighing both the physical and financial progress through UDISE portal.

7. CSR/Philanthropic Support may be received by hosting ICT support, providing volunteer support, opening facilitation centers for learners and for providing IT access to economically weak learners in the form

of cell phones, etc

8. Priority and Saturation in Literacy- The age cohort of 15-35 will be saturated first followed by ages 35 and above. Priority will be given in terms of categories to the Girls and women, SC/ST/OBC/Minorities, Persons with Special Needs (Divyangjans), Marginalized/ Nomadic/ construction workers/ laborers/etc. who can substantially and immediately benefit from adult education. In terms of location/area, the focus shall be on all aspirational districts of NITI Aayog, districts with literacy rates less than the National/State average, districts with

   female literacy rates less than 60% as per the 2011 Census, Districts/ Blocks with large SC/ST/ Minority population, Educationally Backward Blocks, Left Wing Extremism Affected districts.

9. Convergence with Ministries and Departments for effective implementation of NILP: MeitY: Digital Literacy,DFS/MoF: Financial Literacy, MoSDE: Skilling, DoJ/MoLJ: Legal Literacy, MoD: Involvement of NCC Volunteer and Ex- Servicemen, MoYAS: Involvement of NYKS, NSS, MoRD: NRLM and DDU-GKY, MoC: Involvement of Cooperative Societies, MoHFW: Health and Hygiene Literacy, NDMA/MHA: Disaster Management, MoMA: for implementing among Minorities, DoHE: Continuing Edn, Min of Culture: Libraries, Cultural Literacy, MoPR: For Panchayat support, Rural Libraries, MWCD: Involvement of Anganwadi Workers, and MoTA: Implementing in Tribal areas etc.

10. NILP as Janandolan:

- The three crores students/children of around 7 lakh schools registered under UDISE along with about 50 lakh teachers of Government, Aided and Private schools will participate as volunteers.

- An estimated 20 lakh students from Teacher Education and Higher Education Institutions will be actively involved as volunteers.

- Support will be garnered from PRIs, Anganwadi workers, ASHA workers and an estimated 50 lakhs NYSK, NSS and NCC volunteers.

- There will be involvement of the community, participation of philanthropic/CSR organizations through volunteerism and through Vidyanjali portal.

- States/UTs will promote individual/ family/ village/ district success stories through various platforms.

- It will utilize all types of media – Electronic, Print, Folk & Inter-personal platforms including social media platforms like Facebook, Twitter, Instagram, WhatsApp, YouTube, TV channels, radio, etc.

11. Central Portal to be developed by NIC for aggregated data capturing equipped with Mobile App, Online Survey Module, Physical & Financial Modules and Monitoring Framework, etc.

12. Assessment of Literacy will be conducted using a scientific format to capture real-life learning and skills for functional literacy. Assessment on demand will also be made through OTLAS and an e-certificate jointly e-signed by NIOS and NLMA will be issued to the learner.

13. Annual Achievement Survey of Learning Outcomes by samples of 500-1000 randomly selected learners from each State/UT and Outcome-Output Monitoring Framework (OOMF).

1.20 Teaching-Learning Materials

The entire learning material is divided into three because one single volume would be bulky and threatening on the part of the learners. The NILP primers cover the following skills;

Level-1

Ability to 'read and write numbers upto100, write one's own name.

Level-II

Ability to 'read and write words/sentences using the most frequent

letters and vowel signs; 'read and write words and sentences having almost all the letters, all vowel signs and some conjunct letters; 'read and Write numbers upto100anddosimpleadditionandsubtractionupto 100; 'write names of family members and one's address.

Level-III

Ability to 'read and comprehend a small passage (unknown text/newspaper heading, road signs); 'compute simple problems involving multiplication and division; 'apply skills of writing and numeracy in day-to- day activities, i.e. writing letters, filling up forms, etc. Besides 3 graded primers, learners are provided with one slate and lead pencils. The volunteers are provided with a set of these learning materials and a teacher's guide which spells out the details of how the primers would be used. The primers are supplied to the learners.

1.21 Organizational Structure of NILP

The beneficiaries under the scheme are identified through a door to door survey on a mobile app by the surveyors in the states. The non-literate can also avail the benefit of the scheme through direct registration from anyplace through mobile app. The scheme is mainly based on volunteerism for teaching and learning. Volunteers can also register through mobile app for this purpose.

The scheme is based on technology and implemented predominantly through online mode. The teaching learning materials and resources have been made available on DIKSHA platform of NCERT and can be accessed through mobile apps. Further, other modes like TV, Radio, Samajik Chetna Kendra etc. are also to be used for dissemination of Foundational Literacy and Numeracy. All the non-literate above 15 years of age can avail the benefits of the scheme.

Involvement of school students, pre-service students of Higher

Education Institutions, school teachers, Anganwadi and ASHA workers. School to be a unit for implementation of the scheme.

Use of ICT and online implementation of the scheme through 'Online Teaching Learning and Assessment System' (OTLAS) material and resources through digital modes, viz, TV, radio, cell phone-based free/open- source Apps/portals, etc.

1.22 Measures taken by the Indian Government to Improve Literacy Rate

The Indian Government is trying their best to improve the literacy level in the country and they have taken many necessary steps in recent times to improve the overall education system in both cities and rural areas. In recent years, they have been able to bring more and more students into the arena of education. However, still four often Indian people are illiterate, according to a report by UNESCO.

(i) Free Education

The free education system is more and more spread by the government in various areas of India, especially in the rural territories. Poverty is one of the main hindrances for a lot of parents in both cities and villages to send their children to schools. So the government is trying to provide the primary right to proper education for students free of cost in various areas and it has become successful. In many areas, more and more students are coming to schools to study. However, the government has to reach more rural areas to bring more students to schools.

(ii) Establishing New Schools

A few decades ago, lack of schools was a huge problem, especially in rural areas. Studying in a private school is much more expensive and often poor students cannot have this facility. The students had to go miles after miles to reach their schools, which created a lot of problems. However, in recent years, the government has established more

and more schools in various rural areas and the problem is solved to a great extent. However, there are still many villages where the schools are far away. Many students, especially the girls, face safety problems while going to these schools. Therefore, the government needs to take the necessary steps to bring more girl students into school.

(iii) Various Schemes

The government has implemented various effective schemes to spread education to more and more students in various remote areas. The Sarva Siksha Abhiyan Scheme is one of them. In this scheme, the government is providing education to many students absolutely free. The midday meal scheme has also been extremely successful in bringing more students into schools. As the students are getting the food in schools, the parents are sending their students rather than to a hotel to become child labor. However, it is true that in various places all these facilities are not properly received.

(iv) Free Uniforms and Scholarship

Recently, the government has been providing school uniforms, text books, and some other necessary things related to study to students in many places. Government scholarships are increasing the interest of a lot of poor students for higher studies. The government is arranging various study courses and vocational training for free.

(v) Proper Use of Fund

In India, the government is trying to generate more funds for the study of students in various areas. However, recently the government is looking into whether the fund which is generated for the study of children is properly used. The fund should reach the rural and remote areas where the students really need it. The government is trying to assure that the fund is used for the proper reasons related to study only. It is true that recently, the government has taken a lot of measures to improve the

education system in various areas in India. However, they need to continue this and generate more funds to build a proper infrastructure to make more and more children interested in studying in schools.

1.23 Implementation of NILP

- The scheme will be implemented through volunteerism through online mode.
- The training, orientation, workshops of volunteers, may be organized in face-to-face mode. All materials and resources shall be provided digitally.
- A school will be Unit for implementation of the scheme.
- Schools to be used for conducting surveys of beneficiaries and Voluntary Teachers.

1.24 Adult Education andNationalEducationPolicy-2020

National Education Policy (NEP) 2020 was launched on 29.07.2020. It has recommended that "Strong and innovative government initiatives for adult education - in particular, to facilitate community involvement and the smooth and beneficial integration of technology - will be strengthen as soon as possible to expedite this all-important aim of achieving 100% literacy". NEP-2020 has also recommended for taking up five components of Adult Education i.e. (a) foundational literacy and numeracy; (b) critical life skills (including financial literacy, digital literacy, commercial skills, health care and awareness, child care and education, and family welfare); (c) vocational skills development (with a view towards obtaining local employment); (d) basic education (including preparatory, middle, and secondary stage equivalency); and (e) continuing education (including engaging holistic adult education courses in arts, sciences, technology, culture, sports, and recreation, as well as other topics of interest or use to local learners, such as more advanced material on critical life skills.

1.25 Relationship between Adult Education and Community Development

Education is an important tool for development and literacy is expected to be an instrument for better insight for both men and women to take advantage of development. Adult education is intended to help appreciate the need for better life in the various communities. (Silkhondz.2000) refers to community development as an integral part of Adult Education because of the fact that it is used as a forum for acquiring knowledge through which adult members of the community will be exposed to the value culture and norms-of that society through community development. Development can only be possible if made a human centered process and this can be achieved through adult education programmes.

This is based on the fact that literacy education is the development of human potentials. If an individual is educated, he is developed in intellect, in outlook, in skills and equipped to develop himself and others in economic and political spheres of life and community. The most common relationship is that community development serves as medium for teaching of adult education programmes for meaningful development to be achieved; as it is stated in the objectives of community development (Olaitan. 2008) outlined the objectives as follows:

- Provision of educational facilities.
- Provision of essential amenities such as feeder roads, culverts, bridges, market, stalls etc
- Provision of cooperative organization Participation in environmental sanitation.
- Construction of dams and sinking of wells to provide water for both human and animals.
- Provision of health facilities such as dispensaries, maternities and leprosy clinic.

1.26 Characteristics of Adult Education:

Adult education is very dynamic (Self-motivated) in its nature. Its role, purpose and functions will change with changing situations and conditions of adults. Accordingly, its nature and character also undergo changes. Broadly, the nature and characteristic features of adult education are as follows:

- Adult education is community-based and assumes great significance in particular contexts, and it need not be equally relevant to other communities in similar contexts.
- The nature, objectives and types of adult education required for adult will vary from culture to culture.
- Adult education takes into account the dominant needs and prevalent problems of communities and aims at addressing them ineffective ways.
- It involves adults at different levels and stages of planning, implementation and evaluation of adult educational activities meant for their progress, development and welfare.
- In many respects, adult education incorporates elements of flexibility so that the adults would feel at home and comfortable to acquire education that has relevance to their living, working and development.
- Adult education is very dynamic and primarily aimed at bringing in social, economic, political and cultural transformation of the adult, their society and nation.
- It helps to enhance the level of adults' awareness and prompts them to take action for change. It helps in emancipating or liberating (Beneficial) adults from their current problems and situations.
- It is basically conceived and offered taking into account the

experiences of adults.

- o It promotes rational and informed decision with a view to promoting the welfare and development – social, economic, political and cultural- of individuals, groups, society and nation.
- o It is a systematically organized process, using diverse methods and techniques of teaching and learning with an in-built element or component of flexibility for promotion of more learner-centered educational activities.
- o It is very effective in building the network of adults, their groups, activities and associations in the particular context and situation in which the adults live, earn and learn.
- o It aims at enhancing the adults to use all their networks – personal, social, professional, political, etc. – to raising their quality of life and standard of living.
- o Adult education is an effective tool for empowerment of adults.

1.27 Advantages of Adult Education

Here are some of the advantages of adult education:

1. Increases the Country's Literacy Rate

In a country like India where illiteracy is considered to be one of the main problems, adult education is helping in increasing the literacy rate of the country. Many adults are enrolling for adult education in order to attain a degree and do better in life.

2. Contributes to the Development of the Nation

It goes without saying that education is the stepping stone for development of any nation. When the people of a nation are educated, it stands a greater chance of development. Adult education is increasing the number of educated, learned and skilled professional which is impacting the development of our nation in a positive way.

3.   Curbs Crime Rate

The crime rate in our country is high majorly due to a high rate of illiteracy. It is the illiterate and unemployed people who mainly engage in various criminal activities such as pick-pocketing, robbery and rape. Adult education gives them a chance to get educated and acquire skills which in turn opens the door of employment for them.

4.   Helps Shape Better Youth

Educated adults can certainly nurture their children better and thus shape better youth. A person who is uneducated can never understand the value of education. Most of the times, such people do not even encourage their children to seek education. They engage the min work from a nearly age and ruin their life.

5.   Develop a Better Lifestyle

Adult education gives a chance to learn and expand knowledge which in turn provides better job opportunities. A better job opportunity means better purchasing capacity and a better lifestyle.

6. Women Empowerment

Women in the earlier times were confined to the kitchen and other household tasks. Little girls in many areas and communities of India are still confined to the households. They grow up to be vulnerable adults who are dependent on the male members of the family. Adult education programs are an opportunity for them to take charge of their lives and become self-dependent.

1.28 Challenges Faced by Adults in Learning

Grasping Problem

Children are quick learners. They are keen, curious and possess good observational as well as grasping power. They love to explore new things, ask questions and learn constantly. Learning for them is fun. However, it is not the same with the adults. As a person grows old, he

isn't as quick when it comes to learning, the curiosity to learn new things fades away and so does the ability to grasp. This becomes one of the biggest hindrances in learning.

Time Constraint

Another problem is time constraint. Adults are mostly working and are unable to take out much time to study. This is the reason why many of them refrain from enrolling at adult schools. Even those who go to adult school are not able to manage enough time for self-study. This slows the learning process and hampers their performance.

Responsibilities

Children are just required to go to the school and study and may be indulged in certain extra-curricular activities out of interest. They are not loaded with any other responsibility but it is not the same when it comes to adults. Adults need to take care of the financial, emotional and other needs of their family. They also need to fulfill their social responsibilities. Amid all these responsibilities they find it hard to concentrate on their studies and thus learning becomes a challenge for them.

Difficulty Getting Back

It is not that easy to get back to school after you start working. Those who haven't ever been to school find it all the more difficult to adjust to this new environment. Adults find it hard to accustom to new things and going to school as their age seems to be one of the most difficult and challenging tasks for them.

Social Obligations

Many people refrain from enrolling to adult schools because of the fear of society. This is particularly true for the women. A woman who has been suppressed since her childhood and has been denied the right to education will find it hard to gather the strength to go to school in her adulthood. People in our society take no time to criticize a woman who tries to be

independent. Those who go out to study at an adult school are often criticized of neglecting their families. Meeting the needs of her family and Children and completing the daily house hold chores also becomes a hindrance in learning for those enrolled.

1.29 Need for NILP

The major need for adult education within the country is understood as it makes an indispensable contribution to providing literacy skills to adult individuals. It aims to see that every adult within the country is able to inculcate the basic literacy skills of reading, writing and arithmetic. As when individuals carry out the task of implementation of household responsibilities, then it is vital for them to possess the basic literacy skills. Furthermore, the need for adult education is recognized to enable adults to feel pleasurable and contented, adults can get engaged in leisure and recreational activities, adults are able to overcome the impediments that may arise in the course of sustenance of better livelihoods opportunities and adults, particularly belonging to deprived, marginalized and socio-economically backward sections of the society are able to realize that education does not end upon completion of school or college, but it is a lifelong process. An individual continues to learn throughout his life.

The number of non-literates in the country in the age group of 15 years and above was 25.76 crore (9.08 crore male and 16.68 crore female) according to the 2011 census. Currently, an estimated 18.12 crore adults in the country are illiterate,

In consideration of the progress of persons certified as literates being to the tune of 7.64 crore under the Saakshar Bharat programme implemented during 2009-10 to 2017-18, it is estimated that currently around 18.12 crore adults are still non-literate in India.

Adult education is thus, not merely an alternative, but also a great

necessity. Article 29 and 30 of the Indian Constitution guarantees education to all citizens irrespective of caste, colour and creed. Hely (1967, P-7) has emphasized, "Adult education is a permanent necessity, an inseparable aspect of citizenship and therefore, should be both universal and lifelong". The aim of the Saakshar Bharat/Adult Education Policy is to spread literacy among society by targeting non-literate and neo-in literates of 15 years and above [41]. Lifelong learning forms a consortium of both formal and non-formal education, inculcating training and skill development. The uneducated is not a free citizen in reality. Illiteracy as a mass phenomenon blocks (a) economic and social progress, (b) affects economic productivity, (e)population control,(d) national integration,(e)proper working of democratic setup.(f)National security,(g)cultural attainment,(b)proper use of leisure time, (i) improvement in health and sanitation, (j) Adjustment with immediate environment and rapidly changing world: (k) to earn a decent living and (1) change of traditional conservative attitude.

1.30 Rationale

The Government has launched a new Centrally Sponsored Scheme namely, "New India Literacy Programme" (NILP)for implementation during five years from the FYs 2022-23 to 2026-27 with financial outlay of Rs.1037.90 crore out of which Rs.700.00 crore is Central share and Rs.337.90 crore is State share. The scheme aims to cover a target of 5.00 crore non-literates in the age group of 15 years and above.

The main objectives of New India Literacy Programme are to equip citizens with necessary skills for the 21st century. Thus, NILP aims at imparting functional literacy to the learners by which they will be able to (a) achieve self-reliance in literacy and numeracy, (b) become aware of the causes of their deprivation and moving towards amelioration of their condition through organization, and participation in the process of

development, (c) acquire skills to improve the economic status and general well-being and (d) imbibe the values of national integration, conservation of environment, women's equality, observation of small family norm, etc.

Adult education is a practice in which adults engage in systematic and sustained self-educational activities in order to gain new forms of knowledge, skills, attitudes or values. It can mean any form of learning adults engage in beyond traditional schooling, encompassing basic literacy to personal fulfillment as a lifelong learner, and to ensure the fulfillment of an individual. Under girding this effort has been a deep value for adult education and learning's role in democracy, moral and ethical responsibility.

I.31 STATEMENT OF THE PROBLEM
"ENHANCING READING, WRITING, ARITHMETIC SKILLS AND BASIC KNOWLEDGE AMONG ADULTS IN TIRUNELVELI DISTRICT"

Literacy is a basic mandatory human essential to the country's development. It provides different way so opportunities for individuals. Low literacy skills (writing and numeracy) can restrict a person's opportunities in life. The problem under investigation was to analyze the writing and numeracy skill of adult in Tirunelveli district. This study focused on how many non-formal learners are different in attaining literacy skills (writing and numeracy).

Reading teaches learners to comprehend the world and their place in it. Writing teaches them to communicate, develop arguments, and persuade. Arithmetic teaches them to measure attributes, grasp reality, and bring the physical universe into perspective. These skills empower

learners to make meaning, think critically and creatively and reach their full potential.

1.31.1 Adult Education

Now a days, education is a must from every angle, especially to get a job the basic thing is knowledge. So adult education is nothing, but it is a practice in which the adults of a community are engaged in learning activity to develop new skills, and knowledge or even personality. It is a platform where adults could use years of experience and knowledge to learn new skills for a better future. Adult education also includes classes for those adults who never had a chance to go to school but who are interested in study and growth.

The objectives of adult education are, imparting literacy of diverse types, generating awareness of various subjects and promoting functionality. The basic characteristics of adult education policy are relevance, flexibility, efficiency and effectiveness, accessibility and sustainability.

1.31.2 Enhancing reading, writing, arithmetic skills and basic knowledge

This study has been teaching of reading, writing and arithmetic among adult learners in Tirunelveli district. Reading and writing multiple texts on similar topics are helpful for adults to recognize within the texts with adequate speed and accuracy (Braten et al., 2013). Writing during the arithmetic learning deepens the learning of the students and helps them to gain new perspectives according to the National Institute for Literacy (2007). Arithmetic is the branch of mathematics that deals with the study of numbers (manipulation of whole numbers, fractions, and decimals.) The basic calculations include: addition, subtraction, multiplication, and division. Basic math is used in everyday life.

Proper instructions and practices are required or learning to write well. (Ugalee, 2004) reveled that there is a positive impact of writing on

arithmetic problem solving as it helps to organize and describe revealed internal thoughts.

Reading and writing of the contexts support mathematical reasoning by building a strong association between language and mathematics learning (Knowles et al., 2012., Dornyei and Ryan, 2015)

Reading is a process involving word recognition, comprehension, fluency, and motivation. Writing is a skill that involves taking words and creating a text. As mentioned before, reading is the process of obtaining and consolidating knowledge. Writing is the process of combining new thoughts from that knowledge and experience. Writing is used to express ones' thoughts and share them in an insightful way.

1.31.3 Tirunelveli District

The district is located in the southern part of Tamil Nadu. Tirunelveli District was formed in 1790 by the East India Company, later came under the direct control of the British Crown Queen Victoria. The name Tirunelveli has been composed from the three Tamil words i.e. 'Thiru – Nel – Veli' meaning Sacred Paddy Hedge. Tirunelveli District having geographical area of 6759 sq.kms, in the South eastern portion of Tamil Nadu is triangular in shape. It lies between 8°.05' and 9°.30' of the Northern latitude and 77°.05' and 78°.25' of Eastern longitude.

I.32 CONCLUSION

Thus, adult education offers various advantages such as women's empowerment, a better life style, reduction in the crime rate, increase in literacy rate and over all development of the country. Adult education is the utmost importance while the government of our country has already understood its importance. A large number of people in our country are yet to recognize it. A number of colleges and universities have been set up by the government to provide adult education. However, the role of the government does not end here. It needs to sensitize the importance of

education among the masses. People must recognize the need to get educated in order to feel determined to enroll in adult education.

In India, the concept of adult education has acquired major significance, as it makes an important contribution ingenerating information among adults, particularly belonging to deprived, marginalized and economically weaker sections of society. Through adult education, individuals are able to acquire an efficient understanding of the concepts and live their lives in an effectual manner. When the instructors are providing knowledge and information to the adults, they make use of modern and innovative teaching-learning methods and instructional strategies. As lack of literacy enables an individual's to experience a number of problems and challenges. But through adult education, individuals generate awareness and acquire information that is necessary to overcome problems and challenges.

CHAPTER - II

REVIEW OF RELATED LITERATURE

2.1 INTRODUCTION

"A brief summary of previous research and writing of recognized experts provide evidence that the researcher is familiar with what is already known and what is still unknown and untested." - **John W Best**

Review of related Literature is an important step in any research work since a good researcher must be familiar with the existing body of knowledge. Related literature helps the researcher to determine in what way the present study is related to the existing knowledge concerning the problem area. It allows the researcher to acquaint themselves with current knowledge in the area where they propose to research. Also it provides a background for the research project and makes the reader aware of the dimensions of the issue. It helps to determine and exactly locate the study in its right perspectives. It is worthwhile to say that the investigator needs to draw maximum benefits from the previous investigations and utilize the previous findings properly.

A Literature review acts as an extensive critical study in the proposed field and empowers the investigator to get familiarized with the accumulated facts or methodological approaches in his selected field of study. They are secondary sources, and its ultimate aim is to provide a theoretical grounding and empirical studies of the area. It also provides a hope for cohesive and integrated approaches to our problems and for resolution and solution of them through research. It depicts a good estimate of researcher's scholarliness and his ability to distinguish from relevant and irrelevant. It helps in establishing the current status of the proposed study and act as an

indication of how the research will advance knowledge in its area. The ultimate task of review of literature is highly creative and tedious because researcher has to synthesize the available knowledge of the field in a unique way to provide the rationale for one's study.

2.2 MEANING OF REVIEW OF LITERATURE

The phrase review of literature consists of two words 'review' and 'literature'. The term review means to organize the knowledge of the specific area of research to evolve an edifice of knowledge to show that the proposed study would be an addition to this field. The word literature has conveyed different meaning from traditional meaning. In research methodology the term literature refers to the knowledge of a particular area of investigation of any discipline which includes theoretical, practical at its research studies.

2.3 SIGNIFICANCE OF THE REVIEW OF LITERATURE

The significance of the review of related literature are:

- Provides a ground for the development of the present study.
- Stimulates the investigator to an organized program of reading.
- Provides chances to discover several problems and defines them
- Improves the knowledge of the investigator on the related field.
- Provides insights into closely related problem.
- Helps in designing the study, the procedure employed and the data gathering instrument used. Helps in the improvement of the design of the present study and to avoid
- mistakes committed and avoid the risk of duplication.
- Provides recommendation for further research.
- Provides information regarding factor that could have acted as limitation.

2.4 RELATED STUDIES

Keeping the previous studies as guidelines, efforts have been made to find out the researches to the present study. Collected related studies have been arranged chronologically as follows:

Fute. et al. (2023). conducted a study on "A historical review of global efforts on adult literacy education, with particular reference to Tanzania".

Literacy is a fundamental aspect of development and a step towards freedom and liberation from socio-economic constraints, because it enables all citizens to realise their basic right to learning. However, the global efforts which – according to a 2017 estimate of the United Nations Educational, Scientific and Cultural Organization (UNESCO) – resulted in an increase in literacy from 55.7% in 1950 to 86.2% in 2015 at the world level (an average of 5% for each decade) did not significantly affect the actual number of people with low (or no) literacy skills. Due to rapid population growth, the number of people unable to read or write was higher in 2015 (745 million) than it was in 1950 (700 million), with some world regions being more affected than others. After reflecting on global historical trends in adult literacy education, this article focuses on the African continent, and on Tanzania in particular. The authors offer a few recommendations for developing countries to progress towards ensuring that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy by 2030.

Igarashi, Takiko and Suryadarma. (2023). conducted a study on "Foundational mathematics and reading skills of Filipino students over a generation".

Children around the world largely rely on the formal education system to teach them foundational mathematics and reading skills. The inability of an education system to do so may indicate it has structural constraints. In this paper, we use three rounds of a nationally representative government-run household survey to examine trends in the mastery of foundational mathematics and reading skills among grades 4–10 students between 2003 and 2019 in the Philippines. We find that not all higher-grade students master the skills that are taught by grade 3. Comparing between cohorts, we find that foundational mathematics skills continued to decline between the 2003 and 2019 cohorts. Foundational reading skills, however, trended up among the early grades between 2013 and 2019 after stagnating between 2003 and 2013. The latter is suggestive evidence that major educational reforms implemented by the Philippine government since 2012 may have successfully improved reading skills but not mathematics skills. We also find that inequality in foundational skills by sex and wealth has decreased. Overall, the Philippine basic education system, building on its success in ensuring virtually all children attend elementary schools, still has ample room to ensure all students master foundational mathematics and reading skills. • We examine foundational skills among Filipino students over 19 years. • We find a significant decline in foundational mathematics skills. • Foundational reading skills in early grades significantly improved. • Gaps between sex, wealth quartiles, and language diversity declined.

Shah, S.Y. (2023). conducted a Study on "Adult Education in India: Provision of opportunities for literacy, numeracy and basic skills".

This paper provides a brief overview of adult education in India focusing on the literacy scenario, various approaches, programs and web based monitoring system. Although a variety of adult education programs are offered by different agencies in the country, viz., government departments, non-governmental organizations and academic institutions, their focus continues to be on adult literacy, continuing education and skill training presumably due to the massive number of non-literates and neo literates. With the largest number of 282.70 million of global non-literates, India has been pursuing an ambitious literacy program -SaakharBharath- (Literate India)-since 2009 with special focus on women. Apart from discussing the salient features of the program, this paper examines some of the innovative initiatives of the non-governmental organizations and corporate sector in promoting literacy. A brief historical perspective on Indian adult education is provided as a backdrop to the study. Based on the review of official statistics and critical analysis of field reports, this paper identifies various issues and argues that though India may meet the Sustainable Development Goal-4.6 before 2030 by achieving above 80% literacy- which may be considered substantial- yet the importance of pursuing a more vigorous literacy program to become a fully literate society cannot be undermined.

Sowmya,P.et al. (2022). conducted a study on "Reading in Digital Era: A Study on Enhancing Reading Skills".

One of the basic skills of language learning is reading skill. It is integral to develop comprehension, pronunciation and intonation skills. It also helps to improve vocabulary and communication skills, broadens the horizons and enhances the knowledge of the students. Hence, it is very

essential to inculcate the habit of reading among the students from a very young age. With the surge of digital tools, several modern methods can be adopted to make reading more interesting and engaging for the students. Availability of online books, graphic literature, use of digital art in literature, interactive novels and write-ups - all of it have indeed made reading easy and enjoyable to the students. However, there are several challenges involved in it as the majority of the students are not very actively involved in any reading process. The present paper aims to discuss the scope of reading, its types, methods and tools that can be used in the classroom to build reading skills, active utilisation of digital tools, and the difficulties involved in it. The paper also attempts to analyse the impact of digital media on the reading habits of the students and how it can be utilised for the benefit of the students.

Ali, M.A. et al. (2022). conducted a study on "Back to basics: A role of reading, writing, and arithmetic teaching".

This study has assessed the role of reading, writing, and arithmetic teaching among adult learners in Saudi Arabia. A quantitative approach was used by recruiting 186 students divided into three groups, namely, the write to learn (WTL) group, traditional teaching group, and individual technology use (ITU) group. Statistical Package for Social Sciences (SPSS) was used for the analysis of the arithmetic and literacy test scores of the students. The findings showed that the performance of the WTL group was most effective among the three groups. The results showed that the learning capacity of adults could be improved by refining their writing and reading skills. The formative feedback, collaborative environment, and engagement helped improve the learning scores. It shows that the use of information and communication technology (ICT) should be accurately implemented along with the formation of a collaborative environment.

Tremblay. et al. (2022). conducted a study on "Before, During, And After: An Examination of the Pre-Task Planning and Post-Task Revising Practices of Adults with Low Literacy and Their Effect on the Quality of Written Compositions".

This study sought to examine the pre-task planning and post-task revising practices of adults with low literacy and how those practices affect overall writing quality. Seventy-six adults with low literacy composed essays in response to a prompt and were given time for pre-task planning and post-task revising. Results showed that participants with higher planning skills were able to utilize planning and revising processes to increase the detail included in their compositions while potentially streamlining the language contained therein. Writers with lower planning skills, in contrast, focused on lower level aspects of writing (e.g., word choice) and were unable to make use of the more demanding processes of planning and revising to improve their compositions. These findings suggest a hierarchical development of writing skills and the possibility of sacrifices in certain areas of the writing process as writers focus on other areas. Practical implications for practitioners are discussed.

Rogers. et al. (2022). conducted a study on "Wider benefits of adult literacy teaching: A preliminary exploration of the impact of teaching literacy to adults on some facilitators".

This article reports on a pilot research project conducted in nine countries of Africa and Asia on some aspects of the impact that teaching literacy to adults has had on the lives of some adult literacy facilitators (ALFs). The small-scale enquiry was implemented by a team of twelve researchers in nine countries (Afghanistan, Botswana, Ethiopia, Kenya,

Malawi, Nepal, Tanzania, Uganda, Zambia). All of the nineteen ALFs interviewed felt that the experience of teaching literacy to adults, even if for some of them it was brief and posed difficulties, had a positive impact on their lives, and in some cases was life-changing. Despite its limitations, the project demonstrates the importance and feasibility of such a study and encourages further surveys.

Shaikh, S and Abdul, M. (2022). conducted a study on "Role of Adult Education in Women Empowerment through Skill Development Programme".

The present study is focused on the Women Empowerment through Adult Education and Skill Development programmes implemented in India. The study is based on the secondary data which was obtained from various published and unpublished records, books, magazines and journals. This study seeks to review the various initiatives taken by Government of India, like the programmes conducted through public and private partnership, and the ways to increase the employability skills, and the challenges faced for the success of empowering women through skill development programmes. The study also discusses about the schemes, training and skills imparted through adult educational programmes.

Belzer. et al. (2022). conducted a study on "The imagined learner in adult literacy education policy research: An international comparison".

This article provides a comparative analysis of the ways in which learners are portrayed in researchers' descriptions of adult literacy education policy. Although adult learners are rarely referred to directly in policy or in policy research, a range of assumptions about them may be inferred through close analysis of related research literature. This analysis draws on an earlier meta-synthesis (prepared by the first author and Amy Pickard) of adult

learner portrayals in qualitative research which identified a typology of "learner characters" that were predictably employed in descriptions across a large variety of texts. They argued that these learner types were likely to "drive the action" in terms of further research, policy and practice just like characters drive the plot in literary narratives. Asking "Who are the (imagined) learners in research that describes policy documents pertaining to adult literacy?", this article takes this line of thought further by demonstrating that identifying learner types in policy analysis research can inform thinking about who the policy is really for, what is valued, and who benefits. This, in turn, can provide researchers with a distinctive lens for policy analysis and critique. The authors of this article identify five types of imagined learners: The Problem, the Pawn, the Afterthought, the Competitor, and the Competent Citizen.

DarisHadianto. et al. (2022). conducted a study on "Effectiveness of Literacy Teaching Design Integrating Local Culture Discourse and Activities to Enhance Reading Skills".

This study investigates the effectiveness of literacy teaching design integrating local culture discourse and practice to enhance the reading skills of adults in Indonesia. One hundred participants from underdeveloped areas aged 25–50 contributed to the learning process for twelve lesson units. We elicited data by using two instruments, namely multiple-choice questions and interviews. The statistical analysis showed that instructional design profoundly affected the improvement of reading skills. The thematic analysis showed how participants evaluated the literacy teaching design as enriching knowledge, sharing understanding among participants and motivating them to improve their life skills. This study will be useful to teachers who are

seeking cognitive and practical instructions to promote reading skills in the classroom.

ChihWei Wang. et al. (2022). conducted "A case study of adult education and literacy programs and the transition to remote services during the COVID-19 pandemic"

The COVID-19 pandemic drastically impacted the Texas Division of Adult Education. As a result, Texas's grant-funded adult education and literacy (AEL) programs transitioned to remote instruction. There was a need to understand how this unfolded. Thus, the purpose of this case study was to explore how the Texas Division of Adult Education guided AEL programs in the transition to remote services. Several published records were collected and analyzed using document and content analysis. The research findings revealed effective crisis management strategies and professional development interventions implemented by state leadership. This study also highlights the challenges and potential advantages of remote learning. These outcomes are helpful because they could guide other state agencies in incorporating remote learning courses. Ultimately, professional development training evaluations indicated the need for further program support to foster training transfer. This article concludes with implications for AEL programs and suggestions for future research.

Byrne. et al. (2021). conducted a study on "Education reforms and adult skills: Evidence from Estonia".

This paper studies the impact of education reforms in Estonia in the 1990s on adult skills using the OECD PIAAC surveys. Estonia implemented extensive education reforms in the early 1990s throughout Estonian-speaking schools while Russian-speaking schools were exposed to less comprehensive reforms, which were implemented later. A large minority of Estonia's

population at the time was enrolled in Russian-speaking schools providing a unique opportunity to measure the impact of education reforms on literacy, numeracy and problem-solving skills among adults by comparing improvements in PIAAC performance among Estonian and Russian speakers. Difference-in-difference estimation suggests that the reforms led to an adult skill dividend of around 15 to 30 percent of a standard deviation. This translates to a wage (productivity) premium of around 5 to 12 percent.

Ferguson. et al. (2021). conducted a study on "How can an adult literacy tutoring program help participants build confidence and meet their goals?"

Low literacy in adulthood can be a powerful barrier to opportunity. Our research explored how participation in a free adult literacy program that provides dyadic support can help participants to build confidence and meet their unique literacy goals. We conducted in-depth interviews with 15 randomly-selected adult literacy learners who participated in the program. Respondents had diverse literacy skill gaps and needs, and the program helped them to begin to address these issues. Respondents' learning goals were more typically directly linked to study or work requirements rather than social needs, and some respondents demonstrated an ongoing commitment to improving their literacy beyond the program, showing an internal locus of control and a lifelong learner orientation. Improvement in literacy for vocational needs had a tangible influence on respondents' working lives. Some respondents showed an ongoing autonomous effort to build their literacy skills that was related to confidence gained through program participation.

Hyjek. (2021). Conducted A Study On "A Life in The Day of an Adult Literacy Tutor: A Perspective On Tutoring Adults".

In this article, author talks about of being an immigrant from the Canada and his perspective on tutoring adults in the U.S. It discusses about the importance of good education and explores form of communication and type of literacy. It mentions that how literacy remediation programs as not adequately address the needs of those students.

Killian. et al. (2021). conducted a study on "Examining the Underlying Structure of Adult Literacy Practices at Home and at Work".

Adults have similar literacy habits as children, such as reading to gain knowledge or for enjoyment. However, when workplace literacy skills are considered, these practices are not always book related and usually involve informal communication such as collaboration between workers. This study used data from the 2012 Program for the International Assessment of Adult Competencies to examine adults' literacy skills. A total of 39 adult literacy skills were examined to explore patterns among them, effectively reducing them to nine interpretable factors. Each factor focused on an area of literacy skills, such as work-related reading, educating others, and writing. The nine factors that consisted of 37 variables accounted for 59.2% of the total variance in the adults' literacy habits.

Grotlüschen. et al. (2020). conducted a study on "International assessment of low reading proficiency in the adult population: A question of components or lower rungs?".

Among the United Nations' 17 Sustainable Development Goals (SDGs) launched in 2015, the fourth goal (SDG 4) is dedicated to education, and one of the ten targets within that goal specifically addresses adult

literacy and numeracy skills. Efforts to reach this target involve monitoring, which in turn involves assessment. The most powerful instrument for assessing literacy proficiency is the Programme for the International Assessment of Adult Competencies (PIAAC), conducted by the Organisation for Economic Co-operation and Development (OECD). It has five hierarchically organised proficiency levels for literacy. A sixth category, labelled "below Level 1", lumps together low proficiencies at the bottom end of the proficiency continuum. To boost effective action in addressing SDG 4, the UNESCO Institute for Statistics (UIS) recently launched the Global Alliance to Monitor Learning (GAML), which aims to support national assessment strategies and to develop internationally comparable indicators and methodological measurement tools. While PIAAC Levels 1–5 are already broadly suitable for international comparison, the "below Level 1" category has so far only been assessed by individual countries (e.g. Canada, the United States, the United Kingdom and Germany) using instruments developed nationally. Focusing on the reading aspect of literacy, the authors of this article investigate how these nationally developed low proficiency assessment instruments might be adjusted to facilitate international comparability.

Tout, Dave. (2020). conducted a study on "Evolution of adult numeracy from quantitative literacy to numeracy: Lessons learned from international assessments".

Historically, numeracy has tended to be forgotten and overlooked in adult education, especially compared to literacy. Yet evidence exists to show that numeracy should be made a priority, and that building the foundational numeracy skills of young people and adults is vital for their well-being in work and life in the 21st century. In the past three decades, there has been an

increasing awareness of the role and importance of mathematics and numeracy skills in adult life. This concerns every adult as an individual, as a member of society and as a worker, and how proficiency in these areas is critical in underpinning the skills necessary to negotiate the challenges of 21st-century life. This article describes how this growing understanding and awareness of numeracy has been enhanced through the evolution of the assessment of numeracy in international adult skills surveys. It began with the International Adult Literacy Survey (IALS) in the 1990s, continued with the Adult Literacy and Lifeskills (ALL) survey in the mid-2000s, and in 2011 finally led to the Programme for the International Assessment of Adult Competencies (PIAAC). The latter's second cycle is due to start collecting data in 2021–2022 and the results are due to be published in 2023. The development and ongoing refinement of the theoretical frameworks and constructs that underpin these programmes and the assessments themselves, alongside the research based on the rich data of empirical and background information emerging from these surveys, have contributed significantly to our knowledge and understanding of numeracy in people's lives.

Nils, Kirsten. (2019). conducted a study on "Improving literacy and content learning across the curriculum? How teachers relate literacy teaching to school subjects in cross-curricular professional development".

This study examined how teachers relate literacy teaching to their ordinary subject teaching in professional development settings. The study is conducted within the large Swedish professional development program the Literacy Boost which can be viewed as an example of an international focus on reading ability beyond early and beginning reading. Such a focus may be well-grounded, but it also raises concerns of how teachers of different school

subjects are addressed in such programs. The findings of this study show that participating teachers express four approaches of relating literacy teaching to subject teaching, indicating different types and degrees of coherence between professional development content and teachers' teaching practice. While all teaching activities described by teachers aimed at improving students' general literacy, this was mostly done in the form of additional activities rather than being embedded in the ordinary teaching concerning curricular objectives of school subjects. These results suggest that differences in how texts are used and interpreted in different school subjects should be given higher priority in the design of both content and form of professional development programs to better support subject teaching.

Mumpuniarti. (2017). conducted a study on "Challenges Faced by Teachers in Teaching Literacy and Numeracy for Slow Learners".

The current study explored pedagogical strategies carried out by teachers to support special need children in improving their level of literacy and numeracy. The current study utilized qualitative research design where classroom observations were carried out to explore teaching activities used by teachers in teaching language and mathematics. It was then followed by a focus group discussion to identify problems faced by children in numeracy and literacy. This research was carried out in one of the elementary schools in Yogyakarta, Indonesia. Data collected was analyzed manually by focusing on the main aspects. Results demonstrated that 27 activities were frequently used by teachers in teaching language and mathematics. Those activities are the common teaching practice for slow learners. In order to evaluate the effectiveness of those practices, a focus group discussion with a group of students was carried out. Results revealed that most students have problems in literacy (spelling, reading complex words, and write long words) and

numeracy (counting, subtraction, multiplication and divide). As the common teaching practice was found to have minimal effect on children's literacy and numeracy, the current study suggests rethinking of a new pedagogical approach for improving literacy and numeracy for slow learners.

Adrienne. et al. (2016). conducted a study on Readers in Adult Basic Education: Component Skills, Eye Movements, and Fluency".

The present study explored the reading skills of a sample of 48 adults enrolled in a basic education program in northern Florida, United States. Previous research has reported on reading component skills for students in adult education settings, but little is known about eye movement patterns or their relation to reading skills for this population. In this study, reading component skills including decoding, language comprehension, and reading fluency are reported, as are eye movement variables for connected-text oral reading. Eye movement comparisons between individuals with higher and lower oral reading fluency revealed within- and between-subject effects for word frequency and word length as well as group and word frequency interactions. Bivariate correlations indicated strong relations between component skills of reading, eye movement measures, and both the Test of Adult Basic Education (Reading subtest) and the Woodcock-Johnson III Diagnostic Reading Battery Passage Comprehension assessments. Regression analyses revealed the utility of decoding, language comprehension, and lexical activation time for predicting achievement on both the Woodcock Johnson III Passage Comprehension and the Test of Adult Basic Education Reading Comprehension.

Elizabeth,L.T. and Christopher,S. (2014). conducted a study "Examining the Relationships of Component Reading Skills to Reading Comprehension in Struggling Adult Readers: A Meta-Analysis".

The study employed a meta-analytic approach to investigate the relative importance of component reading skills to reading comprehension in struggling adult readers. A total of 10 component skills were consistently identified across 16 independent studies and 2,707 participants. Random effects models generated 76 predictors–reading comprehension effect sizes among the 10 constructs. The results indicated that six of the component skills exhibited strong relationships with reading comprehension (average rs ≥ .50): morphological awareness, language comprehension, fluency, oral vocabulary knowledge, real word decoding, and working memory. Three of the component skills yielded moderate relationships with reading comprehension (average rs ≥ .30 and < .50): pseudoword decoding, orthographic knowledge, and phonological awareness. Rapid automatized naming (RAN) was the only component skill that was weakly related to reading comprehension (r = .15). Morphological awareness was a significantly stronger correlate of reading comprehension than phonological awareness and RAN. This study provides the first attempt at a systematic synthesis of the recent research investigating the reading skills of adults with low literacy skills, a historically understudied population. Directions for future research, the relation of our results to the children's literature, and the implications for researchers and adult basic education programs are discussed.

Daryl, F. M. et al. (2013). conducted a study on "Underlying Reading-Related Skills and Abilities Among Adult Learners".

This exploratory study identified underlying skill and ability differences among subgroups of adolescent and young adult struggling readers (N = 290) overall and in relation to a fluency-based instructional grouping method. We used principal axis factoring of participants' scores on 18 measures of reading-related skills and abilities identified in the research literature to identify a smaller set of generally uncorrelated constructs. The four underlying factors of the 18 measures explained 62.7% of the variance. We labelled these factors Encode/Decode (44.5%), Vocabulary (9.5%), Processing Speed (5.2%), and Working Memory (3.5%). Regression analysis demonstrated Working Memory, Encode/Decode, and Vocabulary collectively predicted 45.9% functional reading as measured by the Comprehensive Adult Student Assessment System. Alternatively, when measured by the Test of Adult Basic Education, Vocabulary and Encode/Decode predicted 47.1% of variance in reading. Differences in predictive utility of the factors by fluency group suggest approaches to tailoring instruction for each group. Future research might examine the optimal mix of instructional approaches that support the identified factors.

Vasudevaiah. (2012). conducted a study on "Literacy attainment and women empowerment among self-help groups - A study in Anantapur district of Andhra Pradesh".

The findings of the study revealed that: Out of 240 neo-literates, 106 members (44.17 per cent) qualified in the literacy test as per National Literacy Mission norms. Variables like age, caste, locality, marital status, occupation, income, period after becoming literate have significantly influenced the performance of neo-literates in literacy skills. Religion, type

of house, number of educated members in the family have not exerted any significant influence on the performance of neo literates in literacy skills.

Mellard. et al. (2011). conducted a study on "Assessment and Instruction of Oral Reading Fluency Among Adults with Low Literacy.".

A study investigated the oral reading fluency of 295 adults with low literacy by analyzing total words per minute and word error rates. Four fluency-ability groupings based on standardized assessment of reading-related skills—phonemic awareness, word recognition, vocabulary comprehension, and general ability—were identified. Findings suggest that adults who read at comparable correct word rates varied significantly in total words read and word error rates.

Guadalupe. et al. (2011). conducted a study on "Measuring the continuum of literacy skills among adults: educational testing and the LAMP experience".

This paper discusses basic standards for methodological approaches used in measuring literacy skills among adults. The authors address the increasing interest in skills measurement, the discourses on how this should be done with scientific integrity and UNESCO's experience regarding the Literacy Assessment and Monitoring Programme (LAMP). The increase in interest is due to the evolving notion of literacy as a continuum. Its recognition in surveys and data collection is ensured in the first commitment in section 11 of the Belem Framework for Action. The discourse on how measurements should be carried out concerns the need to find valid parsimonious approaches, also their relevance in different institutional, cultural and linguistic contexts as well as issues of ownership and sustainability. Finally, UNESCO's experience with LAMP shows how

important addressing these different issues is in order to equip countries with an approach that is fit for purpose.

Charles, A. et.al (2010). conducted a study on "Reading component skills of Learners in Adult Basic Education".

The purposes of this study were to investigate the reliability and construct validity of measures of reading component skills with a sample of adult basic education (ABE) learners, including both native and non-native English speakers, and to describe the performance of those learners on the measures. Investigation of measures of reading components is needed because available measures were neither developed for nor normed on ABE populations or with non-native speakers of English. The study included 486 students, 334 born or educated in the United States (native) and 152 not born or educated in the United States (non-native) but who spoke English well enough to participate in English reading classes. All students had scores on 11 measures covering five constructs: decoding, word recognition, spelling, fluency, and comprehension. Confirmatory factor analysis (CFA) was used to test three models: a two-factor model with print and meaning factors; a three-factor model that separated out a fluency factor; and a five-factor model based on the hypothesized constructs. The five-factor model fit best. In addition, the CFA model fit both native and non-native populations equally well without modification, showing that the tests measure the same constructs with the same accuracy for both groups. Group comparisons found no difference between the native and non-native samples on word recognition, but the native sample scored higher on fluency and comprehension and lower on decoding than did the non-native sample. Students with self-reported learning disabilities scored lower on all reading components. Differences by age and gender were also analyzed.

John, P.S. et.al. (2010). conducted a study on "Relationships among Reading Skills of Adults with Low Literacy".

In this study, confirmatory factor analyses were used to examine the interrelationships among latent factors of the simple view model of reading comprehension (word recognition and language comprehension) and hypothesized additional factors (vocabulary and reading fluency) in a sample of 476 adult learners with low literacy levels. The results provided evidence for reliable distinctions between word recognition, fluency, language comprehension, and vocabulary skills as components of reading. Even so, the data did not support the hypothesis that the simple view needs to be expanded to include vocabulary or fluency factors, as has been posited in a few prior studies of younger and abler readers. Rather, word recognition and language comprehension alone were found to account adequately for variation in reading comprehension in adults with low literacy.

Daryl,F.M.,Emily, F. and Kari, L. W. (2010). conducted a study on "A Path Analysis of Reading Comprehension for Adults with Low Literacy"

Adult literacy interventions often rely on models of reading validated with children or adult populations with a broad range of reading abilities. Such models do not fully satisfy the need for intervention research and development for adults with low literacy. Thus, the authors hypothesized that a model representing the relationship between reading component skills would be predictive of reading comprehension for an adult population with low literacy and beneficial to adult literacy researchers. Using data from 174 adults participating in adult basic education and secondary education programs, the authors performed a path analysis of component skills' contribution to reading comprehension. The findings are clear that existing

reading models do not describe this population. The implications are discussed in terms of instructional and curricular interventions.

Yvonne, G. and laura,R. (2008). conducted a study on "Using Basic Reading Skills Instruction and Formative Assessments to Teach an Adult with Traumatic Brain Injury to Read: A Case Study"

Literacy expectations for persons with cognitive impairments, including impairments caused by traumatic brain injury (TBI), have remained quite low. Some researchers have suggested that educators move from a focus on teaching functional skills to teaching basic reading skills in a manner similar to instruction for nondisabled learners. The purpose of this study was to examine the effectiveness of basic reading strategies on reading skills for an adult with cognitive impairments caused by TBI while using formative assessment to inform instructional decision making. The findings suggest that persons with traumatic brain injury resulting in cognitive and memory impairments may have the potential to learn basic reading skills, even years after a TBI has occurred.

Perumal, Mohan and Suresh. (2007). Conducted a study on "Adult Education Scenario in India, Under New Education Policy" book "

Adult Education Scenario in India, Under New Education Policy", deals from the Genesis and Background of Adult Education in India, made a comparison between Formal and NonFormalEducation, studied the perspectives of Each One Teach One Program me in India and Adult Educational Development in Tamilnadu, they selected Thiruverambur area for the study purposes. Major findings of the study were: Among the learners 72% belongs to the age group of 25 - 50 years. 46% of the learners depend on agriculture and other allied works for their main source of livelihood business. Honorarium of the animators are Rupees 50 per month only,

female animators are more interested to work in the centres than male. 70 large number of centres are function in the study area. The performance of scheduled castes and scheduled tribes are found to be better than other groups.

Paintal,M. (2006) .conducted a study on "concept, purpose, policy, definition, language and programmes of adult education in India, Indonesia, Thailand and China".

The findings of the study revealed that**i)** All the four selected countries had similar socio-cultural settings. ii) Majority of these four countries population lives in rural areas and agriculture is the chief occupation. iii) They were at a different stage of socio-economic development. iv) China had centralized planning, India and Thailand followed five-year development plan but in Indonesia the presidential decrees were important and implemented as government laws.vi) Adult education in these countries was for the down trodden, unreachable and disadvantaged group for whom popular primary education was not possible as these groups were socially, culturally and economically marginalized. vii) The content of adult education was varied in the selected countries but comprises basic literacy, acquiring knowledge pertaining to civic needs and occupational skills to become productive part of system. viii) The content of adult education was varied in the selected countries but comprises basic literacy, acquiring knowledge pertaining to civic needs and occupational skills to become productive part of system. ix) Each of the four countries studied had addresses its adult education problem in its very own way depending upon its political system and its socio-economic stage of development. The findings of Paintal's study confirm that adult education has had a long history of entering into public policy in the selected countries. x)

The review indicates that there are several factors which caused problems for adult continuing education. It also reveals that there are inadequate facilities for instructors and learners in adult education centres of the country. The books and thesis reviewed were directly or indirectly related to the present study.

Singh. (2004). traced the status of adult education in Jammu and Kashmir and agencies involved in organization of the programmes in the study.

Jammu and Kashmir launched National Adult Education Programme (NAEP) on a massive scale on 2nd October 1978, with the objective of making 1.3 million adults literate out of 1.86 million total populations in the age group of 15-35 years, the programme was started in all the 10 existing district during that time and 6,76,527 adults have been made literate in the state up to ending June 1989.In the last part of September 1989, there are 18 projects in Jammu Division and 10 projects in Kashmir Division functioning in the state with an enrolment of 75,658 learners receiving literacy education in 2,446 centres, besides this, 7,875 learners were learning literacy skills in 503 handicrafts centres in the valley and up to the ending of 1989 in the valley of Kashmir 1,25,358 males and 2,47,369 females have become literate.In Jammu and Kashmir high economic status groups were more interested in learning than low economic status groups, comparing Scheduled Caste and Non-Scheduled Caste, Non-Scheduled Caste group were more interested in learning than Scheduled Caste group 54 and among the learners in adult education centres learners of lower age group were more interested than learners of high age group.Library facilities provided to adult learners were meagre and only 40% of learners took the benefits.The major reasons for dropouts given by the adult learners were due to involvement in agriculture work for earning their livelihood and due to household work.

Chandra (2003) made an attempt to study the "National Adult Education Programme."

The study revealed thati) The total target was 100 million but 44.22 million learners were enrolled in Adult Education Centres in different areas till March, 1988.ii)It has been estimated that only about 45% of the enrolled learners attained literacy.iii) iii)The level of achievement of this programme in relation to the target set for it was about 20% only. 8 Muttalib M.A: "Voluntary Action in Education", Sterling Publishers Private Limited, New Delhi, (1989). iv) Motivation and participation of women was high in the programme but the achievement levels of literacy were below the desired level) v) The coverage of weaker sections of society particularly Schedule Tribes and Schedule Caste was higher than the target. (vi) The quality of teaching learning materials prepared are found to be positive but Mass media did not provide appreciable support and learning environment in the Adult Education Centres was poor.vii) The programme worked very well where special recruitment procedures were adopted and management was reasonable. viii) The State Government did not give proper co-operation to Voluntary Agencies and quality of training of the functionaries was poor. ix) Lack of linkage between basic literacy, post-literacy, follow up and continuing education which lead a large number of neo-literates into illiteracy.ix) Support from Political level, Administrative level State level and Panchayat Raj was not approaching.

Kiran,S. (2003).conducted a study on "Implementing Agencies in Adult Education in the Imphal District of Manipur".

The study has five Objectives and analysis was done on the aspect of progress and development, contribution made by the three agencies, funding agencies, implementation of the programmes. Findings of the study were :

there is different progress in the field of Adult Education in Manipur after having a separate Directorate for Adult Education, it has been taken up under three pronged approaches - Directorate of Adult Education Government of Manipur, Non-Governmental Organisations and the University since1973 from different directions under different management system and control, nine voluntary organisations took the initiatives of eradicating illiteracy from the age group of 15 - 35 years within this two districts, there is political interference at the time of departmental promotion which created undesirable complexities in functioning the Directorate, lack of proper co-operation and co-ordination within the department causes the failure of adult education programme to a great extent, Adult Continuing Education and Extension, Manipur University was established in1986 and had been implemented various programmes not only in eradicating of illiteracy but also provides continuing education and extension education through teaching, training, and research.

Khandai. (2003). made an Analysis of India Literacy Rates based on National Sample Survey Organisation (NSSO), 1997.

The main findings of the study werei)The growth of literacy rates are 10% points within 6 years 1991 to 1997 and 12% points within 7 years 1991 to 1998, this shows extraordinarily with the decadal trends of previous years since independence. ii)The survey figures show that in the current decade, in a matter of just 6 years, the decadal average of all earlier years has been surpassed.iii)The increase in literacy particularly rapid between July 1995 and December 1997, due to the hardest time period for the National Literacy Mission when Literacy Campaigns moved to northwards into the heartlands of the Hindi and massive administrative challenge was faced which deeply-embedded unpleasant socio-cultural milieus.iv)The urban-rural differential in

literacy rates has shown a marked decline for the first time in a span of just 6 years as it has dropped by more than 4% faster than in any previous decade)The rapidity growth of literacy rate between 1991 - 1997 in rural areas has been 11.3%, as opposed to rate of growth in urban areas, 51 which has been 6.9% the growth rate in rural areas move faster than the growth rate in urban area by as much as 4.4% is markedly more in the last 6 years contrasting to any previous decade.vi)The growth rate of female literacy between 1991 - 1997 has been 11.3% whereas male literacy rate for the same period has risen by 9% and the female rate of literacy has grown faster than male even in the previous decade which was 9.6% against 7.9%. This is due to a great contribution and special emphasis laid by the National Literacy Mission on women participation.

Lalthankungi. (1997). conducted a study on "An Appraisal of Adult Education Programme in Mizoram".

The study revealed the systematic process of determining the extent to which the objectives of the adult education programme function in Mizoram are achieved. The study adopted random sampling technique for selecting different sample groups, the obtained data were analyses in terms of percentage in which both quantitative and qualitative analyses was carried out. Findings of the study were: The current learners in SAEP are 59.52%, Colleges are 72.50% and respondent in RFLP are 48.33% majority were females, majority of the current learners were cultivators had no previous schooling, learners received teaching learning materials but they were not satisfied with the quality of those materials, attainment of the current learners on 'literacy' component of the programme was satisfactory to a great extent but the level of 'numeracy' was not satisfactory, the programme could not play the expected role in upgrading the functional skills of the current

learners and in general, the attainment of the current learners on 'functionality' component of the programme was far from satisfactory, lack of trained workers and training facilities. Among the three districts in Mizoram performance of Aizawl District was found to be the best followed by Lunglei and Chhimtuipui districts, 76 respectively and in general, the adult education programme functionaries in Mizoram could not play their role as expected in the programme online.

The UGC Review Committee Report (1987) on Adult and Continuing Education.

The UGC Review Committee Report (1987) on Adult and Continuing Educationforwarded the following objectives for continuing education suchas:i)To enable the universities to establish the necessary linkage with community. ii)To provide opportunities for disseminating knowledge in all walks of life. iii)To cater the felt needs of all sections of society, but especially to the need of the less privileged and under privileged sections.iv)To enrich higher education by integrating continuing education and adult education programmes and extension work in the system etcetera.

Saxena J.C. and Sachdeva J.L. (1986). conducted a study on "Role of Adult Education and Mass Media for Civic Education".

The report contains a keynote address in the form of introduction, the objectives of official and non-official agencies and the need of co-operation among educational institutions to promote civic sense to the people. It emphasizes the importance of civic education for the people, to know their rights and duties for the improvement of the quality of life and their living standard as rights without concomitant duties and responsibility could lead to confusion. It also mentioned that exploitations and inequalities were mainly

due to ignorance of the people in general and lack of civic awareness in particular.

Kar,B (1992) conducted a study on "An investigation in to the effectiveness of Adult Education Programme Sadar Block of Balasore District".

The study reported that (i) as high as 51.2% female learners had developed literacy, (ii) 52.4% of male learners had developed awareness and functionality, and (ii) the attitude of most of the adult learners towards small family norm and towards education was positive.

Satapathy,S (1990) investigated on "Impact of adult education on child rearing practices".

The Study found that (i) mother should not know child rearing before birth of her child, (ii) 90% of the respondents were disagree with the statement that during pregnancy a mother should have a good mental condition, (iii) 92% of the respondents agreed that the mother's milk was best food for baby, (iv) 84% of the respondents said the clothing should be clean, light and be made of cotton, (v) 74% of the respondent viewed to teach their baby to respect others and to teach good manner, (vi) 70% said to teach their baby about cultural heritage and (vii) 94% of the respondents said that the all-round development of the child depends on mother.

Satyanarayan (1986) conducted a study on "The impact of adult education programme on individual modernity in rural and tribal development blocks".

The study was reported that modernity is seen in constituents such as innovativeness, independence, future orientation, open mindedness and aspiration. The social orientation awareness index included awareness of

social and political issues in the community context. The study concluded that there is a meaningful link between adult education and modernity particularly among the tribal groups, there is however, no evidence to suggest that adult education acts as a counterforce to earlier beliefs.

Mariappan,S and Ramakrishnan,C. (1980). conducted a study on "Learner's attitude towards literacy in Adult Education Centre of Tamil Nadu and Pondicherry - an Appraisal".

The study revealed that 96% of men and 94% of women were interested to learn. Almost 63% learners wished to acquire as much knowledge as possible from Adult Education centres constituting the areas of reading, writing, occupation, awareness, economic culture, social status etc. The preference of learners for the written language suggested their interest for reading, and writing.

Brahm Prakash (1978) conducted an experiment on "The impact of functional literacy in the rural areas of Haryana and Delhi".

The study revealed that functional literacy programme had brought about a positive and significant change in the knowledge, attitude and adoption behaviours of the participants with respect to high yielding varieties of programmes.

Venkataih,N. (1977) conducted a study on "The impact of functional literacy programme on the farmers of Andhra Pradesh".

The major findings of the study were that there was no significant increase in the achievement of literacy and acquisition of modern agricultural knowledge with the increase in the socio- economic states of the participants.

Lakra.S. (1976). conducted a research on "Impact of Adult Education in the Tribals of Ranchi district of Bihar".

The main objective of the study was to investigate into the damages that had occurred in the socio-economic and political spheres of life of the tribals due to adult education imparted to them. The study pointed out that the tribals developed a toll for western music and dance and neglected their own heritage. Their standard of living rose with the level of education which made them free from Poverty, Ignorance, Social taboos and superstitions, gradually their tribals became educationally conscious and send their children to schools. They become politically have been adopted their severe associations into Adivasi Mahasabha.S

Agnihotri. (1974). investigated on "Impact of Adult Education Programme in Wardha Districts of Maharashtra".

Aspects of the study were literacy, social attitude, change in living pattern, awareness of responsibilities, economic condition, standard of living, promotion of knowledge etc. The investigator found no improvement in the standard of living of the village people. Their work efficiency had not increased. They had started to realise the importance of modern farming methods. A significant percentage of them had understood the need of cleanliness.

Chaturvedi,S.C. (1969). conducted a study on "The impact of social education on the life of the people in U.P."

The study pointed out that the social education programme had definite impact on the life of the people in rural areas despite many limitations of the programme. However, there was not enough enthusiasm in

either the people or the workers in the field about the programme and the attainment of its goal.

The careful investigation of the related literature provided supportive evidences to the present study since there are many number of studies done related to the present study. From the review of literature, it was stated that varying methods and different sampling techniques in the relevant studies. A look back into all the available researches done with regard to reading Skills,writing skills, arithmetic skills, and adult literacy brings out gaps and overlaps and helps in identifying the direction in which further researches n the area may be undertaken.

From the literature review, it was revealed that majority of the studies were conducted to find out the literacy level of fundamental mathematics, Language reading and writing literacy among adults. Most of the studies were focussed on the literacy level of adults and the programmes organized to improve the reading writing skills. Very few studies focussed on Empowerment of women through skill development programme.

2.5 CONCLUSION

From the analysis of the studies given above, it is clear that the present study stands different from the studies in population, sample, tool, variables and dimensions conducted so far. Hence the present study would be able to provide valuable information needed for the researchers, educationists, policy makers,teachers and students to understand about the enhancement of reading, writing, arithmetic skills and basic knowledge among adults.

CHAPTER-III

METHODOLOGY

3.1 INTRODUCTION

A research methodology is a procedure a researcher chooses forcarrying out research. As the name suggests, a research methodology is a way of conducting research. The methodology a researcher chooses will depend on the research question(s) asked. Every research project looks a little bit different. While research questions can span a wide breadth of topics, it is important that researchers follow specific procedures and protocols when conducting their research. Methodology, or making sure you have documented the steps you took, is therefore important in research. The procedure a person follows to conduct research is called a research methodology. It is important to understand the parts of a research methodology to ensure research is organized, credible, and impactful. Practically there is no single fixed blue print for planning research design. It generally depends on (a) the kind of question being asked or investigate, (b) the purpose of the research, (c) the research approach (paradigm) and principles on which the researcher is working and (d) the philosophy, ontology and epistemology. Research design is governed by the notion of "fitness for purpose". However, the purpose of the research determines the research design and research methodology. The present chapter indicates those matters that need to be address in practice so that an area of research interest can be translated into researchable, practical and feasible. It shows how research might be operational one. It is essential to try as far as possible to plan every stage of the research process. Once it has been decided the researcher is in very positive position to conduct the research. In the way of planning research design, the researcher will open up a range of possible

options or possibilities. Now the researcher has to pick those options which are desirable and compatible with each other according to the nature of the research topic. Hence the researcher is requiring to establish a detailed framework or blueprint of options that will actually work in the situation and more towards an action plan that can be realistically operate the research work. Research process depends on what the researcher wants to know. The planning of research design depends on the questions being asked or investigates. This depends on the researcher's careful consideration of the purpose of research which is discussed earlier.

3.2 RESEARCH METHODOLOGY

Research methodology is necessary in sociology as it provides legitimacy and wider acceptance to the sociological work. Different methods are used for different purposes of research like Positivist research or interpretive research. Research methodology is a collective term for the whole structured process of conducting a research study. It is science of studying how the research is conducted. It is a procedure by which are searcher performs the work of description, explanation and prediction during a study. Research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done. The various steps that are generally adopted by a researcher in are studying his research problem along the logic behind them and explain why one is using a particular method or technique and why he or she is not using others. Research Methodology describes research methods, approaches and designs in details that are used throughout the study and highlights and justifies the choice by explaining the advantages and disadvantages of each, taking into account their practicability in the particular research.

3.3 RESEARCH DESIGN

Research design is a blueprint of a scientific study. It includes research methodologies, tools, and techniques to conduct the research. It helps to identify and address the problem that may rise during the process of research and analysis. A design of research refers basically to the conceptual structure within which the research is conducted. It implies a plan to render the enquiry efficiently, so as to yield the truest possible generalizations, descriptions and predictions. In fundamental research it adopts a very rigid structure while in applied research it becomes a flexible one. It is a plan that displays overall devices to be employed, allocates the time and resources and decisions about the precise treatment to be given in a specific situation. This overall structure with which implementation of a plan or program occurs is known as research design.

3.3.1 Basic Principles of Research Design

    i. Identifies the problems
   ii. Reviews literature around the problem statement
  iii. Specifies hypothesis
   iv. Describes sources of data
    v. Defines how data will be interpreted

3.3.2 Basic Need of Research Design

1. Reduces inaccuracy
2. Increases efficiency and reliability
3. Eliminates bias and errors
4. Minimizes wastage of time
5. Helpful in testing the hypothesis
6. Provides a direction to the research

3.3.3 Types of Research Design

A researcher must be well-versed in different types of research design. Moreover, a clear understanding of different research designs helps to choose the proper technique for the research. Research design is broadly divided into quantitative and qualitative research design. We'll walk you through them in detail below.

3.3.3.1 Quantitative Research design

Quantitative research design aims at finding answers to who, what, where, how, and when through the course of research. Moreover, the outcome of the quantitative analysis is easy to represent in the form of statistics, graphs, charts, and numbers.

3.3.3.2 Qualitative research design

Qualitative research design focuses on finding answers to how and why. It uses open-ended questions and helps the subjects express their views clearly. Qualitative research is ideal for businesses that aim to understand customer's behavior and requirements

You can further break the types of research designs into five categories.

3.3.3.3 Experimental design

This type of research design looks at a problem scientifically by establishing a clear cause and effect of every event. It also tries to understand the impact of the independent variable on the dependable variable. Often social sciences use it to observe human behaviors and understand the social psychology of human being better.

3.3.3.4 Correlational design

Correlation research design establishes a relationship between two related variables. The researcher observes the variables over time and then

draws conclusions based on them. This type of research design requires two different groups.

A correlation coefficient determines the relationship between two variables. The value of the correlation coefficient ranges between -1 and +1. If the correlation coefficient is +1, it indicates a positive relationship between the two variables, and -1 means a negative relationship.

3.3.3.5 Descriptive design

Descriptive design is a theory-based research method describing the research's primary subject matter. This type of research design uses data collection techniques like natural observation, case studies, and surveys to derive results. This type of research design provides insight into the why and how of research.

3.3.3.6 Diagnostic design

In diagnostic research, the design strives to explore the reason behind an issue and find solutions to solve it. This type of research design tries to solve the problems in a structured form divided into three phases- the issue's inception, diagnosis of the issue, and solution for the issue.

3.3.3.7 Explanatory design

In this research design, the researcher explores concepts and ideas on a subject to explore more theories. The main aim of the research is to explore the subjects' undiscovered aspects and answer questions like what, how, and why.

3.4 METHODS OF RESEARCH

Research methods are the strategies, processes or techniques utilized in the collection of data or evidence for analysis in order to uncover new information or create better understanding of a topic. There are different types of research methods which use different tools for data collection.

Methods of research may be classified from many points of view; the decision about the method or methods to be employed always depends upon the nature of problem selected and the kinds of data necessary for its solution. The methods of sociological research applicable to study related to education are as follows;

i) Historical Method
ii) Experimental Method
iii) Genetic Method
iv) Case study
v) Survey Method

3.4.1. Method Adopted for the Present Study

The survey method is the practice of gathering data for a study by asking people questions related to your research. Typically, researchers survey people who have particular knowledge, insights or experiences related to the study. Researchers create a formal list of questions to ask the participants and may distribute it one-on-one. The world survey refers to gathering of data from a relatively large number of cases at a particular time. It involves interpretations, comparison measurement, classification, evaluation and generalization all directed towards a proper understanding and solution of significant educational problem.

The investigators, in their present study, adopted survey method of educational research. Survey research studies large and small populations by selecting and studying sample chosen from the population to discover the relative incidence, distribution and inter relations of sociological and psychological variables. It is considered to be a branch of social scientific research, which immediately distinguishes survey research from status

research. The survey researcher is interested in the accurate assessment of the characteristics of whole population; random sample can often furnish some information as a census at less cost, with greater efficiency and sometime greater accuracy. Survey research focused on the people, the vital facts of people and their belief, opinion, attitude, motivation and behaviour. Since present study aim at to find out the level of educational status, sociability, economic status, social support and health and hygiene. Since the survey method has been adopted.

3.4.2   Reasons for Selecting Survey Method

Survey Method is important for the following reasons:

1. It provides comprehension of underlying issues in the area of study.

2. It focuses attention upon the needs that otherwise could remain unnoticed.

3. It provides extensive information about the nature of educational phenomena.

4. It gathers data from relatively large number of cases at a particular time.

5. It is concerned with generalized statistics of the whole population and with the characteristics of individuals.

3.5 Steps in Survey Method

According to William Wireman (1985) the detailed steps in a surveymethod are as follows;

1. Planning
2. Development and application of sampling plan

3. Construction of questionnaire

4. Data collection

5. Translation of data

6. Data analysis

7. Conclusion and Reporting

3.5.1 Planning

The plan of action has to be drawn up to ensure scientific and objective merits of the study. Definition of the problem, operational definitions of variables, review and development of the survey design should be clearly drawn out.

3.5.2 Development and Application of Sampling Plan

The geographical area to be covered, the sample to be selected and detailed sampling procedure, should be defined and formulated.

3.5.3 Construction of Research Tool

The tools of investigation generally used are interview schedule or questionnaire and the like. A specified investigation should require specified tools of inquiry. If no readymade tool is available, a suitable one will be prepared in a systematic manner. The tools should be tested in a pilot sample before it is administered to the vast sample.

3.5.4 Data Collection

The data will be collected from the proposed group of persons or sources with the help of the tool to be employed in the study. The participation respondents are imperative to ensure comprehensiveness and

authenticity of the data.

3.5.5 Translation of Data

Depending upon the extensiveness of the survey data and upon the nature of the material collected the handling of data usually takes initial tabulation and construction of category systems as necessary and technical preparation for analysis.

3.5.6 Data Analysis

Analysis of data comprises, various approaches designed to restrict the phenomena in their constitutional parts with a view to obtain greater insight into specified aspects. The statistical analysis of data is principally based on counts of numbers of units that fall into different classes and subclasses, where quantitative responses have been obtained total for the classes are secured. From these numbers and totals, the arithmetic means can be computed for the different classes. Basic summary table can then be compiled more critical analysis can be applied to the data.

3.5.7 Conclusion and Reporting

After collecting and analyzing the data, the researches have to accomplish the tasks of drawing inferences following by reporting. It is only through interpretation that the research can expose relations and processes that come under his findings. Research report is considered a major component of the research study for the research task remains incomplete till the report has been presented. As the problem selected for the present study is concerned with one of the current problems, the investigator decided to employ the survey method for the collection of data.

3.6   OBJECTIVES OF THE STUDY

Section – I

Percentage Analysis

1. To find out the level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to age.

2. To find out the level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to gender.

3. To find out the level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to category.

4. To find out the level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to educational qualification.

5. To find out the level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to monthly income.

6. To find out the level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to occupation.

Section – II

Differential Analysis

7. To find out significant difference, if any, between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to gender.

Section – III

Analysis of Variance

8. To find out significant difference, if any, among adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to age group.

9. To find out significant difference, if any, among adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to category.

Section – IV

Associational Analysis

10. To find out significant association, if any, between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to educational qualification.

11. To find out significant association, if any, between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to monthly income.

12. To find out significant association, if any, between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to occupation.

3.7 HYPOTHESES

Section – I

Percentage Analysis

1. The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to age is moderate.

2. The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to gender is moderate.

3. The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to category is moderate.

4. The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to educational qualification is moderate.

5. The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to monthly income is moderate.

6. The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to occupation is moderate.

Differential Analysis

7. There is no significant difference between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to gender.

Section – III

Analysis of Variance

8. There is no significant difference among adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to age group.

9. There is no significant difference among adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to category.

Section – IV

Associational Analysis

10. There is no significant association between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to educational qualification.

11. There is no significant association between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to monthly income.

12. There is no significant association, if any, between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to occupation.

3.8 POPULATION FOR THE STUDY

The population for the present study was identified as the adults those who belong to the age group of 15 and above residing in Tirunelveli District.

3.9 SAMPLE FOR THE STUDY

The study was conducted in Tirunelveli District. Among the population 1086adults those who belong to the age group of 15 and above residing in Tirunelveli District were selected randomly for the present study.

3.10 SAMPLING TECHNIQUE FOR THE STUDY

Simple random sampling technique was adopted by the investigators.

3.11 DISTRIBUTION OF THE SAMPLE

TABLE 3.1

Area-wise distribution of the sample

S.No.	Area of the Study	Number of Respondents
1.	Tirunelveli District	1086

Table 3.2

Distribution of the sample with respect to Age

Categories	Number
Age 15– 25	35
Age 26 – 35	154
Age 36& Above	897
Total	1086

Figure 3.1

Distribution of the sample with respect to Age
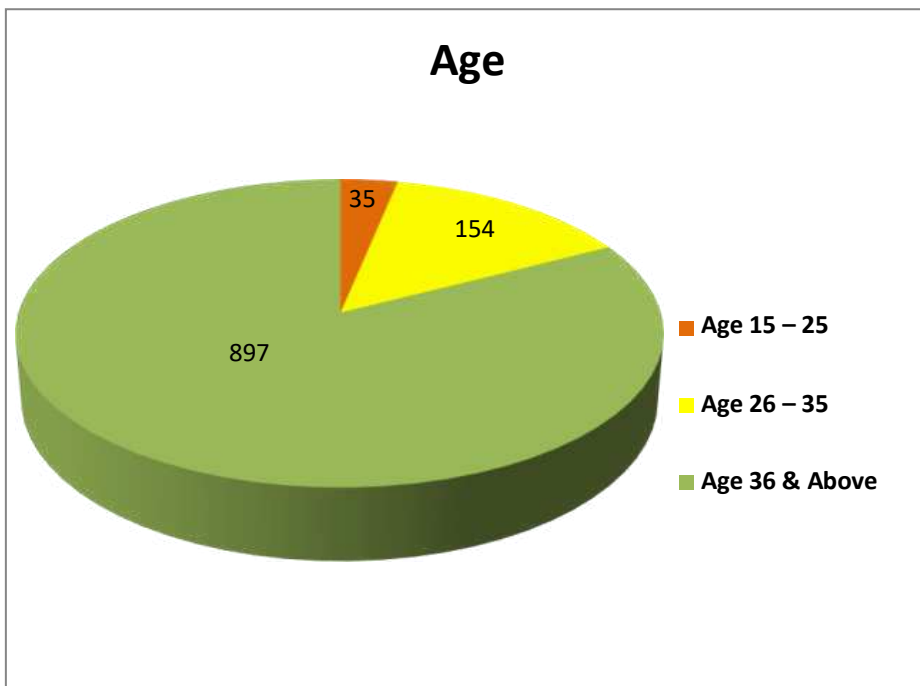
Table 3.3

Distribution of the sample with respect to Gender

Category	Number
Male	185
Female	901
Total	1086

Figure 3.2

Distribution of the sample with respect to Gender
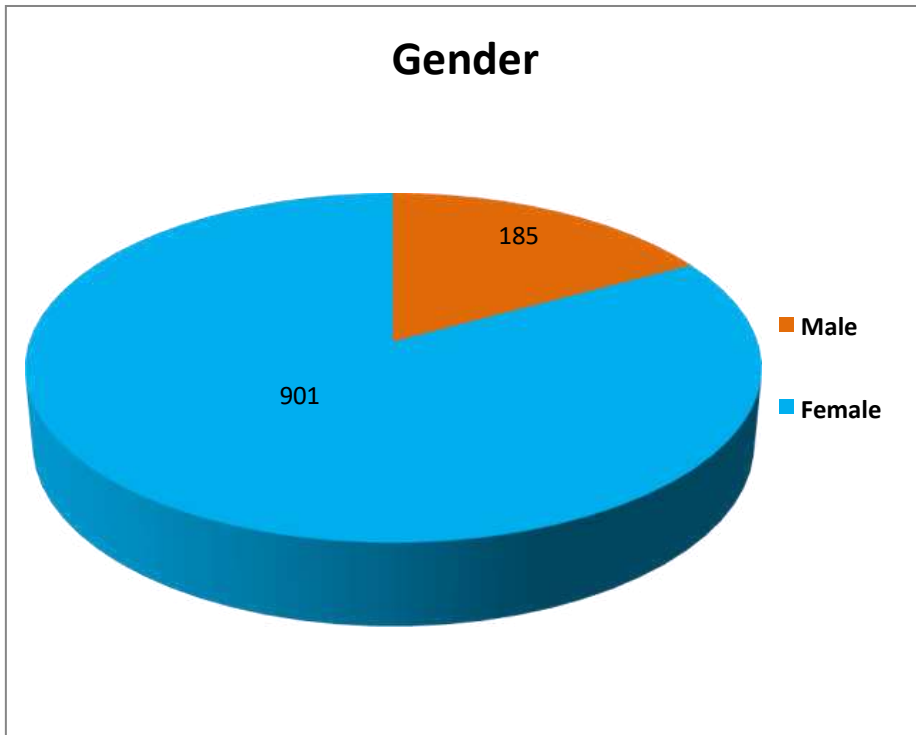
Table 3.4

Distribution of the sample with respect to Category

Category	Number
SC / ST	169
BC	561
MBC	256
OC	100
Total	1086

Figure 3.3

Distribution of the sample with respect to Category
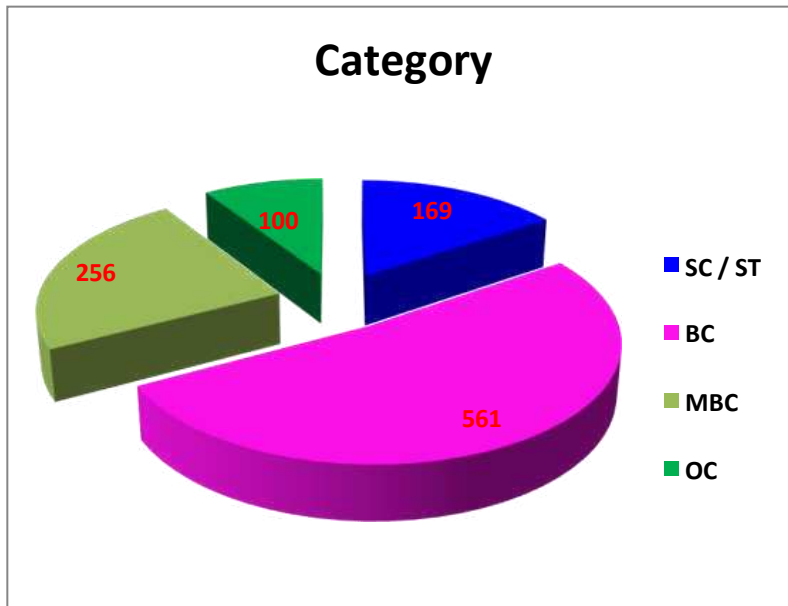
Table 3.5

Distribution of the sample with respect to educational qualification

Category	Number
Illiterate	411
1-3 Std	336
4 & 5 Std	339
Total	1086

Figure 3.4

Distribution of the sample with respect to educational qualification

93
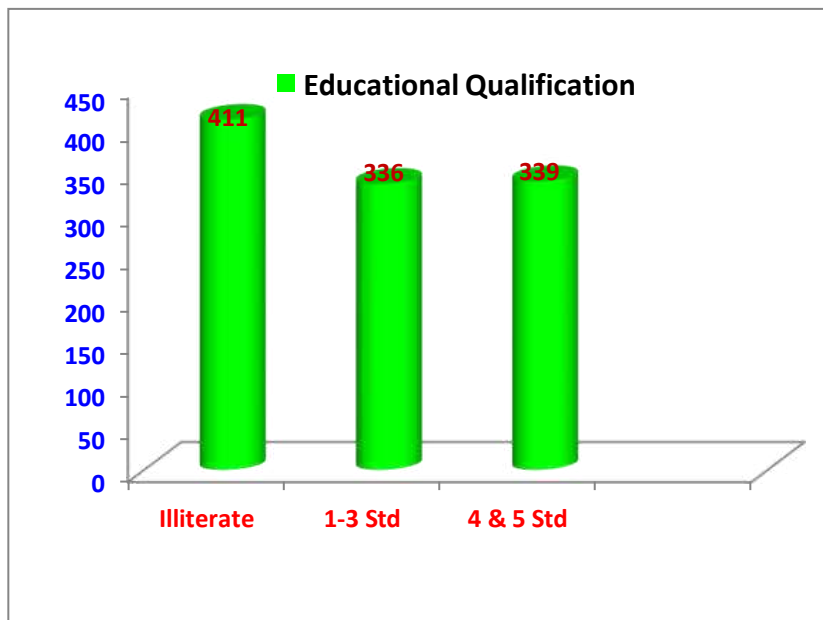
Table 3.6

Distribution of the sample with respect to monthly income of family

Category	Number
Rs. 5,000 & Below	647
Rs. 5,001 – 10,000	268
Rs. 10,001 – 20,000	132
Rs. 20,001 & Above	339
Total	1086

Figure 3.5

Distribution of the sample with respect to monthly income of family

Monthly Income of Family
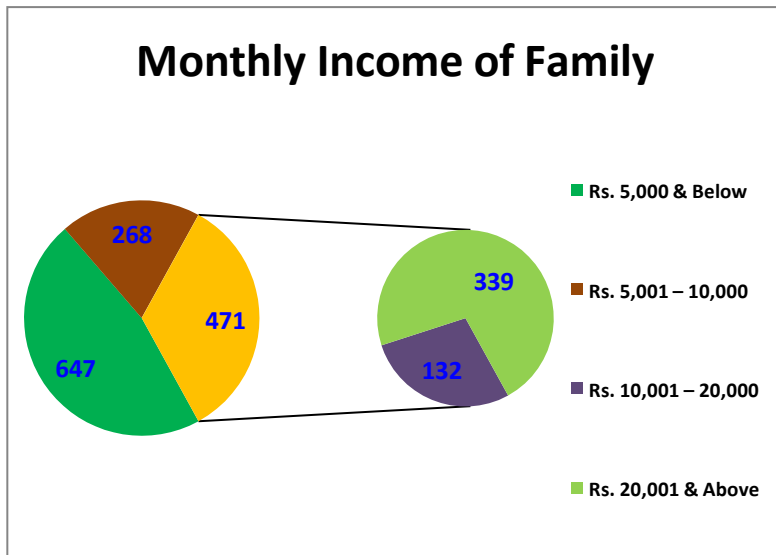
Table 3.7

Distribution of the sample with respect to occupation

Category	Number
Unemployed	470
Daily Wages	388
Self Employed	133
Monthly Salaried	95
Total	1086

Figure 3.6

Distribution of the sample with respect to occupation
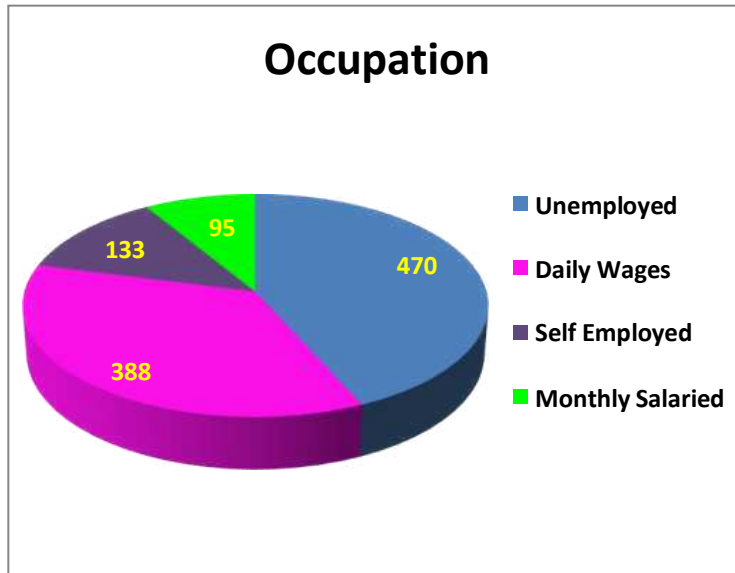
3.12 TOOL FOR THE PRESENT STUDY

In this present study, the investigators have used self-made tool to Enhance Reading, Writing, Arithmetic Skills and Basic Knowledge Among Adults in Tirunelveli District. It was developed by Dr.J.Maria Prema, Asistant Professor of Education, Dr.P.Johncy Rose, Librarian and Dr.V.Lavanya, Assistant Professor of Education, St.Ignatius College of Education (Autonomous), Palayamkottai. The self-made tool is; Questionnaire forEnhancing Reading, Writing, Arithmetic Skills and Basic Knowledge among Adults (E3RBKA), 2023.

3.13 TOOL CONSTRUCTION

Development of the Tool

In the present study after a thorough survey on the available tool, the investigators had selected a suitable tool that helped to enhance Reading, Writing, Arithmetic Skills and Basic Knowledge among Adults in Tirunelveli District.

The major steps followed in the construction of this tool are described under different heads.

3.14 STEPS IN CONSTRUCTION OF TOOL

    i)   Planning of the tool

    ii)   Item writing

    iii)   item editing

    iv)   Arrangement of items

    v)   Draft Questionnaire

    vi)   Pilot study

    vii)   Final try out

viii)   Scoring

ix)   Establishing Reliability and Validity

x)   Preliminary try outs

xi)   Final form of tool

Planning of the Test

The investigators have used self-made tool to Enhance Reading, Writing, Arithmetic Skills and Basic Knowledge among Adults in Tirunelveli District. It was developed by Dr.J.Maria Prema, Assistant Professor of Education, Dr.P.Johncy Rose, Librarian and Dr.V.Lavanya, Assistant Professor of Education, St.Ignatius College of Education (Autonomous), Palayamkottai. The self-made tool is; Questionnaire for Enhancing Reading, Writing, Arithmetic Skills and Basic Knowledge among Adults (E3RBKA), 2023. Due considerations were given to the variables tested and to the different aspects involved.

Item Writing

The important step in the construction of any research tool is writing of suitable items. After a thorough and careful study of the literature available, the investigators collected materials and prepared the items. The questionnaire covers the decisive features of the needed data. The evaluator must select one.

Item Editing

Each item in the tool was based on the psychology of respondent. Item editing is the process of checking and scrutinizing items. The items were referred to experts for the modification. The ambiguous items were rewritten in simple meaningful manner.

Arrangement of Items

The investigators read all the statements carefully. All the items were then arranged based on the nature of statements. The tool for the present study was constructed by the investigators under the following dimensions;

1. Language Development
2. Mathematical Development
3. Health and Hygiene
4. Basic Knowledge

Preliminary Try Out

A preliminary tryout was made to fix out the weakness and workability of the items. The difficulties in responding the items were noted. This step helped the investigators to modify the certain variables, which were vague and questionable. For this purpose, the questionnaire was used to enhance Reading, Writing, Arithmetic Skills and Basic Knowledge among Adults in Tirunelveli District.

Draft

The first draft was prepared by printing the items with the options to mark responses.

Pilot Study

The pilot study was conducted with 30 respondents from different villages in Tirunelveli district by simple random sampling technique.

Final Try Out

Totally 1086adults in different villages in Tirunelveli District wereselected as the sample.

3.15 ESTABLISHING RELIABILITY AND VALIDITY

Content Validity

For content validity, the tool was given to the panel of experts in the field of education for Enhancing Reading, Writing, Arithmetic Skills and Basic Knowledge among Adults in Tirunelveli District. Thus the content validity of the tool was established by experts' opinion.

Item Validity

The pilot study was conducted to establish the item validity of the research tool. The tool was administrated with 30 adults those who belong to the age group 15 and above were selected randomly. The item in the questionnaire for enhancing learning among adults was selected through item-total correlation. The investigators tried to refine the tool by finding out the most suitable items to be included in the final tool. The item analysis was used to find out item correlation of each item. The item was selected based on the correlation value. The item was selected from 0.362 "r" value. Among the 28 items, 3 items were eliminated and 25 items were selected for the present study.

Table 3.8

Correlation Value for the Items in the Questionnaire for Enhancing Reading, Writing, Arithmetic Skills and Basic Knowledge among Adults

Items	'r' value	Remarks
1	0.4701	S
2	0.4233	S
3	0.6547	S
4	0.5743	S
5	0.3166	NS
6	0.4398	S
7	0.3022	NS
8	0.4786	S
9	0.6743	S
10	0.5724	S
11	0.6211	S
12	0.4953	S
13	0.5707	S
14	0.2894	NS
15	0.5984	S
16	0.5880	S
17	0.5438	S

18	0.5842	S
19	0.5203	S
20	0.7430	S
21	0.6970	S
22	0.7311	S
23	0.5091	S
24	0.7001	S
25	0.4900	S
26	0.5767	S
27	0.6440	S
28	0.5229	S

NS - Not Selected **S** - Selected

Reliability

For establishing the reliability of the tool, test-retest method was followed. For this draft tool was administrated with 30 adults those who belong to the age 15 and above randomly selected and observed. After 15 days the questionnaire was given to the same set of the adults. Then the product moment co-efficient of correlation was found. It is 0.78. Thus, the tool is taken as reliable.

3.16 SCORING

Agreement Points	Right Answer	Wrong Answer
Questions	2	0

(The maximum score is 50 and the minimum score is 0)

3.17 ADMINISTRATION OF THE TOOL

The investigators got the permission from the college Principal to engage prospective teachers to teach them and collect data for the study. Faculty of the college also monitored the students to collect data. The students personally visited adults those who need basic education in their local area residing in Tirunelveli district. The prospective teachers taught them for about 30 days continuously for enhancing reading, writing, arithmetic skills and basic knowledge. Already the investigator constructed the syllabus and explained everything to their prospective teachers. The prospective teachers completed their syllabus which contains 5 units such as;

i) Language Development ii) Mathematical Development iii) Health and Hygiene iv) Basic Knowledge. Then the investigators explained about the questionnaire and asked the people to give answer in oral and written form.Most of the respondents did not know to write; in such situation students helped them. Finally, the investigators collected all the required data from the respondents.

3.18 BACKGROUND VARIABLES

The investigator has taken 6 background variables for the present study. They are as follows;

1. Age

(15 – 25 / 26 – 35 / 36 & above)

2. Gender

(Male / Female)

3. Category

(SC/ST / BC / MBC / OC)

4. EducationQualification

(Illiterate / 1-3 Std / 4 & 5 Std)

5. Monthly Income of Family

(Rs.5000&below/Rs.5001-10,000/Rs. 10,001-20,000/ Rs.20,001&above)

6. Occupation

(Unemployed / Daily Wages / Self Employed/ Monthly Salaried)

3.19 STATISTICAL TECHNIQUES USED

The data collected from the respondents by administered the tool was processed with the help of the following statistics;

- Mean
- Median
- Percentage Analysis
- Differential Analysis ('t' test)
- Analysis of Variance (F-test)
- Associational Analysis (Chi-square test)

Statistical techniques are very essential for any research. It will help

the investigator to analyze and interpret the data. The investigator has used the following statistics for analyzing the data.

i) Percentage Analysis

Level

High Level	→	*The score above mean +1 standard deviation.*
Average Level	→	*The score between mean ± standard deviation.*
Low Level	→	*The score below mean-1 standard deviation.*

Arithmetic Mean

The investigators have used the following formula the arithmetic mean.

$$\overline{X} = \frac{\Sigma x}{n}$$

Standard Deviation (SD)

The standard deviation, the square root of variance is a measure of spread or dispersion of scores in a distribution.

$$S.D = \frac{1}{N}\sqrt{N(\Sigma X^2) - (\Sigma X)2}$$

ii) Differential Analysis

't'-Test: 't' test is used to find out the significant difference between the means of two groups.

$$t = \frac{M_1 - M_2}{\sqrt{\frac{S_1^2}{N_1} + \frac{S_2^2}{N_2}}}$$

iii) Analysis of Variance

'F'- Test: Analysis of variance has been used to find out the difference among the groups.

$$F \quad = \quad \frac{\text{Mean Square Variance between groups}}{\text{Mean Square Variance within groups}}$$

iv) Associational Analysis

Chi-Square: To find out the association between variables, the chi-square test has been used.

$$\chi^2 \quad = \quad \Sigma \frac{(O - E)^2}{E}$$

3.20 DELIMITATIONS

i)   The present investigation had been confined to adults those who belong to the age group 15 and above residing in Tirunelveli district only.

ii)   The data were collected from adults those who need basic level of education.

iii) The prospective teachers were engaged to teach the adults and collect data only.

3.21 CONCLUSION

Research methodology is used to give a clear-cut idea of what the researcher is carrying out his or her research. In order to plan at the right point of time and to advance the research work, research methodology makes the right platform for the researcher to map out the research work in relevance to make solid plans. In this chapter the investigators provided information in relation with methodology of study including the method for data collection and the pattern of data analysis. The investigator clearly mentioned the syllabus and dimensions of the tool which they dealt with for the study.

CHAPTER IV

ANALYSIS OF DATA

4. 1 INTRODUCTION

Analyzing the data is the most integral part of the research. It is also the toughest step as most researchers might not be able to do the analysis on their own. Analysis as a process enters into research in one form or the other the very beginning in the selection of the problem, in the determination of methods and in interpreting and drawing conclusion from the data gathered. Analysis otherwise means a critical examination of the assembled and grouped data for studying the characteristics of the object under study and for determining the patterns of relationships among the variables relating to it.

In this chapter, an attempt has been made to find out the level of language development, mathematical development, health and hygiene and basic knowledge of adults. Further, it examines the association between the background variables of adults in Tirunelveli district. Analysis of data means studying the tabulated material in order to determine inherent facts or meanings. It involves breaking down exiting complex factors into simple parts together in new arrangements for the purpose of interpretation.

The major aim of the present study is to enhance reading, writing, arithmetic skills, health and hygiene and basic knowledge under different dimensions; i) Language Development ii) Mathematical Development iii) Health and Hygiene iv) Basic Knowledge with respect to background variables in Tirunelveli district. For the purpose of gathering data for the study, appropriate tool has been used with the sample of 1086adults in Tirunelveli district. The data thus collected were subjected to different types of quantitative treatment. The major procedures like percentage analysis, 't'-

test, F-test and Chi-square test were applied. The SPSS package was employed for the purpose of data analysis.

SECTION I

It deals with the level of reading, writing, arithmetic skills, health and hygiene and basic knowledge under different dimensions; i) Language Development ii) Mathematical Development iii) Health and Hygiene iv) Basic Knowledge with respect to age, gender, category, educational qualification, Monthly Income of family and occupation of adults in Tirunelveli district.

SECTION II

It deals with significant difference between adults in reading, writing, arithmetic skills, health and hygiene and basic knowledge under different dimensions; i) Language Development ii) Mathematical Development iii) Health and Hygiene iv) Basic Knowledge with respect to gender.

SECTION III

It deals with significant difference among adults in reading, writing, arithmetic skills, health and hygiene and basic knowledge under different dimensions;

i) Language Development ii) Mathematical Development iii) Health and Hygiene iv) Basic Knowledge with respect to age and category.

SECTION IV

It deals with the significant association in reading, writing, arithmetic skills, health and hygiene and basic knowledge under different dimensions; i) Language Development ii) Mathematical Development iii) Health and Hygiene iv) Basic Knowledge with respect to educational qualification, monthly income of family and occupation.

4. 2 DATA ANALYSIS

4. 2.1 PERCENTAGE ANALYSIS

Null Hypothesis 1

1. The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to age is moderate.

Table 4.1

The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to age

Background Variable	Dimensions	Categories	No	Low		Moderate		High	
				No	%	No	%	No	%
Age	Language Development	15– 25	35	6	17.1	29	82.9	0	0.00
		26– 35	154	32	20.8	122	79.2	0	0.00
		36 & Above	897	110	12.3	787	87.7	0	0.00
	Mathematical Development	15 – 25	35	9	25.7	7	20.0	19	54.3
		26 – 35	154	36	23.4	21	13.6	97	63.0
		36 & Above	897	136	15.5	120	13.4	638	71.1
	Health and Hygiene	15 – 25	35	3	8.6	18	51.4	14	40.0
		26 – 35	154	23	14.9	87	56.5	44	28.6
		36 & Above	897	166	18.5	446	49.7	285	31.8
	Basic Knowledge	15 – 25	35	6	17.1	22	62.9	7	20.0
		26 – 35	154	23	14.9	97	63.0	34	22.1
		36 & Above	897	118	13.2	546	60.9	233	26.0

It is inferred from the above table that the majority of reading, writing, arithmetic skills, health and hygiene and basic knowledge under

different dimensions; i) Language Development ii) Health and Hygiene iii) Basic Knowledge with respect to age is moderate. Adults show high level in the dimension Mathematical Development with reference to age.

Null Hypothesis2

The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to gender is moderate**.**

Table 4.2

The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to gender

Background Variable	Dimensions	Categories	No	Low		Moderate		High	
				No	%	No	%	No	%
Gender	Language Development	Male	185	21	11.4	164	88.6	0	0.00
		Female	901	127	14.1	774	85.9	0	0.00
	Mathematical Development	Male	185	31	16.8	26	14.1	128	69.2
		Female	901	152	17.0	122	13.5	626	69.5
	Health and Hygiene	Male	185	40	21.6	101	54.6	44	23.8
		Female	901	152	16.9	450	49.9	299	33.2
	Basic Knowledge	Male	185	21	11.4	120	64.9	44	23.8
		Female	901	126	14.0	545	60.5	230	25.5

It is inferred from the above table that the majority of reading, writing, arithmetic skills, health and hygiene and basic knowledge under different dimensions; i) Language Development ii) Health and Hygiene iii) Basic Knowledge with respect to gender is moderate. Adults show high level in the dimension Mathematical Development with reference to gender.

Null Hypothesis 3

The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to category is moderate.

Table 4.3

The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to category

Background Variable	Dimensions	Categories	No	Low		Medium		High	
				No	%	No	%	No	%
Category	Language Development	SC / ST	169	23	13.6	146	86.4	0	0.00
		MBC	561	81	14.4	480	85.6	0	0.00
		BC	256	34	13.3	222	86.7	0	0.00
		OC	100	10	10.0	90	90.0	0	0.00
	Mathematical Development	SC / ST	169	37	21.9	26	15.4	106	62.7
		MBC	561	88	15.7	92	16.4	381	67.9
		BC	256	50	19.5	22	8.6	184	71.9
		OC	100	9	9.0	8	8.0	83	83.0
	Health and Hygiene	SC / ST	169	35	20.7	87	51.5	47	27.8
		MBC	561	109	19.4	311	55.4	141	25.1
		BC	256	40	15.6	116	45.3	100	39.1
		OC	100	8	8.0	37	37.0	55	55.0
		SC / ST	169	24	14.2	98	58.0	47	27.8
	Basic	MBC	561	73	13.0	372	66.3	116	20.7

				Low		Moderate		High	
	Knowledge								
		BC	256	34	13.3	135	52.7	87	34.0
		OC	100	16	16.0	60	60.0	24	24.0

It is inferred from the above table that the majority of reading, writing, arithmetic skills, health and hygiene and basic knowledge under different dimensions; i) Language Development ii) Health and Hygiene iii) Basic Knowledge with respect to category is moderate. Adults show high level in the dimension Mathematical Development with reference to category.

Null Hypothesis 4

The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to educational qualification is moderate.

Table 4.4

The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to educational qualification

Background Variable	Dimensions	Categories	No	Low		Moderate		High	
				No	%	No	%	No	%
Educational Qualification	Language Development	Illiterate	411	66	16.1	345	83.9	0	0.00
		1-3 Std	336	54	16.1	282	83.9	0	0.00
		4&5 Std	339	28	8.3	311	91.7	0	0.00
	Mathematical Development	Illiterate	411	81	19.7	45	10.9	285	69.3
		1-3 Std	336	59	17.6	56	16.7	221	65.8

				Low		Medium		High	
		4&5 Std	339	44	13.0	47	13.9	248	73.2
Health and Hygiene		Illiterate	411	90	21.9	186	45.3	135	32.8
		1-3 Std	336	49	14.6	198	58.9	89	26.5
		4&5 Std	339	53	15.6	167	49.3	119	35.1
Basic Knowledge		Illiterate	411	57	13.9	261	63.5	93	22.6
		1-3 Std	336	46	13.7	212	63.1	78	23.2
		4&5 Std	339	44	13.0	192	56.6	103	30.4

It is inferred from the above table that the majority of reading, writing, arithmetic skills, health and hygiene and basic knowledge under different dimensions; i) Language Development ii) Health and Hygiene iii) Basic Knowledge with respect to educational qualification is moderate. Adults show high level in the dimension Mathematical Development with reference to educational qualification.

Null Hypothesis 5

The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to monthly income is moderate.

Table 4.5

The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to monthly income

Background Variable	Dimensions	Categories	No	Low		Medium		High	
				No	%	No	%	No	%
	Language Development	Rs.5000& Below	647	91	14.1	556	85.9	0	0.00

112

Category	Income							
	Rs.5001-10000	268	39	14.6	229	85.4	0	0.00
	Rs.10001-20000	132	12	9.1	120	90.9	0	0.00
	Rs.20001& Above	39	6	15.4	33	84.6	0	0.00
Mathematical Development	Rs.5000& Below	647	110	17.0	79	12.2	458	70.8
	Rs.5001-10000	268	44	16.4	53	19.8	171	63.8
	Rs.10001-20000	132	19	14.4	12	9.1	101	76.5
	Rs.20001& Above	39	11	28.2	4	10.3	24	61.5
Health and Hygiene	Rs.5000& Below	647	118	18.2	310	47.9	219	33.8
	Rs.5001-10000	268	43	16.0	157	58.6	68	25.4
	Rs.10001-20000	132	23	17.4	68	51.5	41	31.1
	Rs.20001& Above	39	8	20.5	16	41.0	15	38.5
	Rs.5000& Below	647	80	12.4	394	60.9	173	26.7
Basic Knowledge	Rs.5001-10000	268	43	16.0	173	64.6	52	19.4

				Low		Medium		High	
Rs.10001-20000			132	16	12.1	77	58.3	39	29.5
Rs.20001&Above			39	8	20.5	21	53.8	10	25.6

It is inferred from the above table that the majority of reading, writing, arithmetic skills, health and hygiene and basic knowledge under different dimensions; i) Language Development ii) Health and Hygiene iii) Basic Knowledge with respect to monthly income of family is moderate. Adults show high level in the dimension Mathematical Development with reference to monthly income of family.

Null Hypothesis6

The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to occupation is moderate.

Table 4.6

The level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to occupation

Background Variable	Dimensions	Categories	No	Low		Medium		High	
				No	%	No	%	No	%
Occupation	Language Development	Unemployed	470	63	13.4	407	86.6	0	0.00
		Daily Wages	388	58	14.9	330	85.1	0	0.00
		Self Employed	133	17	12.8	116	87.2	0	0.00
		Monthly	95	10	10.5	85	89.5	0	0.00

Dimension	Occupation						
	Salaried						
Mathematical Development	Unemployed	470	72	15.3	48	10.2	350	74.5
	Daily Wages	388	66	17.0	68	17.5	254	65.5
	Self Employed	133	26	19.5	22	16.5	85	63.9
	Monthly Salaried	95	20	21.1	10	10.5	65	68.4
Health and Hygiene	Unemployed	470	71	15.1	235	50.0	164	34.9
	Daily Wages	388	83	21.4	189	48.7	116	29.9
	Self Employed	133	25	18.8	75	56.4	33	24.8
	Monthly Salaried	95	13	13.7	52	54.7	30	31.6
Basic Knowledge	Unemployed	470	50	10.6	296	63.0	124	26.4
	Daily Wages	388	61	15.7	232	59.8	95	24.5
	Self Employed	133	19	14.3	82	61.7	32	24.1
	Monthly Salaried	95	17	17.9	55	57.9	23	24.2

It is inferred from the above table that the majority of reading, writing, arithmetic skills, health and hygiene and basic knowledge under different dimensions; i) Language Development ii) Health and Hygiene iii) Basic Knowledge with respect to occupation is moderate. Adults show high

level in the dimension Mathematical Development with reference to occupation.

4. 2.2 DIFFERENTIAL ANALYSIS

Null Hypothesis 7

There is no significant difference between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to gender.

Table 4.7

Difference between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to gender

Dimensions	Category	N	Mean	S.D.	Calculated t-value	Remarks at 5% level
Language Development	Male	185	5.01	1.184	0.710	NS
	Female	901	4.94	1.255		
Mathematical Development	Male	185	4.83	1.302	0.378	NS
	Female	901	4.87	1.335		
Health & Hygiene	Male	185	4.43	1.219	2.595	S
	Female	901	4.69	1.229		
Basic Knowledge	Male	185	5.36	1.419	1.672	NS
	Female	901	5.17	1.589		

(At 5% level of significance the table value of 't' is 1.96)

It is inferred from the above table that there is no significant difference between adults and its dimensions: language development, mathematical development and basic knowledge with reference to gender. The calculated 't' value is less than the table value. Hence the null hypothesis is accepted.

There is significant difference between male and female adults in the dimension health and hygiene with reference to gender. The calculated 't' value is more than the table value. Hence the null hypothesis is rejected.

4. 2.3 ANALYSIS OF VARIANCE
Null Hypothesis 8

There is no significant difference among adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to age.

Table 4.8

Difference among adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to age

| Dimensions | Source of variation | df=2,1083 | | Calculated F value | Remark at 5% level |
		Sum of squares	Mean square variation		
Language Development	Between	13.179	6.590	4.293	NS
	Within	1662.519	1.535		
Mathematical Development	Between	31.092	15.546	8.931	NS
	Within	1885.280	1.741		
Health & Hygiene	Between	4.101	2.051	1.355	NS
	Within	1638.702	1.513		
Basic		3.687	1.844	0.755	NS

| Knowledge | Between | | |
| | Within | 2643.953 | 2.441 |

_____

(At 5% level of significance the table value of F is 19.00)

It is inferred from the above table that there is no significant difference among adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to age. The calculated F value is less than the table value. Hence the null hypothesis is accepted.

Duncan test for Age Group

Table 4.9

Mean scores in the dimension: language development among adults with reference to age

Age Group	N	Subset for Alpha = 0.05
		1
15 – 25	35	4.74
26 – 35	154	4.71
36 & Above	897	5.00

Table 4.10

Mean scores in the dimension: mathematical development among adults with reference to age

Age Group	N	Subset for Alpha = 0.05
		1
15 – 25	35	4.46
26 – 35	154	4.51
36 & Above	897	4.94

Table 4.11

Mean scores in the dimension: health and hygiene among adults with reference to age

Age Group	N	Subset for Alpha = 0.05
		1
15 – 25	35	4.97
26 – 35	154	4.60
36 & Above	897	4.64

Table 4.12

Mean scores in the dimension: basic knowledge among adults with reference to age

Age Group	N	Subset for Alpha = 0.05
		1
15 – 25	35	5.11
26 – 35	154	5.06
36 & Above	897	5.23

Null Hypothesis 9

There is no significant difference among adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to category.

Table 4.13

Difference among adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to category

Dimensions	Source of variation	df=3, 1082		Calculated F value	Remark at 5% level
		Sum of squares	Mean square variation		
Language Development	Between	13.868	4.623	3.010	NS
	Within	1661.830	1.536		
Mathematical Development	Between	16.649	5.550	3.161	NS
	Within	1899.723	1.756		

Health & Hygiene	Between	46.482	15.494	10.502	S
	Within	1596.321	1.475		
Basic Knowledge	Between	12.319	4.106	1.686	NS
	Within	2635.321	2.436		

(At 5% level of significance the table value of F is 9.28)

It is inferred from the above table that there is no significant difference among adults and its dimensions: language development, mathematical development and basic knowledge with reference to category. The calculated F value is less than the table value. Hence the null hypothesis is accepted.

There is significant difference among adults and its dimension health and hygiene with reference to category. The calculated F value is greater than the table value. Hence the null hypothesis is rejected.

Duncan test for Category

Table 4.14

Mean scores in the dimension: language development among adults with reference to category

Category	N	Subset for Alpha = 0.05
		1
SC / ST	169	4.98
BC	561	4.86
MBC	256	5.04
OC	100	5.22

Table 4.15

Mean scores in the dimension: mathematical development among adults with reference to category

Category	N	Subset for Alpha = 0.05
		1
SC / ST	169	4.72
BC	561	4.84
MBC	256	4.88
OC	100	5.22

Table 4.16

Mean scores in the dimension: health and hygiene among adults with reference to category

Category	N	Subset for Alpha = 0.05
		1
SC / ST	169	4.56
BC	561	4.50
MBC	256	4.83
OC	100	5.14

Table 4.17

Mean scores in the dimension: basic knowledge among adults with reference to category

Category	N	Subset for Alpha = 0.05
		1
SC / ST	169	5.32
BC	561	5.10
MBC	256	5.33
OC	100	5.21

4. 2.5 ASSOCIATIONAL ANALYSIS

Null Hypothesis 10

There is no significant association between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to educational qualification.

Table 4.10

Association between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to educational qualification

Dimensions	df	Calculated 'χ^2' value	Remarks at 5% level
Language Development	2	12.067	S
Mathematical	4	10.854	S

Development			
Health & Hygiene	4	18.083	S
Basic Knowledge	4	7.035	NS

Table value of χ^2 at 5% level of significance, for 2 degrees of freedom is

5.991

Table value of χ^2 at 5% level of significance, for 4 degrees of freedom is

9.488

Table value of χ^2 at 5% level of significance, for 3 degrees of freedom is

7.815

Table value of χ^2 at 5% level of significance, for 6 degrees of freedom is

12.592

It is inferred from the above table that there is significant association between adults and its dimensions: language development, mathematical development, health and hygiene with reference to educational qualification. The calculated χ^2 value is greater than the table value. Hence the null hypothesis is rejected.

There is no significant association between adults and its dimension basic knowledge with reference to educational qualification. The calculated χ^2 value is less than the table value. Hence the null hypothesis is accepted.

Null Hypothesis 11

There is no significant association between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to monthly income.

Table 4.11

Association between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to monthly income

Dimensions	df	Calculated 'χ^2' value	Remarks at 5% Level
Language Development	3	2.710	NS
Mathematical Development	6	16.875	S
Health & Hygiene	6	10.629	NS
Basic Knowledge	6	9.690	NS

Table value of χ^2 at 5% level of significance, for 3 degrees of freedom is

7.815

Table value of χ^2 at 5% level of significance, for 6 degrees of freedom is

12.592

It is inferred from the above table that there is no significant association between adults and its dimensions: language development, health and hygiene and basic knowledge with reference to monthly income of family. The calculated χ^2 value is less than the table value. Hence the null hypothesis is accepted.

There is significant association between adults and its dimension mathematical development with reference to monthly income of family. The calculated χ^2 value is greater than the table value. Hence the null hypothesis is rejected.

Null Hypothesis 12

There is no significant association, if any, between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to occupation.

Table 4.12

Association, if any, between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to occupation

Dimensions	df	Calculated 'χ^2' value	Remarks at 5% level
Language Development	3	1.452	NS
Mathematical Development	6	15.255	S
Health & Hygiene	6	11.149	NS
Basic Knowledge	6	6.660	NS

Table value of χ^2 at 5% level of significance, for 3 degrees of freedom is

7.815

Table value of χ^2 at 5% level of significance, for 6 degrees of freedom is

12.592

It is inferred from the above table that there is no significant association between adults and its dimensions: language development, health and hygiene and basic knowledge with reference to occupation. The calculated χ^2 value is less than the table value. Hence the null hypothesis is accepted.

There is significant association between adults and its dimension mathematical development with reference to occupation. The calculated χ^2 value is greater than the table value. Hence the null hypothesis is rejected.

4. 3 CONCLUSION

The investigator applied percentage analysis; critical ratio test, ANOVA test and chi square statistical test were used to find out the study on to enhance reading, writing, arithmetic skills, health and hygiene and basic knowledge under different dimensions; i) Language Development ii) Mathematical Development iii) Health and Hygiene iv) Basic Knowledge with respect to background variables in Tirunelveli district. The statistical techniques are given in this chapter.

The findings, recommendation and suggestions for further research are discussed in the next chapter. In this chapter, the data are analyzed. The calculated values are compared with table values at 5% level of significance. The hypotheses are accepted or rejected based on the calculated values. If the calculated value is less than the table value, null hypothesis is accepted. If the calculated value is greater than the table value, null hypothesis is rejected. All the data are shown in the table and the interpretation is given under the table.

CHAPTER V

FINDINGS, INTERPRETATIONS, RECOMMENDATIONS AND SUGGESTIONS

5.1 INTRODUCTION

The present study is an endeavor to enhance reading, writing, arithmetic skills and basic knowledge among adults in Tirunelveli district. Literacy is the ability to read, write and comprehend information in order to communicate effectively. From reading the newspaper to understand road signs, literacy is the only tool that helps you make sense of your surroundings. Literacy serves as the foundation of basic education for all. There is a strong relationship between illiteracy and poverty. Literacy is defined as the "ability to read and write". Thus, an illiterate person, who cannot read or write, is unable to get a skilled job and is forced to take up an unskilled job. This has an impact on his wages, the standard of living and ultimately his ability to provide proper education to his children. This would also mean that his children will not be able to improve their skills and get a better job and eventually come out of poverty. An unlettered person is unable to access proper healthcare, understand their fundamental rights and demand for the same. The prospective teachers taught adults for 30 days continuously. Most of the participants were above 25 years old people and even they did not know how to read and write. In the beginning, we collected their response regarding language, mathematical knowledge, health and hygiene and basic knowledge. After collecting their response, the investigators came to know that they were not able to read and write a simple sentence, not able to fill the Chelan, not aware of health and hygiene and not able to response to the questions which are related to basic knowledge. That is why the investigators selected these adult people to teach under four

dimensions i) Language Development ii) Mathematical Development iii) Health and Hygiene iv) Basic Knowledge. This chapter presents the summary of the findings, so conclusions drawn from the findings and corresponding recommendations. The findings have been listed along with significant quantitative information. The implications of these findings may direct towards adult education that is basic knowledge for adults. This will lead to independent life. Reading, writing, arithmetic skills and basic knowledge among adults in Tirunelveli district were enhanced by the effective teaching of prospective teachers.

5.2 TITLE OF THE PROBLEM

"ENHANCING READING, WRITING, ARITHMETIC SKILLS AND BASIC KNOWLEDGE AMONG ADULTS IN TIRUNELVELI DISTRICT"

5.3 FINDINGS

Section – I

Percentage Analysis

1. The level of language development, health and hygiene and basic knowledge of adults with reference to age is moderate.

2. The level of language development, health and hygiene and basic knowledge of adults with reference to gender is moderate.

3. The level of language development, health and hygiene and basic knowledge of adults with reference to category is moderate.

4. The level of language development, health and hygiene and basic knowledge of adults with reference to educational qualification is moderate.

5. The level of language development, health and hygiene and basic knowledge of adults with reference to monthly income is moderate.

6. The level of language development, health and hygiene and basic knowledge of adults with reference to occupation is moderate.

7. The level of mathematical development of adults with reference to age, gender, category, educational qualification, monthly income and occupation is high.

Section – II

Differential Analysis

8. There is no significant difference between adults and its dimensions: language development, mathematical development and basic knowledge with reference to gender.

9. There is significant difference between adults and its dimension: health and hygiene with reference to gender.

Section – III

Analysis of Variance

10. There is no significant difference among adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to age group.

11. There is no significant difference among adults and its dimensions: language development, mathematical development and basic knowledge with reference to category.

12. There is significant difference among adults and its dimension: health and hygiene with reference to category.

Section – IV

Associational Analysis

13. There is no significant association, if any, between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to educational qualification.

14. There is significant association between adults and its dimensions: language development and health and hygiene with reference to educational qualification.

15. There is no significant association, if any, between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to monthly income.

16. There is significant association between adults and its dimension: mathematical development with reference to monthly income.

17. There is no significant association, if any, between adults and its dimensions: language development, mathematical development, health and hygiene and basic knowledge with reference to occupation.

18. There is significant association between adults and its dimension: mathematical development with reference to occupation.

5.4 INTERPRETATIONS

Section – I

Percentage Analysis

The level of mathematical development of adults with reference to age, gender, category, educational qualification, monthly income and occupation is high.

The present study reveals that the level of mathematical development of adults with reference to age, gender, category, educational qualification, monthly income and occupation is high. It shows that, thirty days of continuous training given by the student teachers to the adults was more effective. They learnt the content given in the dimension; mathematical development. The finding reveals that, they learnt mathematical content easily than other content which are related to reading, writing and basic knowledge because it is not easy for learners to learn language. They are able to understand the basic concept of mathematics. The opportunities for learning mathematics might be less in the society. The inconvenience of getting basic education in their family or local area may be the reason for being illiterate in the society. Because of their high level potential of learning mathematical problems and the effective teaching of prospective teachers made them to show high level of mathematical development of adults with reference to age, gender, category, educational qualification, monthly income and occupation.

Section – II

Differential Analysis

There is significant difference between adults and its dimension; health and hygiene with reference to gender.

The present study reveals that there is significant difference between adults and its dimension; health and hygiene with reference to gender. "Hygiene routines can vary from person to person. There are numerous reasons for this, starting from cultures, education, habits, and possibilities," said Danela Zagar, global brand manager at INTIMINA. "Either way, maintaining personal hygiene is the key to feeling carefree and healthy". "For example, it can be challenging to maintain high standards during menstruation, particularly when traveling or being at work and school. But all women should know the best ways to care for their bodies to feel fresh and confident. Especially for female, maintaining health and hygiene is a common practice in their routine life right from their young age. They give more important to this aspect of keeping everything clean and neat. This may be the reason for this finding.

Section – III

Analysis of Variance

There is significant difference among adults and its dimension; health and hygiene with reference to category.

This study reveals that there is significant difference among adults and its dimension; health and hygiene with reference to category. In this study adults those who belong to OC category shows better in relation to health and hygiene. This may be due to the living condition of their area. The

places where the adults those who belong to SC/ST are mostly outskirt of the main city. We can expect all the facilities for their healthy life. They are suffering from severe diseases like communicable diseases easily because of their poor condition of unhealthy area where they reside. They don't worry about neat and cleanliness of their living place. They always struggle for their basic need especially daily food. And also adults from MBC and BC category are daily wages or coolie. They are also having minimum level of attitude towards health and hygiene. But adults those who belong to OC category concentrate on health and hygiene. Because most of them are having separate place for worship and keep holy things in their house. So if they have separate place for worshiping God at home. That place should be kept neat and clean. They give more important to health and hygiene. This may be the reason to this result.

Section–IV

Associational Analysis

There is significant association between adults and its dimensions: language development and health and hygiene with reference to educational qualification.

This study reveals that there is significant association between adults and its dimensions: language development and health and hygiene with reference to educational qualification. The adult those who already studied 4ᵗʰ or 5ᵗʰ standard, they are able to follow the instructions and understand the language. They can read and write as per the guidance given by prospective teachers while studying language. As well as there are more chance to understand the effects of unhealthy practices in their life. They suppose to concentrate on health and hygiene. They might have heard much health and

hygiene related news and incidents by which they keep themselves and surrounding clean and take healthy food. When they are sick, they go to hospital and follow healthy practice at home. Therefore educational qualification is associated with language development and health and hygiene.

There is significant association between adults and its dimension: mathematical development with reference to monthly income.

The study reveals that there is significant association between adults and its dimension: mathematical development with reference to monthly income. The adults' family with good income may have adequate facilities for learning. Especially there is no place for inferiority complex and they show better confident in doing any task. Because of having good income, they may learn mathematical formula and sums effectively.

There is significant association between adults and its dimension: mathematical development with reference to occupation.

This study reveals that there is significant association between adults and its dimension: mathematical development with reference to occupation. There is no doubt that if anybody deals with technical based task or the job which deals with measurement certainly this knowledge will help them to do mathematical task. Transfer of learning, which has sometimes been considered to be the ultimate goal of education, (McKeough, Lupart, & Marini, 1995) is often described as the ability to apply what one has learned in one situation to a different situation. Adults those who are already engaged with occupation which is related to statistics, measurements and calculation, it is quite easy to understand basic mathematics and they will do mathematical calculation easily as per the psychological concept transfer of

learning because they easily transfer the ideas or concept to the given new problem. This may be the reason for having significant association between adults and its dimension: mathematical development with reference to occupation.

5.5 RECOMMENDATIONS

For Government Authorities

- Government authorities should take essential steps to conduct research among adults in the rural area and analyze challengeable practices to enhance reading, writing and arithmetic skills.

- Central and state Government could organize or conduct training programmes in collaboration with NGOs to make them aware of basic knowledge.

- Local Government authorities such as health inpector and panchayat president could supervise their local area and analyze health and hygienic practices of the people.

- The present study reveals that adults can easily learn arithmetic skills but they feel difficult to learn language such as reading and writing. So, the Government must take proper remedial measures to enhance mother tongue and regional language in educationally deprived area.

For the NGOs

- The non- governmental organizations could conduct action research among illiterate adults in rural area and take adequate steps to rectify their difficulties in learning.

- Periodic awareness programmes regarding health and hygiene could be conducted for adults wherever need to enhance their standard of life.

- The findings of the present study show that, they are good at learning mathematical skills. They easily understand the concept through skill based training. Hence, the NGOs should conduct workshops and skill based training programme among adults for self employment.

- NGOs could allocate adequate fund to other institutions to enhance basic knowledge among illiterate to become literate in future.

5.6 SUGGESTIONS FOR FUTHER RESEARCH

- The present study confined to the adults in Tirunelveli district especially rural area. So further research could be conducted among illiterate in rural area under massive scale/coverage.

- A study could be conducted on self help group and their contribution for enhancing literacy level of adults.

- Further study could be done on literacy scheme of central and state government in Southern and North-East region.

- A study could be conducted on usage and implementation of information and communication technology among adults for the formation of a collaborative environment.

5.7 CONCLUSION

The present study examined the level of language development, mathematical development, health and hygiene and basic knowledge of adults with reference to background variables. The findings of the present study reveal that there is association between adults with respect to their educational qualification, monthly income and occupation in relation with its dimensions: basic knowledge, health and hygiene and mathematical skills respectively.

Based on the testimony of Ali, et al. (2022) conducted a study on "Back to basics: A role of reading, writing, and arithmetic teaching". This study has assessed the role of reading, writing, and arithmetic teaching among adult learners in Saudi Arabia. A quantitative approach was used by recruiting 186 students divided into three groups, namely, the write to learn (WTL) group, traditional teaching group, and individual technology use (ITU) group. Statistical Package for Social Sciences (SPSS) was used for the analysis of the arithmetic and literacy test scores of the students. The findings showed that the performance of the WTL group was most effective among the three groups. The results showed that the learning capacity of adults could be improved by refining their writing and reading skills. The formative feedback, collaborative environment, and engagement helped improve the learning scores. It shows that the use of information and

communication technology (ICT) should be accurately implemented along with the formation of a collaborative environment.

The three R's and the fundamental idea of assisting learners in discovering how to apply their knowledge will motivate children to work enthusiastically to develop their learning capacities. Children will also develop their personalities and learn from the environment if they follow the three R's rather than from books, it will help them understand better in the future.

An adult's struggle with low literacy can be a devastating family legacy, a barrier to financial stability, and an emotional obstacle to overcome. The key to reducing that struggle is Adult Education. It unlocks the potential in the individual by opening up reading, writing and mathematical skills by teaching basic study skills and by providing basic job readiness education.

REFERENCES

Fute. et al. (2023). A historical review of global efforts on adult literacy education, with particular reference to Tanzania. International Review of Education / Internationale ZeitschriftfürErziehungswissenschaft; Vol. 69 Issue 3, p327-350,24p

Igarashi Takiko and Suryadarma. (2023). Foundational mathematics and reading skills of Filipino students over a generation. International Journal of Educational Development; Vol. 96, 1p

Shah, S.Y. (2023). Adult Education in India: Provision of opportunities for literacy, numeracy and basic skills. Literacy Research & Instruction; Oct-Dec2022, Vol. 61 Issue 4, p361-382, 22p

Sowmya, P. et al. (2022). Reading in Digital Era: A Study on Enhancing Reading Skills International Journal of English Literature and Social Sciences Vol-7, Issue-5; Sep-Oct, 2022

Ali, M.Alghazo. et al. (2022). Back to basics: A role of reading, writing, and arithmetic teaching. Frontiers in Education, 28 October 2022 Sec. Digital Learning Innovations volume 7 - 2022 | https://doi.org/10.3389/feduc.2022.913014

Tremblay et al. (2022). Before, During, And After: An Examination of the Pre-Task Planning and Post-Task Revising Practices of Adults with Low Literacy and Their Effect on the Quality of Written Compositions.COABE Journal: The Resource for Adult Education; Spring2022, Vol. 11 Issue 1, p25-41, 17p

Rogers et al. (2022). Wider benefits of adult literacy teaching: A preliminary exploration of the impact of teaching literacy to adults on some facilitatorss.International Review of Education / Internationale ZeitschriftfürErziehungswissenschaft; Feb2022, Vol. 68 Issue 1, p55-79, 25p

Shaikh Shakeel and Abdul Majeed (2022). Role of Adult Education in Women Empowerment through Skill Development Programme.Indian Journal of Adult Education 83 (1) 2022, 112-119

Belzer et al. (2022). The imagined learner in adult literacy education policy research: An international comparison. International Review of Education / Internationale ZeitschriftfürErziehungswissenschaft; Jun2022, Vol. 68 Issue 3, p369-388, 20p

Daris, Hadianto. et al. (2022). Effectiveness of Literacy Teaching Design Integrating Local Culture Discourse and Activities to Enhance Reading Skills. https://doi.org/10.1080/2331186X.2021.2016040

ChihWei, Wang. et al. (2022). A case study of adult education and literacy programs and the transition to remote services during the COVID-19 pandemic. New Horizons in Adult Education & Human Resource Development, Vol.34 issue 1https://doi.org/10.1002/nha3.20352

Byrne et al. (2021). Education reforms and adult skills: Evidence from Estonia.Economics of Education Review; Jun2021, Vol. 82, 1p

https://doi.org/10.1080/20004508.2019.1580983

Ferguson. et al. (2021). How can an adult literacy tutoring program help participants build confidence and meet their goals? Australian Journal of Language & Literacy; Feb2021, Vol. 44 Issue 1, p75-83, 9p

Hyjek. (2021). A Life in The Day of an Adult Literacy Tutor: A Perspective On Tutoring Adults. Literacy Practice & Research; 2021, Vol. 46 Issue 1, p1-11, 11p

Killian. et al. (2021). Examining the Underlying Structure of Adult Literacy Practices at Home and at Work. Reading Horizons; Aug2021, Vol. 60 Issue 2, p1-21, 21p

Grotlüschen et al.   (2020). International assessment of low reading proficiency in the adult population: A question of components or

lower rungs? International Review of Education / Internationale ZeitschriftfürErziehungswissenschaft; Jun2020, Vol. 66 Issue 2/3, p235-265, 31p

Tout, Dave. (2020) Evolution of adult numeracy from quantitative literacy to numeracy: Lessons learned from international assessments.International Review of Education / Internationale ZeitschriftfürErziehungswissenschaft; June2020, Vol. 66 Issue 2/3, p183-209, 27p

Nils, Kirsten (2019). Improving literacy and content learning across the curriculum? How teachers relate literacy teaching to school subjects in cross-curricular professional development. https://doi.org/10.1080/20004508.2019.1580983

Mumpuniarti. (2017). Challenges Faced by Teachers in Teaching Literacy and Numeracy for Slow Learners.Journal of Sustainable Development 10(3):243

Adrienne. et al. (2016). Readers in Adult Basic Education: Component Skills, Eye Movements, and Fluency.Journal of Learning Disabilities Vol.50,Issue 2 https://doi.org/10.1177/0022219415609187

Elizabeth L.Tighe and Christopher Schatschneider (2014). Examining the Relationships of Component Reading Skills to Reading Comprehension in Struggling Adult Readers: A Meta-Analysis.Journal of Learning Disabilities Vol.49, Issue 4 https://journals.sagepub.com/doi/abs/10.1177/0022219414555415

Daryl F, Mellard et al. (2013). Underlying Reading-Related Skills and Abilities Among Adult Learners. Journal of Learning Disabilities Vol.48, Issue 3 https://doi.org/10.1177/0022219413500813

Vasudevaiah. (2012). Literacy attainment and women empowerment among self-help groups - A study in Anantapur district of Andhra Pradesh.

Impact of continuing education programmes on social transformation among scheduled castes in Anantapur district an empirical study

Mellard. et al. (2011). Assessment and Instruction of Oral Reading Fluency Among Adults with Low Literacy. Adult Basic Education & Literacy Journal; Spring2011, Vol. 5 Issue 1, p3-14, 12p

Charles, A. et.al. (2010). Reading component skills of Learners in Adult Basic Education. Journal of Learning Disabilities Vol.43, Issue 2 https://doi.org/10.1177/0022219409359342

John, Sabatini. et.al (2010) Relationships among Reading Skills of Adults with Low Literacy. Journal of Learning Disabilities Vol.43, Issue 2 https://doi.org/10.1177/0022219409359343

Daryl, F.Mellard., Emily Fall and Kari L Woods. (2010). A Path Analysis of Reading Comprehension for Adults with Low Literacy. Journal of Learning Disabilities Vol.43, Issue 2 https://doi.org/10.1177/0022219409359345

Agarwal J. C.(2008).Adult Education, Doaba House, Delhi,

Perumal M, Mohan P. S. and Suresh M. (2007). Adult Education Scenario in India, Under New Education Policy, Abhijeet Publication, Delhi.

Best,J.W. and Kahn,V.J.(2006). Research in Education. New Delhi:Prentice Hall of India Pvt.Ltd.

Paintal, Manjeet. (2006). Adult Education in India, Indonesia, Thailand and China - A Comparative Study, Ph. D. Education, Punjab University.

Mubarak, Singh. (2004)Adult Education in India: Some Reflections, Kanishka Publishers & Distributors, New Delhi.

Chandra ShivendraSoti. (2003). Adult and Non-Formal Education, Surjeet Publications, New Delhi.

Kiran Singh. (2003). Implementing Agencies in Adult Education in the Imphal District of Manipur, Ph. D. Education, Manipur University.

Khandai Kumar Hemanta. (2003) Psychology & Research in Adult Education, Associated Publishers, Ambala Cantt,

Lalthankungi. (1997). An Appraisal of Adult Education Programme in Mizoram, Ph. D. Education, North Eastern Hill University, Shillong.

Kar,B.(1992). An Investigation into the Effectiveness of Adult Education Programme in Sadar Block of BalasoreDistrict.In Abstract of Research Studies on Adult Education.Vol.1,1994-95, Bhuvaneswar:SRC,Odisha.

Satapathy,S.(1990). Impact of Adult Education on Child Rearing Practices. In Abstracts of Research Studies on Adult Education; Vol.1,1994-95 Bhuvaneswar:SRC,Odisha.

Venkataih,N.(1997).Literacy Programme on the participation in the Andhra Pradesh.Ph. D. Education, Sri Venkateshwar University.

Aithal, P. S., & Aithal, S. (2020). Analysis of the Indian National Education Policy 2020 towards achieving its objectives. *International Journal of Management, Technology, and Social Sciences (IJMTS)*, 5(2), 19-41.

Aitokhuehi, O. (2021). Application of theory of change to adult education programme planning in the era of covid-19 and beyond. *Contemporary Issues in Education and Learning*, 157-172.

Ajmal, M., & Hussain, J. (2022). Comparative Analysis of Literacy Skills, Writing and Numeracy Attained by the Students of Formal and Non-Formal Schools at Primary Level in Islamabad Capital Territory. *Bulletin of Education and Research*, *44*(1), 23-38.

Boyadjieva, P., & Ilieva-Trichkova, P. (2023). Adult education as a pathway to empowerment: Challenges and possibilities. *Lifelong Learning, Young Adults and the Challenges of Disadvantage in Europe*, 169-191.

Gandhi, R. (2022). Significance of New Education Policy (NEP) 2020 for Adult Education and Lifelong Learning Program. *International Journal of Management, Technology and Social Sciences (IJMTS)*, *7*(1), 79-95.

Kapur, R. (2021). Development of Management skills among students. *International Journal of Information, Business and Management*, *13*(2), 167-178.

Porfirio, L., Chavarín, A., Linzy, M., Lopez, H., & Montiel, A. (2023). Students take the lead: promoting diversity and inclusion in adult education through ambassador training. *COABE Journal: The Resource for Adult Education*, *12*(1).

https://dsel.education.gov.in/ /2023-01/Draft Guidelines of NILP.pdf

https://www.futureschool.com/importance-of-adult-education/

https://epale.ec.europa.eu/en/blog/basic-skills-development-adults

https://www.genieacademy.com/blog/foundation-of-basic-skills

https://www.futureschool.com/importance-of-adult-education/

https://www.vedantu.com/political-science/national-literacy-mission

ENHANCING READING, WRITING, ARITHMETIC SKILLS AND

BASIC KNOWLEDGE AMONG ADULTS IN TIRUNELVELI

DISTRICT

Personal Data

Name of the Respondent   :

1. Age   : 15 – 25 / 26 – 35 / 36 & above

2. Gender   : Male / Female

3. Category   : SC / ST / BC / MBC / OC

4. Educational Qualification   : Illiterate / 1-3 Std / 4 & 5 Std

5. Monthly Income of Family : Rs.5000 & below / Rs.5001-10,000 /

   Rs.10,001 -20,000 / Rs.20,001 & above

6. Occupation   : Unemployed / Daily Wages / Self Employed

   / Monthly Salaried

ENHANCING READING, WRITING, ARITHMETIC SKILLS AND BASIC KNOWLEDGE AMONG ADULTS IN TIRUNELVELI DISTRICT

RESEARCH TOOL

I Language Development

1. Write consonants?

2. Spell the words given below correctly

School, fruit, bird, cotton

3. Write two new words using any three letters.

4. Write down the names of any three towns in your neighbourhood.

5. Read a paragraph of the given newspaper

II Basic Mathematics

6.Write the numbers given below in alphabetical form.

a) 24 b) 85 c) 57 d) 92

7. Fill in the blanks:

4, 6 ------- 10 -------- 14,16 ------- 20

8. Fill in the blanks:

 5, 10 ------, 20 ---- ,30

9. Write the given numbers in descending order

10, 64, 89, 91,13, 24, 19,46, 98, 01

10. Do the account given below

$$856 +719$$

11. Please make the account given below

$$5419 - 300$$

12. Do the account given below

    336 X 3

13. Do the account given below

    48/4

14. Say 6th table.

III Health & Hygiene

15. Name any two types of food prepared using millets.

16. What is your role in keeping the area where you live clean?

17. What are the two yoga practices that you do?

18. Name the plants in your house?

19. How do you dispose the waste in your house?

IV Basic Knowledge

20. What is the name of the panchayat member in your area?

21. Fill out the given bank form?

22. Write an application letter to the officer of the department to determine the drinking water and electricity related problems in your area.

23. Write the descriptions for the code of the following road rules.

 a) Red b) Yellow c) Green

24. What kind of first aid should be given in case of a fire to a person in the vicinity?

25. Explain the reasons for climate change.

READING, WRITING & ARITHMETIC SKILL TRAINING FOR ADULTS

READING, WRITING & ARITHMETIC SKILL TRAINING FOR ADULTS

READING, WRITING & ARITHMETIC SKILL TRAINING FOR ADULTS

CAP TURING THE INTENSIVE TRAINING FOR ADULTS

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