STRATEGIES TO CREATE AWARENESS ABOUT VOCATIONAL OPPORTUNITIES AMONG STUDENTS WITH HEARING IMPAIRMENT

Submitted by

TRUPTY .M. PANDYA

(Reg. No. 20PSE016)

Under the Guidance of

Mrs. R. VAIJAYANTHI

THESIS SUBMITTED TO
AVINASHILINGAM INSTITUTE FOR HOME SCIENCE
AND HIGHER EDUCATION FOR WOMEN,
COIMBATORE - 641043

IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE DEGREE OF

MASTER EDUCATION IN SPECIAL EDUCATION (HEARING IMPAIRMENT)

MAY – 2022

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Signature of the Head of the Department	Signature of the Dean of the Faculty	Signature of the Guide

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CHAPTER I

INTRODUCTION

"Proper Preparation Prevents Poor Performance."

1.0.0 Introduction

In the education system, there are two key elements in the school education program namely curriculum and co-curricular where students are exposed to different knowledge, skills, norms, values, cultural aspects and beliefs. Besides the curriculum, co-curricular activities have also been considered as a part of the curriculum in the school that each student needs to be involved in. However, there are assumptions which states that students are not being able to experience specific experiences while in the classroom but with the presence of co-curricular activities; students are able to learn various of skills and gain wide knowledge that will help them in the future. These are the opportunities in learning and experiential based method of acquisition of knowledge that are provided to students which enables them to develop mental strength, skills, talents, interests, spiritual, positive social, physical and aesthetic values through the co-curricular activities.

Co-curricular is an activity other than the subjects taught in the classroom and is also the part of a student's education course at school. Years back, co-curricular activities were merely considered; as an activity to occupy their leisure time. However, co-curricular activities are found to play an essential role in educational institutions of a country as it is considered as the complementary to the curriculum requirements and needs as well as provide the opportunity to acquire advanced skills from classroom learning to students. This proves that co-curricular activities are a very relevant activity in producing active and creative minded students, leadership and team spirit, disciplined, not wasting time as well as able to contribute business and culture to the society which are expected by the industry among today's graduates. However, graduates from local education system are observed to have failed to meet the industry requirements and cause employers to provide additional training programs to fit them into the scope of work assigned.

Co-curricular activities develop the learning experiences of children with special needs, enable them to identify and develop their innate abilities like creative & public-speaking skills, leadership qualities, etc. Co-curricular activities provide them an opportunity of thinking unusually and getting the innovative ideas of their own. These activities enable students to develop problem-solving, reasoning, critical thinking, creative thinking, communication, and collaborative abilities. These kinds of activities with the academic curriculum are beneficial that students develop skills beyond the knowledge of subjects

Benefits of Co-Curricular Activities for Students includes the development of various skills like Social Skills and Relationship-Building, Time Management Skills, Exploring a Plethora of Interests, Developing Self-Esteem and Commitment.

The present study entitled as **"Strategies to Create Awareness about Vocational Opportunities among Students with Hearing Impairment"** makes the best use of activities like awareness and intervention; know-how and insights about the various vocational opportunities that are available in the modern times for the Students with Hearing Impairment. The wide range of career choices and the spiking scope of certain vocational activities and skills are brought to the lime light.

1.1.0 Hearing Impairment

Hearing Impairment cannot be seen and hence its effects are not visible to others, so deaf suffers in silence. A deaf person is so isolated from family and friends and greeted by unsympathetic attitude s/he is often depressed and needs psychological counselling. The consequences of the child born with hearing loss are quite severe. (**Varshney S., 2016**)

Hearing impairment is related to health and substantially affects child's ability to normally acquire the speech. It has an influence on life of a child, earlier the problem is identified and health issues can be reduced accordingly. It is a fact that hearing loss is critical to language development and affects academic performance.

Hearing impairment is a generic term referring to any organic hearing problem regardless of ethology or degree. It is a deviation or change for the worse in either structure or function which is usually outside the range of normal. It generally

includes a broad range of hearing disability, ranging in severity from mild hearing impairment to profoundly deaf.

Persons having 70 dB hearing loss in speech frequencies in both ears are referred as Deaf and "Hard of Hearing" is referred to persons having 60 dB to 70 dB hearing loss in speech frequencies in both ears. The higher the decibel (dB), the louder is the sound. **Rights of Persons with Disability Act, (RPWD Act, 2016)**

Most of the people with Hearing loss belong to age group of 0 -10 years. Chronic Suppurative Otitis Media (C.S.O.M) was the most common etiological factor resulting in hearing loss and Presbycusis (old age hearing loss) was the second commonest cause. **Bansal, (2002)**

Hearing impairment is lack of ability of an individual to hear sounds adequately which is due to their improper development, damage or disease to any part of the hearing mechanism. Hearing is pre-requisite for the development of typical speech & language. A child develops speaking by hearing the speech of others in the family and surroundings.

Hearing loss, also known as hearing impairment, is a partial or total lack of ability to hear. A deaf person has less hearing capacity or no hearing. Hearing loss may occur either in one or both ears. In children, hearing problems can cause the lack of ability to learn spoken language and in adults it can create difficulties with social interaction and at work.

Categorization of Hearing Impairment:

The Global Burden of Disease Expert Group projected classification of Hearing loss according to the language acquired, site of damage, and degree of loss as follows: **(*Olusanya, B. O., Neumann, K. J., & Saunders, J. E., 2014)***

According to the Language acquired:

- **Pre- Lingual Hearing Loss**: It is the loss of hearing sensitivity existing at birth or infancy before speech and language patterns are acquired. In such condition, development of speech and language, voice and articulation are

affected. As an adult the individual is likely to continue to have limitations. It is also called congenital deafness

- **Post- Lingual Hearing Loss**: It is the loss of hearing sensitivity after birth and the development of speech and language. Language may not diminish; however since reception of high frequency sounds are affected there will be slight change in voice and articulation.

According to the Site of Damage:

- **Conductive Hearing loss**: When the transmission of sound through the external ear or middle ear is interfered by any condition, then it is called conductive hearing loss
- **Sensory Neural Hearing loss:** Any damage in the inner ear i.e. in cochlear or in the auditory nerves
- **Mixed Hearing loss:** When the transmission of sound is interfered by problem in the external ear, middle ear, and also inner ear, then that condition is called as mixed hearing loss.

According to the Degree of Hearing Loss:

- **-10 to 20dB (normal)** - Hardly has any impact on communication in noisy environments, soft sounds are difficult to understand
- **20 to 35dB (mild hearing loss)** - Even in quiet environments, distant speech is challenging to hear
- **36 to 50dB (moderate hearing loss)** - Conversational speech can be heard only from nearby distance. Group activities are challenging
- **50 to 65dB (moderately-severe hearing loss)** - Clear conversational speech can be heard only when it is loud and speech is evidently impaired
- **65 to 80dB (Severe hearing loss)** - Cannot recognize many of the words in the conversational speech even when loud. Speech is not intelligible
- **80 to 95dB (Profound hearing loss)** - Only hear very loud sounds and primary mode of communication would be through non-verbal mode
- **95 dB + (Complete or Total hearing loss) -** Cannot hear any speech or sound

Early Identification and Intervention with appropriate education can bring out the potentials in children with hearing loss and with the invention of advanced

amplification devices myths such as hearing impairment is equal to short of intelligence and diminish of articulatory capacity. ***(Olusanya. O. B., Davis. C. A., Hoffman. J. H., 2019)***

1.2.0 Vocational Education Training

Vocational education and training, abbreviated as VET, sometimes simply called vocational training, is the training in skills and teaching of knowledge related to a specific trade, occupation or vocation in which the student or employee wishes to participate.

Vocational Education and Training (VET) ensures skills development in a wide range of occupational fields, through school-based and work-based learning. It plays a key role in ensuring lower school dropout rates and facilitates the school-to-work transition. In a changing world of work, well-designed Vocational Education and Training systems can play a crucial role in developing the right skills for the labour market, not only for youth but also for adults in need of up-skilling or re-skilling.

Vocational Education and Training provides opportunities for skills development to a diverse group of learners. Inclusive Vocational Education and Training systems have potential to facilitate the integration of migrants. Adults can also participate in VET programmes to up-skill and re-skill through their working lives.

Vocational training refers to instructional programs or courses that focus on the skills required for a particular job function or trade. In vocational training, education prepares students for specific careers, disregarding traditional, unrelated academic subjects.

The purpose of career and technical education is to provide a foundation of skills that enable high school students to be gainfully employed after graduation-either full-time or while continuing their education or training. Nearly two-thirds of all graduates of career and technical programs enter some form of postsecondary program. The subject areas most commonly associated with career and technical education are: business (office administration, entrepreneurship); trade and industrial

(e.g., automotive technician, carpenter, computer numerical control technician); health occupations (nursing, dental, and medical technicians); agriculture (food and fibre production, agribusiness); family and consumer sciences (culinary arts, family management and life skills); marketing (merchandising, retail); and technology (computer-based careers).

There are numerous types and choices of Vocational Opportunities available for the Students with Hearing Impairment and some of them are as follows:

- Makeup and beautician training
- Mehandi (henna) designing
- Cooking and baking classes
- Sewing, stitching and tailoring
- Woodworking and carpentry training
- Jewellery designing courses
- Bike and car mechanic courses
- Art Administration
- Pottery Making
- Textile Printing
- Farming

Work readiness, interview and job search skills, social and communication skills, task analysis and career choice are some basic vocational skills. These trainings focus on developing technical skills for a specific job or trade. It offers you practical knowledge in contrast to theoretical knowledge offered by the conventional formal education system. Vocational skills are usually based on manual or practical activities, traditionally non-academic, related to a specific trade, occupation or vocation. It is sometimes referred to as technical education as the trainee directly develops expertise in a particular group of techniques.

1.3.0 Pre-Vocational Skills

A pre-vocational curriculum may include instruction on job-seeking skills. These skills include how to find a job opening, where to look for one, writing a resume and interviewing for a job. Children with special needs generally grow into

adults who still have special needs. Even though this may seem obvious, inattention to pre-vocational skills can seriously affect the special needs adult's ability to enter the workforce and live a product, self-sustainable life. The introduction of skills that carry over into the workplace can positively impact special needs children when it comes to cognitive development, quality of life and general well-being. There are some basic pre-vocational skills that need to be developed and mentored in children or students with special needs and they are as listed.

1) ***Developing Academic Abilities***

Academic abilities are necessary to complete the complex tasks of most jobs. Children with special needs should master functional academics that will help them to enter the workforce with the basic knowledge necessary to make simple calculations, communicate verbally and write effectively.

2) ***Finding the Job***

Not only do special needs children need to know skills related to a job, they need to know how to find that job. A pre-vocational curriculum may include instruction on job-seeking skills. These skills include how to find a job opening, where to look for one, writing a resume, interviewing for a job and also using a computer to find and reach out to potential employers and how to complete a job application.

3) ***Matching Job Requirements to Worker Skills***

Finding the right job that fits the special needs individual's skill set requires understanding what tasks or duties match up with the person's abilities. A pre-vocational curriculum should address this issue and teach special needs children relevant information about jobs.

4) ***Understanding Workplace Etiquette***

Pre-vocational training in interacting with other employees, treating the boss in a courteous way and being polite to customers is essential for these students before they go out into the real world. Other etiquette-related skills include the importance of getting to work on time, voice tone and volume to use

while on the job, professional and personal boundaries and social problem-solving.

1.4.0 Types of Vocational Training

Following are the major types of vocational training programs offered in India:

1. Vocational courses as part of the school curriculum: Schools in India usually offer vocational courses as part of the regular curriculum. They allow students to choose a few skill-based subjects from a wide variety of options in addition to the standard compulsory subjects. The Central Board of Secondary Education (CBSE) starts vocational subjects as early as from the upper primary level (class V to VIII) in order to give students the necessary orientation so that they can explore different career choices at secondary (class IX and X) and senior secondary (class XI and XII) levels.

CBSE gives the flexibility to choose from the following types of vocational courses along with regular school education:

* Business and commerce courses, such as office secretaryship, stenography and computer application, accountancy and auditing, marketing and salesmanship, banking, retail, financial market management and business administration
* Engineering and technology courses, such as electrical technology, automobile technology, civil engineering, air conditioning and refrigeration technology, electronics technology, geospatial technology, foundry and IT application
* Health and paramedical courses, such as ophthalmic techniques, medical laboratory techniques, auxiliary nursing and midwifery, X-ray technician course, healthcare sciences, health and beauty studies and medical diagnostics
* Fashion and textile courses, such as fashion design and clothing construction and textile design, dyeing and printing
* Agricultural courses, such as poultry farming, horticulture and dairying
* Hospitality and tourism courses, such as food service, catering, hotel management, bakery and confectionary and travel and tourism management
* Other courses, such as transportation system, life insurance and library management

2. Industrial Training Institute (ITI) courses: ITIs are trade-focused higher secondary schools set up under the Ministry of Skill Development and Entrepreneurship of the central government. These institutes offer training in over 130 trades and crafts. The minimum qualification required to join the ITI training is an eighth-class pass. The training period lasts from six months to two years. At the successful completion of the training, one can earn the National Trade Certificate (NTC).

After completing ITI training, students can join an apprenticeship program in different industries. They also become eligible for a lateral entry into the second year of a polytechnic diploma. Following are some of the popular disciplines of trade in which ITI offers training:

* Operator: Excavator, pump, stone mining machine and advanced machine tools
* Fitter: Sanitary hardware, marine engine and general
* Technician: Foundry, radiology, spinning, rubber, physiotherapy, weaving and textile processing
* Mechanic: consumer electronics, machine tools, medical electronics, motor vehicle, air-conditioner, lift and escalator
* Painter: Domestic, industrial and general
* Building maintenance: Carpenter, mason, plumber, electrician and fireman
* Machine shop: Welder, draughtsman, sheet metal worker, machinist, tuner and tool and die maker
* Computers: Computer operator, desktop publishing (DTP), web designing, multimedia animation and medical transcription

3. Skill development programs for small-scale industries: Various government and non-government organizations offer industrial skill development programs for small-scale industries. For example, MSME-Development Institute, functioning under the Ministry of Micro, Small and Medium Enterprises (MSME), conducts general and

product-specific entrepreneurship skill development programs (ESDP) of six weeks duration. Some of the common trades these programs cover include the following:

* Food processing
* Screen printing
* Motor rewinding
* Leather goods manufacturing
* Two-wheeler repair and servicing

It also organizes skill development programs (SDP) of three to six months' duration in machine shop practice and fabrication workshops. The shortest ones are the process demonstration programs of one-day duration related to the manufacture of the following products:

* Liquid soap
* Phenyl
* Room fresheners
* Detergent powder
* Shoe polish

4. Vocational courses by state governments: Many state governments offer vocational programs outside the formal education system at the local level. For example, the Society for Employment Promotion and Training in Twin Cities (SETWIN) offers skill-based training to educated unemployed youth in the twin cities of Hyderabad and Secunderabad in Telangana. It has over 70 centres (own and franchised) that impart training in over 100 courses, including the following:

* Technical courses: Solar technician, CCTV installation and gem cutting and polishing
* Computer courses: MS-OFFICE, multimedia, AUTO CAD, computer hardware and graphic designing
* Management courses: Diploma and PG Diploma courses in food production, tourism and hotel management
* Women-oriented courses: Garment making, herbal beauty care and dress designing
* Educational courses: Spoken English, pre-primary teacher training and drawing teacher training
* Media courses: Reporter, anchor, editor, photographer and floor manager

1.5.0 Strategies to Develop Vocational Skills in School Students

There are few strategies to develop vocational skills in Students with Hearing Impairment and for any school going children. A skill set is a combination of abilities, qualities and experiences one can apply to perform tasks well. These can include soft skills such as interpersonal skills, organization and leadership as well as technical skills such as research, computer programming, accounting writing and more. Spending time on improving skills can help achieve personal career goals such as earning a promotion or becoming an expert on a certain topic. The skill set can be applied to progress in the current career or expanded to earn a job in a different field or industry.

- ***Set goals for self***

  Setting specific goals to improve career helps the students to stay on track with their development. Make sure that the goals are measurable, achievable and relevant to the profession or goals. Then, consider organizing a timeline to achieve the goal by setting a beginning and end date, as well as smaller goals to achieve along the way.

- ***Find a mentor***

  A professional mentor is typically a superior whom the student can respect and trust. Once they find their mentor, they can reach out for informal meetings, which can then naturally develop into a professional relationship.

- ***Seek feedback about strengths and weaknesses***

  Students can ask superiors, colleagues or even friends or family about their strengths and areas for improvement. It is important to seek feedback from people who will give honest critiques rather than automatic praise. Once the student identifies the weaknesses, they can focus on developing those skills.

- ***Review job descriptions for positions desired***

  These job descriptions will give an idea of the transferable skills possessed, as well as the job-specific skills that are needed. Once they identify the

skills needed, they can research job shadowing or education programs that can provide the necessary skill set to transition into that position.

- ***Enrol in an online degree program***

  Companies often encourage employees to further their education with a degree, and some offer tuition assistance or reimbursement. If they are advancing their career with a related program, such as accounting and finance, they may also find those credits transferable.

- ***Take continuing education courses in career-related fields***

  These courses are often taught by professionals with experience in their field. For some professions, continuing education courses are required to stay current in the industry. Many colleges and universities offer continuing education courses in a variety of fields.

- ***Take advantage of company training***

  Many companies use independent training departments with experts in different fields that train on specialized skill sets. A check with the supervisor about what the company has to offer and which courses would be especially beneficial for the professional growth.

1.6.0 Importance of Vocational Skills

Vocational training is important due to the following reasons:

- ⇨ It offers training for specific skills and jobs and helps them to perform their job better
- ⇨ Students can undergo vocational training along with or outside the formal education system as it prepares students to take up a high-paying job or occupation almost immediately.
- ⇨ Undergoing training from a vocational school benefits the students with a certification from an independent organisation, which vouches for the skills and puts them in an advantageous position over informally trained candidates.
- ⇨ Since its utility is direct and clear, students often participate more actively than the formal education as it offers a learning opportunity to those who

missed the formal education or those who are not sure whether they should attend a school.

- ⇨ It offers an opportunity to learn the skills of their choice and make a career switch at almost any point in time along with offering employment opportunities in villages and small towns, which prevents population migration to large cities.
- ⇨ A majority of the vocational skills are universal in nature and they make the students eligible for employment in foreign countries too by providing the much-needed skilled manpower to the industry.

1.7.0 Advantages of Vocational Education Training

It is witnessed that the global economy has gone through a turbulent phase that has forced many people out of a job, many of them never focussed on hands-on skills in the various industries available across the globe. Vocational Training should be treated as a blueprint to a better future. They will also replace the plethora of academic qualifications currently on offer in each technical or non-technical area with just one recognizable qualification type.

"India Skills Competition" and celebrations of World Youth Skills Day have given a fresh dose of energy to sustained efforts under the Pradhan Mantri Kaushal Vikas Yojana (PMKYV) to transform India to be the Skill capital of the world. The main aim of the vocational training is to achieve recognition and respect to our country's vibrant youth and make them more employable- ready as per industry standards, thereby maneuvering the skills, labor and employment landscape of India. Vocational Training enhances employability and adds value to education.

Some validating factors are as follows:

- ✓ Vocational Training is possible for any industry that an individual has a passion for. The vocational training should help him/her to land a job and begin a lucrative career in that specific sector
- ✓ With vocational training, anyone intends to skip professional education can be taught how to acquire, incorporate and develop it on their manual skill set
- ✓ It should be designed in such a manner that it can be pursued by individuals as young as 14 or as old as even 60 years of age
- ✓ Initiatives like 'Digital India' has allowed formal education to amalgamate with vocational training skills to meet the ever rising demand for skilled technical and non-technical workforce in the country
- ✓ It should focus on the immediate beneficiaries: youth, the enterprise, and nation
- ✓ The training should ensure the constant availability of a skilled workforce for strong and balanced growth
- ✓ The right mix of education and vocational training can make him/her more employable in the global scenario. It should motivate the workforce of today and tomorrow and make them employable by established players in the industry

Educational Institutions should offer students a concoction of study and 'on the job' learning and should be intended to equip young people for the modern workplace. The main motto of the training is to show the experience of the world of work so that the young people understand the range of options available to them and to assist them to make the right choices about the career paths on offer. Some of the notable benefits are as follows:

- ★ **Job Readiness:** Since the on-job training involves field work, the skills and abilities to perform a job becomes better. Any type of vocational training makes him/her adapt to the nuances of the corporate world. Vocational Training provides job aspirant the confidence and makes them job-ready
- ★ **Upgradation of new skills:** Apart from adapting to new skills, vocational training also aids in up gradation of new skills for the individual, thus removing skill age-old skills and utilization. Unlike others, this is also taken up by already employed people to upgrade their job-related knowledge

- ★ **Reduces Marginalization:** Some of the groups that are marginalized in the society have easy access to vocational training that helps them earn a living. Even a student who was not excellent in academics can land up a lucrative job with the help of vocational training
- ★ **Makes study Enjoyable:** Almost all vocational training courses require one to go through a practical process, and just theoretical. This whole process of learning becomes more enjoyable
- ★ **Increased productivity:** Vocational Training increases the productivity of the individual by keeping them upgraded with the skills. There is a higher chance of promotion in the workplace
- ★ **Better Interaction skills:** Vocational Training can be a whole new experience from a learner's perspective. the educators must focus on creating an environment where students can enhance their ability to interact with others
- ★ **Motivates to think out-of-the-Box:** Practical process while learning is a concoction of observation, reflection, experience, and application. The vocation training can promote out-of-the-box thinking capability of a student

Vocational training, skills-based qualifications are a genuine alternative to academic learning. This type of job-oriented enables young people to gain practical skills in a specific craft, occupation or trade by providing applied hands-on work-based learning which is a perfect melange of theory and practice. It is very imperative from the educators' point of view to make the students aware about the range of options available to them and to nurture them to make the right choice ahead. This type of vocational training can help vulnerable young people to reach their potential and attain success in their goals.

The Government must ensure that young people are accessed to quality education and well-informed educators. Good educators can motivate and nurture young people to make the right choice ahead. Retail, hospitality, travel, tourism, and paramedics are the type of certain areas in which students need to have their skill-based training.

The National Knowledge Commission (NKC, 2006) has considered Vocational training as an important element of the nation's education initiative.

There is a sheer need to redefine the critical elements of imparting vocational education to make it flexible, inclusive, and more job oriented. The Government has also shown tremendous enthusiasm towards vocational Training and has suggested important initiatives. The NKC has recommended the following long and short term strategy to strengthen the vocational training.

1. Vocational education should be placed under the Ministry of Human Resource Development (MHRD)
2. Increase the flexibility of VET within the mainstream education system through the following steps:
    a. Aspects of general education (such as numeracy skills, etc.) should be allowed in VET as far as possible, to enable students to return to mainstream education at a later stage
    b. Programmes in training institutes and polytechnics should have distinct tracks for students of different educational attainments
    c. Students should be allowed to have multiple entry and exit options in the vocational education stream
    d. Proper Links should be created between the vocational education stream and school education as well as higher education
    e. Programmes devoted to certain skills training at the primary and secondary level should be launched in all schools
    f. Vocational training should be made promulgated in various literacy and adult education schemes
    g. Schemes for lifelong skill up-gradation, through short training programmes, should be launched
    h. There should be a facility for generating a cadre of multi-skilled persons

An individual who initiates with a four-year regular course can opt for vocational courses at first while exploring available options to choose a degree program. A career-focused degree includes an array of experiences and classes which better groom students for diverse career options. Vocational courses and training programmes are therefore the need of the hour in India. Their result oriented curriculum will nurture formal education and will facilitate the employability of Indian youths. Globally India ranks second in terms of age of the working population

(18-29 years). These trained youths will have a very important role to play in the growth and progress of the country. The working youth working will decide the future of India. It is imperative that these working populations are nurtured with specific craft equipped with the industry-specific training to groom them productive for themselves and the country.

1.8.0 Need and Significance of the Study

The needs and significance of this study are enlisted as follows:

- ⇨ For any student; especially for children with special needs, employment and its rightful opportunity are highly essential in every individual's life. It enables a person to lead an independent and successful life. To ensure good placement options along with the apt age (after formal education) or so; and to sustain their job nature; vocational skills are the most important factor influencing such deeds
- ⇨ Quality vocational training is provided through proper and formal vocational education and training. Thus, it is well understood that the awareness and knowledge about the various vocational choices and field of interest of every needful individual needs to be identified, explored and well-trained
- ⇨ Aspects like improving the awareness level about vocational opportunities among the hearing impaired students in the components of basic knowledge on their self interest and talents possessed by birth
- ⇨ To create awareness about the criterion requirements for selection of vocational courses related to the specific career choices made by the hearing impaired students
- ⇨ For ensuring that the hearing impaired students are aware about the scope of the vocational training course(s) that they are likely to opt

1.9.0 Statement of the Problem

The problem of this study is stated as **"Strategies to Create Awareness about Vocational Opportunities among Students with Hearing Impairment."**

1.10.0 Definition of Terms Used in the Study

The terms used in this study are denied as:

- ★ **Strategy:** A general plan of action to achieve one or more long-term or overall goals under conditions of uncertainty
- ★ **Vocational Education and Training (VET):** It is also called Career and Technical Education (CTE) which prepares learners for jobs that are based in manual or practical activities, traditionally non-academic and totally related to a specific trade, occupation or vocation
- ★ **Vocation:** An occupation in which a person is especially drawn or for which they are suited, trained, or qualified
- ★ **Students with Hearing Impairment:** The inability of a Hearing Impaired individual in hearing sounds adequately ***(Steiner, 2016)***

1.11.0 Scope of the Study

1) The study helps to know about the level of awareness that prevails among the students with special needs and about the various vocational opportunities that are available for them specifically and accordingly.
2) This study helps us to know the information about the students' interests in learning the new skills using vocational education and training.
3) It helps to know about the methodologies used to train and equip children with special needs with their vocational abilities by providing awareness and exposure to the numerous vocational choices.
4) It gives clarity and insight on the concept of vocational skills, vocational education and training altogether.
5) The study helps in identifying the impact of availing the vocational education and training for the Students with Hearing Impairment.

1.12.0 Objectives of the Study

The objective of the study is to:

1. Identify the Students with Hearing Impairment and their areas of interest along with their individual talents and skills possessed

2. Develop a tool to conduct a survey related to the awareness about vocational opportunities among the students with hearing impaired in special and inclusive classroom
3. Develop an intervention package for enabling the students with hearing impairment in realizing and identifying their areas of interest and wide range of employment opportunities that can be accessed by them
4. To find out the significant influence of Locality, Gender, Grade, Age, Mode of Communication, Residential Status and Awareness level about Vocational Opportunities among hearing impaired students
5. Compare the Pre-test and Post-test Scores with respect to the Dependent Variables of the study that includes Knowledge on Vocational Opportunities; Awareness on Criterion Requirements for Selection of Vocational Courses; Awareness on Abilities and Skills for Vocational Training Courses and Scope of Vocational Training Courses

1.13.0 Hypothesis of the Study

The following hypotheses were framed for the study:-

1. There is no significant difference in the Pre-test scores with respect to Locality in Awareness about Vocational Opportunities among Students with Hearing Impairment
2. There is no significant difference in the Post-test scores with respect to Locality in Awareness about Vocational Opportunities among Students with Hearing Impairment
3. There is no significant difference in the Pre-test scores with respect to Gender in Awareness about Vocational Opportunities among Students with Hearing Impairment
4. There is no significant difference in the Post-test scores with respect to Gender in Awareness about Vocational Opportunities among Students with Hearing Impairment
5. There is no significant difference in the Pre-test scores with respect to Grade in Awareness about Vocational Opportunities among Students with Hearing Impairment

6. There is no significant difference in the Post-test scores with respect to Grade in Awareness about Vocational Opportunities among Students with Hearing Impairment
7. There is no significant difference in the Pre-test scores with respect to Age in Awareness about Vocational Opportunities among Students with Hearing Impairment
8. There is no significant difference in the Post-test scores with respect to Age in Awareness about Vocational Opportunities among Students with Hearing Impairment
9. There is no significant difference in the Pre-test scores with respect to Mode of Communication in Awareness about Vocational Opportunities among Students with Hearing Impairment
10. There is no significant difference in the Post-test scores with respect to Mode of Communication in Awareness about Vocational Opportunities among Students with Hearing Impairment
11. There is no significant difference in the Pre-test scores with respect to Residential Status in Awareness about Vocational Opportunities among Students with Hearing Impairment
12. There is no significant difference in the Post-test scores with respect to Residential Status in Awareness about Vocational Opportunities among Students with Hearing Impairment
13. There is no significant difference in the mean scores of Overall Pre-test and Post-test on Awareness about Vocational Opportunities among Students with Hearing Impairment
14. There is no significant difference in the Pre-test and Post-test scores with respect to Knowledge on Vocational Opportunities
15. There is no significant difference in the Pre-test and Post-test scores with respect to Awareness on Criterion Requirements for Selection of Vocational Courses
16. There is no significant difference in the Pre-test and Post-test scores with respect to Awareness on Abilities and Skills for Vocational Training Courses
17. There is no significant difference in the Pre-test and Post-test scores with respect to Scope of Vocational Training Courses

1.14.0 Limitations of the Study

The limitations and constraints faced in the research pint of view are enlisted as follows:

- The sample size is limited up to secondary and higher secondary school level
- The survey was conducted only among Students with Hearing Impairment
- The tool focused only on creating awareness, provoking their realization towards their areas of interest and capabilities and in developing the vocational skills in Students with Hearing Impairment
- The study was confined to only two special schools in Coimbatore and Trichy districts respectively
- The Intervention package was confined to only ten Basic Vocational Choices available for Students with Hearing Impairment

1.15.0 Organisation of the Study

The present work on **"Strategies to Create Awareness about Vocational Opportunities among Students with Hearing Impairment"** is organized in five chapters.

- ❖ The ***first chapte***r consists of introduction, need and importance of the study, statement of the problem, scope, objectives, hypothesis and limitations of the study
- ❖ The ***second chapter*** consists of review of related literature and researches to present the study. The literature review collected provides a highlight on the needs to create awareness and to develop vocational skills in students with hearing impairment as well as throws light on the strategies to provide vocational education and training
- ❖ The ***third chapter*** presents the methodology undertaken for the current research study
- ❖ The ***fourth chapter*** consists of the detailed analysis on the information collected from the sample. Results are presented in tabulated format and interpretation is done in the forms of pictorial representations
- ❖ The ***fifth chapter*** throws light on the summary and findings of the study along with suggestions and recommendations for the future study

1.16.0 Conclusion

> *"What lies behind us and what lies before us are tiny matters compared to what lies within us."* - ***Ralph Waldo Emerson***

Just like any other normal human being, the persons with disabilities deserve a dignified, meaningful, independent and a productive life. Employment provides not only good income but also opportunities for social inclusion and participation. Their needs are not special. But how their needs are met may be different. Yet, they are the same needs as anyone else's. Therefore, providing equity level and equal range of awareness, exposure and training related to development of vocational skills and reaching out to the various vocational opportunities to the students with hearing impairment is the most crucial part; influencing factor in their lives.

CHAPTER II

REVIEW OF RELATED LITERATURE

"All education is, in a sense, vocational, Vocational for living." - JOHN NEWSOM

2.0.0 Introduction

Review of related literature is one of the foremost steps in conducting a research work. The term 'Review of Literature' consists of two words, among them the word 'review' means to organize the knowledge of a specific area and the word 'literature' means the knowledge of a particular area of investigation about any topic in research methodology. It covers the theoretical basis as well as the practical aspects of the research related to the area. The literature in any field forms the foundation upon which all future work will be built. If the researcher fails to build the foundation of knowledge provided by the review of literature, the work will be little shallow and naïve and often will duplicate work that has been already done by someone else **(Borg, 2009)**

The review of literature is important in various ways - firstly, it helps to find out quite similar study that helps to design the current study. Secondly, the prior research works ensure to include the major relevant components in the study; finally, it helps to anticipate the common problems in the present study and to avoid the common traps and pitfalls.

2.1.0 Purpose of Review of Literature

In Experimental and Survey research, the review of literature serves a variety of related purposes preliminary to the actual collection of data. The literature review is done by the researcher to create context from past studies for the new study and to form new theory from the newly gathered data. It also:

- ⇨ Provides new ideas, theories and background to formulate hypothesis.
- ⇨ Indicate whether the evidence already available helps to solve the problem adequately.
- ⇨ Suggests methods, procedure, sample, collection of data and statistical techniques to find the solution to the problem.

- ⇨ Organize and form the research design and make a suitable presentation of the study.

2.2.0 Topic used in the Collection of Reviews

The literature concerning to the study on **"Strategies to Create Awareness about Vocational Opportunities among Students with Hearing Impairment"** is reviewed in this chapter under the following headings:

2.2.1 - Vocational Skills for Students with Disabilities

2.2.2 - Vocational Skills for Students with Hearing Impairment

2.2.3 - Employability Skills for Students with Hearing Impairment

2.2.4 - Vocational Rehabilitation for Students with Hearing Impairment

2.2.1 Vocational Skills for Students with Disabilities

King, K., & Palmer, R. (2010) in their study on ***"Planning for technical and vocational skills development, Paris: UNESCO, International Institute for Educational Planning"*** has identified on the position of skills development on the agenda of policymakers and development agencies which improved markedly around the turn of the 21st century. This study tracks the ways skills have gained importance both in the developing and the more industrialized world. It analyses critically the multiple 'drivers' of skills development and the linkages of skills to the knowledge economy, growth, and employment in an increasingly competitive world. It also acknowledges the many modalities and delivery systems for skills development, arguing that this institutional diversity, often spread across several ministries and training authorities, has made it more difficult to give a national account of the skills development sector. The re-emergence of skills has triggered many reform initiatives associated with [technical and vocational skills development] TVSD, some of which have become almost 'fashions' and are in danger of being adopted without sufficient evidence of their effectiveness.

Evans, R. N., & Herr, E. L. (1971) did a study entitled as ***"Foundations of vocational education,"*** and have explored the design for vocational educators and prospective vocational educators which concentrate on the basic principles affecting all human resource development. The author has suggested ways in which vocational education can better serve the needs of youth and adults. There is a brief overview of

the school as seen by a vocational educator and describes methods of preparing personnel to conduct programs in vocational education.

Gordon, H. R. (2003) conducted a phenomenal study entitled as ***"The history and growth of vocational education in America"*** and illustratively examines historical trends affecting the evolution of vocational education (VE). It is designed especially for use in teacher education programs of VE and for undergraduate and graduate courses in history, philosophy, and foundations of VE. An overview of leaders influencing VE curriculum development is identified describing the impact of land-grant institutions on professional growth of VE. A discussion on the selected factors that influenced VE development was observed and it was organized around the legislative history of VE and addresses historical work roles of women in VE, legislative breakthroughs affecting women, and problems associated with gender equity. The study also examines the historical relationship between ethnic groups and VE and participation of special needs populations in VE and addresses vocational instructional programs and VE teachers along with providing an overview of vocational student organizations. The study finally introduces the effectiveness of school-to-work and describes the aging workforce and also focuses on the globalization of career and technical education.

Cannella-Malone, H. I., & Schaefer, J. M. (2017) conducted a study entitled as ***"A review of research on teaching people with significant disabilities vocational skills, career development and transition for exceptional individuals"***. The purpose of this review was to summarize and analyze the literature on teaching vocational skills to individuals with significant disabilities. Sixty-two articles (with 75 experiments) included in this review were published between 1969 and 2014, and indicated that most participants were successfully taught to engage in a variety of vocational skills in a range of settings. Unfortunately, this review also determined that the research on teaching vocational skills to individuals with significant disabilities is steadily decreasing, with only 15 new studies published since 2000.

Seaman, R. L., & Cannella-Malone, H. I. (2016) did an in-depth analysis entitled on ***"Vocational skills interventions for adults with autism spectrum disorder: A review of the literature".*** This research study has identified a

disproportionately high unemployment rate. Also, found that obtaining and maintaining employment is exceptionally difficult for individuals with autism spectrum disorders (ASD). Further, few individuals with ASD have been trained in the vocational skills needed to obtain gainful employment. The need to evaluate not only our current knowledge about the employment needs of individuals with ASD, but also to inquire about interventions, strategies, and supports in the workplace are pressing. The harsh reality of high unemployment rates for adults with ASD, and the consequently high cost of services, can be aided by examining the best practices for supporting employment. This review of the literature focuses on vocational training interventions targeted specifically to adolescents and adults with ASD. Twenty studies evaluating pre-employment, specific vocational skill training and job retention interventions were discussed along with discussing on the trends in intervention characteristics that were highlighted and recommendations for future research were suggested.

Allen, K. D., Wallace, D. P., Greene, D. J., Bowen, S. L., & Burke, R. V. (2010) in their study entitled as ***"Community-based vocational instruction using videotaped modeling for young adults with autism spectrum disorders performing in air-inflated mascots. Focus on Autism and Other Developmental Disabilities"*** examined the benefits of video modeling to teach a unique vocational skill set to an adolescent and two young adults with Autism Spectrum Disorders. Video modeling was used to teach skills necessary to entertain customers and promote products in a retail setting while wearing a Walk-Around costume. The three participants were observed before and after watching a video model perform the skills in the costume in scripted and naturalistic scenes. The authors concluded that all participants learned to use the skills in combination or sequence after watching the video model and these skills are generalized to an actual job opportunity.

Agran, M., Fodor-Davis, J., Moore, S. C., & Martella, R. C. (1992) studied on ***"Effects of peer-delivered self-instructional training on a lunch-making work task for students with severe disabilities".*** From this research, it can be investigated that the effects of peer-delivered self-instructional training on the work performance of three students with moderate to severe disabilities. Two students with mild mental retardation were trained to teach the participants two task-specific self-instructions

and an interactive statement to a customer while they prepared sack lunches. Results indicated that two of the three participants learned to make sack lunches in the correct sequence and generalized their responding across novel customers. For the third participant, increases in performance with generalized responding across novel customers occurred only after picture cues were added to a self-instructional training package directed by a non-peer trainer. Conditional probabilities were calculated to determine the correspondence between the self-instructions and the task responses.

Salend, S. J., Ellis, L. L., & Reynolds, C. J. (1989) did a study entitled ***"Using self-instruction to teach vocational skills to individuals who are severely retarded".*** This study illustrates the effectiveness of a self-instruction procedure on the vocational skills of four individuals who are severely retarded. Results showed that the self-instruction procedure led to a marked increase in the subjects' work production rates and a concomitant decrease in the number of errors made.

Murray, C., & Doren, B. (2013) did a study entitled ***"The effects of working at gaining employment skills on the social and vocational skills of adolescents with disabilities: A school-based intervention".*** This research study provides the investigation that was designed to evaluate the effects of the Working at Gaining Employment Skills (WAGES) curriculum on the social and occupational skills of adolescents with disabilities. Adolescents with disabilities were assigned to either an intervention or control condition. Youth in the intervention group were exposed to the WAGES curriculum for approximately 4.5 months, whereas students in the control group received "business-as-usual" within special education settings. Students and teachers completed brief measures pertaining to prevocational/occupational skills as well as measures pertaining to students' social skills prior to and following the intervention. Results indicated that after controlling for pretest differences on outcome variables, students participating in the intervention had greater vocational outcome expectations, greater occupational skills, and greater social skills (i.e., empathy, cooperation, and assertiveness) than did students with disabilities in the control condition following the intervention.

Jaya, H., Haryoko, S., & Suhaeb, S. (2018, June) did a survey entitled as ***"Life skills education for children with special needs in order to facilitate vocational***

skills". The present study has identified that the Life skills for students with special needs are very important and valuable for them to get in education. This skills education program is a part of life skill. With this provision is expected they will be able to live independently by not / less dependent on others. This skill training focuses on the various skills to produce a product in the form of real objects that are beneficial to life. By learning the various skills expected, children with special needs can gain a perceptual experience, appreciative experience, and creative experience. Children with disabilities include blind children, hearing impaired, mentally disabled, tuna barrel, gifted child, and children with specific learning difficulties. Seeing the disorder they have a very varied intelligence. so there are children who have a high cognitive disabilities, but also have a low cognitive. Some have a severe disability and some are mild. Seeing this condition the kind of life skills that are suitable to be developed are general life skills and vocational life skills for children with disabilities. There are Types of life skills education for children with disabilities, severe disability and other disabilities children who have less developed intelligence life skills education in general life skills and vocational life skills. While blind children, deaf, deaf, and tuna barrel, gifted children and children with specific learning difficulties developed general life skills, academic life skill, and vocational life skills. Through the help of learning media can help children with special needs in understanding the content of the lessons and facilitating vocational skills.

Stone-MacDonald, A. (2012) conducted a study entitled on ***"Learning daily life and vocational skills in natural settings: A Tanzanian model".*** This study investigates at a special education school in Tanzania, children learn in natural settings using a functional curriculum that has been adapted to their local context. Children with developmental disabilities are supported in learning the skills and knowledge they need to participate in their families and the community. The school utilized funds of knowledge (Gonzalez, Moll, and Amanti, 2005) and cooperation between parents, teachers, and community members to design an appropriate curriculum. During an ethnographic case study, I observed how students with developmental disabilities could learn vocational and daily life skills in a natural environment at their school and successfully transfer those skills to multiple settings in their community. These strategies could be utilized in other countries, including the

United States, in the same manner to support students with disabilities to learn the skills they need for home, school, and job success.

Chadsey, J. G. (2007) conducted a study entitled ***"Vocational skills and performance"***. From this study, it has been found that, since the mid-1980s, employment has been identified as a critical outcome for youth with disabilities, particularly when the U.S. Department of Education, Office of Special Education and Rehabilitation (OSERS) emphasized the importance of facilitating the transition from high school to work. In 1990, specific language on the transition from school to work was included in the Individuals with Disabilities Education Act (IDEA), added to the 1997 IDEA Amendments, and recently modified in 2004 reauthorization. When students with disabilities leave high school, some will enter postsecondary educational institutions and some will enter the workforce. This chapter is about those students with mental retardation and developmental disabilities who plan to be employed once they exit the schools. With the passage of IDEA in 2004, an Individualized Education Program (IEP) team must implement by age 16 the type of coursework and experiences students will need to develop the basic skills for employment and other transition outcomes.

2.2.2 Vocational Skills for Students with Hearing Impairment

Kramer, S. E. (2008) conducted a study entitled ***"Hearing impairment, work, and vocational enablement"*** and observed that, within the International Classification of Functioning, Disability, and Health (ICF; WHO), participation in work is acknowledged as one of the major areas in life (D8). Difficulties that make it impossible for the person to optimally partake in work result in participation restriction. An increasing number of people with hearing loss are seeking help for occupational problems. Various studies identified issues that should be addressed in the management of employees with hearing loss and emphasized the importance of a tailored vocational enablement program. This paper describes a recently developed vocational enablement protocol (VEP) addressing the specific needs of those with hearing loss in the workforce. It is characterized by an integrated approach (occupational physician, otolaryngologist, audiologist, social worker/psychologist, speech-language pathologist). The goal is to facilitate participation in, and retention of, work. The protocol is currently implemented in a few audiological centers in the

Netherlands. This paper presents data collected at the audiological center of the VU University Medical Center, Amsterdam. Thus far, 86 patients, aged 19 to 64 years (mean 48, SD 23), have completed the protocol.

Furlonger, B. (1998) conducted a study entitled ***"An investigation of the career development of high school adolescents with hearing impairments in New Zealand".*** From this research, it is derived that, although the need for better-skilled workers has been signaled by the marketplace, people with hearing impairments generally are employed in unskilled or semiskilled jobs. They are, therefore, at heightened risk of unemployment and underemployment. Compounding this risk are the levels of vocational preparation and job awareness of adolescents with hearing impairments, which are generally considered inadequate. With a view to improving prevocational programs for hearing impaired adolescents, the researcher collected information on career awareness and vocational maturity. Significant differences were identified between hearing impaired and hearing adolescents on a range of career measures. In particular, adolescents with hearing impairments were identified as having less career awareness.

Sink, J. M., Field, T. F., & Raulerson, M. H. (1978) conducted a study entitled ***"Vocational evaluation services for the deaf and hearing impaired: State of the art".*** In this research study, it is observed that a national survey of rehabilitation facilities and schools providing vocational evaluation service to the deaf and hearing impaired was completed. Standard commercial work samples systems and psychological tests were identified as the major approaches utilized to provide vocational evaluation services to the deaf. The study points out the need for modification of vocational evaluation systems and psychological test to include standard procedures for their administration without verbal or written communication. It further points to the need for development and expansion of training efforts to better prepare vocational evaluation to serve the deaf and hearing impaired.

Munyua, C., Awori, B. B., & Rukangu, S. (2014) conducted a study entitled ***"Factors Influencing Choice of Vocational Courses by Learners with Hearing Impairments In Selected Vocational Training Centres, Kenya"***. The purpose of this specific study was to investigate the factors influencing choice of vocational courses

by learners with Hearing Impairments (HI) in selected Vocational Training Centres (VTCs), Kenya. The objectives of the study were: types of vocational courses, learners' career aspirations, peer influence and factors within the school environment that facilitate choice of vocational courses. The research study adopted mixed method approach design in achieving its objectives. Data was collected from selected VTCs in Kenya. Purposive sampling was used in the selection of the institutions, administrators, instructors and learners. Stratified sampling was used to select male and female learners i.e. four administrators, eleven instructors, sixty-two learners. The findings of this study indicated that most of the vocational courses offered in VTCs were tailoring, masonry, carpentry and joinery and beauty therapy and were relevant to job market. The study also established that peers influenced how learners with HI chose vocational courses and acted as role models and they encouraged each other to choose same courses they had undertaken. The study also found out that learners with HI lacked career awareness in the choice of vocational courses due to lack of proper guidance by the parents/guardians and also partly by the instructors and this greatly influenced how they chose their vocational courses. The study showed that factors within the school environment influence the type of vocational courses learners with HI chose and that instructors advised the learners on how to choose vocational courses depending on their interest and abilities. It is thus recommended that on the effect of peer influence on the choice of vocational courses, the VTCs should employ or hire career experts whose responsibilities should be to guide learners on the suitability of various courses.

Ab Halim, F., Bakar, A. R., Hamzah, R., & Rashid, A. M. (2013) conducted a descriptive study entitled ***"Employability skills of technical and vocational students with hearing impairments: Employers' perspectives".*** This study aims to explore the employers' requirement for employability skills of the technical and vocational students who are hearing impaired. The research instrument used was adapted from the Secretary's Commission on Achieving Necessary Skills (SCANS) which consists of thirty nine items. The employability skills surveyed include basic skills, thinking skills, personal qualities, sourcing skills, information skills, interpersonal skills, system skills and technology skills. The instrument was distributed to 110 industry employers throughout Malaysia. However, only 23 (21%) employers returned the survey form. The majority of respondents are from service industry (78.2%) including

the retail, food service, restaurants and hotel as well as the fashion designing industry. A high percentage of the respondents (65.2%) are Human Resource Manager who had one to five years of working experience. Based on the survey, the three top most highly rated skills are, personal qualities (M=4.37, SD=.39), basic skills (M=4.10, SD=.58) and interpersonal skills (M=4.07, SD=.47). Knowing the skills that employer's demand from their hearing impaired employees, institutions can provide the appropriate training to prepare their hearing impaired graduates for future employment.

Minghat, A. D., Abdullah, S. A., Kamin, Y., Hamid, M. Z. A., & Zulkifli, M. F. M. (2015) examined ***"Interest and confidence of hearing-impaired students toward vocational education: A preliminary study".*** This preliminary study was conducted to examine hearing-impaired students regarding their interest and confidence toward vocational education. A sample of 127 hearing-impaired students in special vocational schools was randomly selected in this study. A set of questionnaires was designed as an instrument to collect empirical data for this study. The key result shows that the respondents were interested in skilled training but their confidence was at moderate level. The findings also show that there was no significant difference with regard to the students' interest in vocational education based on gender. However, there is a significant difference between males and females with regard to their confidence in embarking in vocational education. These empirical findings are critical in deciding the future training and career pathway for hearing-impaired students in Malaysia.

Bari, S., Yasin, M. H. M., & Yusof, M. M. (2013) did a study entitled ***"School-to-work for hearing impaired students".*** This research study has identified about the Adolescents with disabilities especially hearing impaired student and their family facing many challenges especially at critical transition periods in their lives. Such transition include moving from a middle school to a high school setting, moving a high school to an employment setting, entering a postsecondary education programme and deciding to live independently in the community. The purpose of this study is to determine the transition process from school to work among hearing impaired students in Malaysia. The main focus of this study was to indentify the level of the transition process from special education teachers, and deaf worker who come

from the transition programme. The data source is obtained from 200 of special education teacher and 60 deaf workers which is work from various sectors. Quantitative approaches will be used to analyze the finding. A set of questionnaire, was used as a research instrument. Taxonomy Transition Program Model by Kohler (1996) will be use to the teachers and "The Survey of Job Training for Hearing Impaired Youth" by Kendall G (2002) will be use to deaf worker questionnaire will be used as a quantitative data. The quantitative data was analyze using descriptive and inferential statistic and information from interview protocol and open ended question was analyzed inductively based cases and cross cases of emerging themes. Hence, the outcome of this study hopefully will be useful source and reference to enhance the transition programme from school to work among hearing impaired students.

Boutin, D. L., & Wilson, K. (2009) did a study entitled ***"An analysis of vocational rehabilitation services for consumers with hearing impairments who received college or university training".*** The purpose of this study was to determine the predictive ability of vocational rehabilitation services for deaf and hard of hearing consumers who received college and university training. The RSA-911 database for fiscal year 2004 was analyzed to evaluate the effectiveness of 21 services in leading to competitive employment. A model predicting competitive employment included job search assistance, job placement, maintenance, rehabilitation technology, transportation, information and referral services, and other services.

Belknap, P.J. , Korwin, K.A. , & Long, N.M. (1995) did a study entitled ***"Job coaching: A means to reduce unemployment and underemployment in the deaf community".*** In this study, it has been identified that there has been historically, vocational rehabilitation approaches to assisting deaf people to succeed in employment have been lacking. This contributes to unemployment and underemployment among the deaf community. This article discusses barriers to employment experienced by deaf people, the traditional role of vocational rehabilitation services, and service gaps related to job retention and advancement. A model for the provision of job coach services is provided that calls for the coach to be a member of a team providing routine ongoing services. Current and future efforts to develop coach training opportunities are described as well.

Yusof, M. M., Yasin, M. H. M., Hashim, S. H., & Itam, M. A. (2012) did a study entitled ***"Transition programme and barriers to participating in the employment sector among hearing impaired students in Malaysia".*** This research investigated perceptions of hearing-impaired students in identifying the effectiveness and experiences which facilitated their successful transition from secondary and post-secondary education into adult life and employment. These studies had indirectly identified barriers faced by hearing-impaired students during their transition from high school to community living as perceived by educators and employers. A total of 85 hearing-impaired employees are involved as respondents to answer the questionnaire and 10 individuals from various sectors will be identified as participants in the qualitative data. The findings indicated 55.3% agreed that the counselor/teacher helped in securing employment, and 74% agreed that school programs did not help with job placement. The study also showed that communication is the main factors that prevented hearing-impaired worker to participate in the employment sector. Other factors include level of education, personality, perceptions of the deaf and the employers.

Chui, S. H. J. (2008) did a study entitled ***"Vocational needs of young adults with hearing impairment".*** In this research, it is observed that people with hearing impairment experience difficulties in integrating into society, especially in finding and maintaining jobs. This study attempts to explore the work experiences of young adults with hearing impairment, and to derive from the findings the improvement of training and support service for better job prospects of people with hearing impairment in Hong Kong. A qualitative research was adopted. Ten participants aged from 22 to 35 were interviewed. They all graduated from two of the three skills centres of the Vocational Training Council. The ten participants were divided into two groups: the job seeking group and the employment group based on their employment status. Each of the group was consisted of five participants. Both the job seeking and the employment groups wanted to have employment. The job seeking group was passive in seeking jobs. The job seeking group was rather passive when they had communication barriers with people in the workplace.

Although the employment group also had encountered communication barriers in their workplace, they were keen to overcome the challenges. Support from the

employers and co-workers were the key factor leading to the employment success of the employment group. The findings of this pilot study have implications on the vocational training and placements for people with hearing impairment. Work habits and interpersonal skills should be further emphasized in the vocational training programmes. Teamwork skills should be included so that people with hearing impairment can work with others while they participate in projects. Support to employers and co-workers of people with hearing impairment should be provided so that they can provide accommodations in the workplace. Follow-up service should be provided by service providers so that people with hearing impairment are supported in seeking and maintaining their jobs for better job prospects and integrating into society.

2.2.3 Employability Skills for Students with Hearing Impairment

Navei, N., Akyem, S. Y., & Diabour, K. K. (2022) did a study entitled ***"Art education for learners with special educational needs: Case study of visual artefacts produced by hearing-impaired pupils of Tetteh Ocloo State School for the Deaf".*** From this study, it is evident that Formal education becomes most authentic, inclusive, and learner-centred when Art is at its forefront. The Arts provide learners with authentic learning experiences that engage their minds, hearts, hands, and entire bodies. The general relevance of Art education for learners with special educational needs has been variously and solidly argued by previous studies. However, much is not known about the creative artifacts of learners with special educational needs. The focus of this qualitative case study was to artistically appreciate selected visual artifacts produced by hearing-impaired pupils of Tetteh Ocloo State School for the Deaf located at Adjei-Kojo, a suburb of Accra in Ghana. Adopting triangulation of instruments (semi-structured interviews, field observation & photography), the study gathered in-depth data from sixteen purposively sampled respondents with findings analyzed using qualitative descriptive tenets. The study ascertained that the Creative Arts subject is dedicatedly taught in Tetteh Ocloo State School for the Deaf by Art specialist teachers. As a result, the study observed that the hearing-impaired primary pupils of Tetteh Ocloo State School for the Deaf were able to produce intriguing Visual artifacts (ranging from drawings/painting, clay work & paper craft). Aesthetic appreciation of some of the artifacts revealed that the works represent the oral

accounts of the pupils' worldview of salient experiences in their immediate social and physical environments. It is recommended that the Art specialist teachers of Tetteh Ocloo State School for the Deaf should continue to teach the Creative Arts subject with dedication as this would nurture and inculcate the needed creative, innovative, and inventive skills onto the pupils for responsible adulthood.

Bullis, M., & Watson, D. (1984) did a study entitled ***"Career Education of Hearing-Impaired Students: A Review".*** In this study, it is explored that a monograph reviews the many efforts that have been made in the fields of education and vocational rehabilitation to develop and refine career preparation services for hearing-impaired individuals. The following papers are included in the volume: "Career Education: A Literature Review," by Charlene Dwyer; "A Current Profile of Career Education Programs," by Sue Ouellette and Charlene Dwyer; "A Dilemma: Who and What to Teach in Career Education Programs?" by Michael Bullis; and "Where Do We Go from Here?" by Michael Bullis. A directory of career education curricula used in State schools and postsecondary education, which was compiled by Roger Beach, is appended to the monograph. (MN)

Punch, R., Creed, P. A., & Hyde, M. (2005) did a study entitled ***"Predicting career development in hard-of-hearing adolescents in Australia"***. This research reports on a study investigating the career development of hard-of-hearing high school students attending regular classes with itinerant teacher support. We compared 65 hard-of-hearing students with a matched group of normally hearing peers on measures of career maturity, career indecision, perceived career barriers, and three variables associated with social cognitive career theory career decision-making self-efficacy, outcome expectations, and goals. In addition, the predictors of career maturity and career indecision were tested in both groups. Results indicated that (a) the two groups did not differ on measures of career maturity, (b) the SCCT variables were less predictive of career behaviors for the hard-of-hearing students than for the normally hearing students, and (c) perceived career barriers related to hearing loss predicted lower scores on career maturity attitude for the hard-of-hearing students.

Avdeeva, A., Bagdasaryan, N., & Safonova, Y. (2019, July) did a study entitled ***"Way to Yourself: a Model of Professional Realization of Hearing Impaired***

Students". The study is devoted to topical issues of creative self-realization of young people with hearing impairment through their inclusion in the profession. Studying at the university is considered as the most important stage determining the career strategies of graduates with hearing impairment. According to the results of this study, a model of their professional implementation was built. The authors showed that the conceptual basis for modeling was: first, a systematic approach to the analysis of activities; second, the concept of disability as a socially constructed phenomenon. The main blocks of the model include motive formation, goals, activity programs, a decision block, and a subsystem of activity-important qualities. The social identity of graduates with hearing restriction is presented as a system-forming factor. Depending on social identity, constructive and non-constructive career direction of graduates is highlighted.

Schroedel, J. G., & Geyer, P. D. (2000) did a study entitled ***"Long-term career attainments of deaf and hard of hearing college graduates: Results from a 15-year follow-up survey".*** This research study reports the national longitudinal survey of 240 college graduates with hearing loss. Results confirm that economic benefits resulted from these alumni's postsecondary training. Most respondents were relatively successfully employed and satisfied with life. Over time, increasing numbers had completed higher degrees and secured white-collar positions. Between 1988 and 1998, men in the study sample made more consistent earnings gains than their female counterparts. Larger proportions of deaf alumni had earned advanced degrees and secured white-collar jobs than hard of hearing alumni. Deaf alumni also earned more. Results also showed that recipients of associate's degrees earned more than recipients of bachelor's degrees. Implications of the findings for secondary educators, vocational rehabilitation counselors, and postsecondary service providers are discussed. Recommendations are made on how to improve career decision making by deaf and hard of hearing adolescents, enrich the career potential of deaf and hard of hearing women, and increase the productivity of workers with hearing loss.

Schroedel, J. G. (1991) did a study entitled ***"Improving the career decisions of deaf seniors in residential and day high schools".*** From this research study, it is identified that Career development interventions can have positive effects on the career decisions that deaf seniors make before graduating from high school.

Interviews with 189 seniors from 16 residential and day high schools revealed their career decisions and their experiences with career development activities. School staff evaluated the seniors' career decisions, career decision-making skills, and probable post-high school placements. The results indicated that seniors who had vocational training were more knowledgeable about their vocational aptitudes than were seniors who had no vocational training. Seniors with vocational training were also more likely to have considered other careers prior to making career decisions. Seniors who had received career counseling were more knowledgeable than those who had not about the skills needed to enter their chosen careers and were more interested in their career choices. More importantly, the amount of interest in one's career choice was determined to be related to ratings of motivation, readiness, and prospects for completing the postsecondary placement. The implications of these results are discussed below for professionals in education and rehabilitation.

Zahari, M. S. M., Yusoff, N. M., Jamaluddin, M. R., Radzi, S. M., & Othman, Z. (2010) did a study entitled ***"The employability of the hearing impaired graduates in Malaysia hospitality industry".*** From this study, it is evident that there is an increasing awakening concern by the Malaysian government on the importance of giving career guidance and trainings for the young of disabled groups. The Ministry of Higher Education has introduced continuing skill-based programs for the young hearing impaired students with the intention to equip them for industry career including hospitality industry. This study empirically investigates the level of employability among the hearing impaired graduates in Malaysia hospitality industry. Using a self reported questionnaire among the hearing impaired graduates from the Polytechnic Johor Bahru, Malaysia and result revealed that the specialized hospitality programs attended explicitly developed graduates skill, confidence, interest and commitment with some at present directly working in the industry. Despite that, substantial numbers of graduates also claimed that they are rejected and excluded by the industry practitioners owing to their communication disability and physical condition. This situation has given several consequences, significant impact and implications not only to the disable students, graduates, hospitality institutions, industry and as well as the government.

2.2.4 Vocational Rehabilitation for Students with Hearing Impairment

Clark, C. (2007) did a study entitled ***"Connecting the Dots: A Successful Transition for Deaf Students from Vocational Education and Training to Employment".*** This study identifies and evaluates the pathways available from school to vocational education and training and to work, for students who are deaf or hard of hearing. Research involved interviews with seven young people from Victoria who had either just completed secondary school and were enrolling in a VET course, or had completed a course and were looking for work. The study found that only when they undertook apprenticeships and traineeships did students find employment related to their field, and that more emphasis needs to be placed on developing strategies to assist deaf students to overcome attitudinal barriers in the workplace.

DeCaro, J. J., Evans, L., & Dowaliby, F. J. (1982) did a study entitled ***"Advising deaf youth to train for various occupations: Attitudes of significant others".*** In this study, it is explored that the influence of significant others upon the deaf child's formulation of his/her concept of deafness is profound. The articulation of the attitudes of such persons toward the types of employment deaf people can perform is, therefore, important. An attitude instrument and research methodology were developed, validated and implemented with parents, teachers, house-parents and teachers' aides at a school for the deaf in England. Attitudes pertaining to advising equally qualified deaf and hearing persons to train for 14 different occupations were assessed. There were no significant differences in the expressed attitudes of parents, teachers, teachers' aides and house-parents.

Polansky, D. W. (1979) did a study entitled ***"A model summer employment program for deaf youth".*** In this study, it has been observed that there is much in the news these days about our educational system producing functionally illiterate graduates. While the deaf have shown as a group to have poor language, reading, and math skills, they must nevertheless compete with an increasing number of hearing students with the same problems, for a decreasing number of low skill jobs. The Vocational Exploration Program (VEP) was an eight week summer employment and education program which gave educators an opportunity to study the attitudes of employers and students in work situations, and some ideas on how to better prepare deaf high school students for the competition for jobs in the labor market.

Palmer, J. L., Garberoglio, C. L., Chan, S. W. H., Cawthon, S. W., & Sales, A. (2020) did a study entitled ***"Deaf People and Vocational Rehabilitation: Who Is Being Served?".*** From this study, it is identified that Vocational rehabilitation (VR) services are designed to support disabled people in their pursuit of employment goals. VR provides vocational assessment and evaluation, transition skills development, on-the-job training, career counseling, and postsecondary education and training to reduce labor force disparities. In 2017, VR agencies across the nation received 569,530 new applications and served 975,359 people, leading to 175,458 improved employment outcomes. One of those people who applied for VR or received services in 2017, 7.9% was deaf. This research brief provides insight into the characteristics of deaf people who have applied for or received services from VR agencies. The data can be used to inform recruitment efforts, identify gaps in populations being served, and better understand who is being served in the United States. Historically, vocational rehabilitation has sought ways to better serve deaf people by providing staff who are uniquely trained and qualified (e.g., rehabilitation counselors for the deaf, 34 CFR - 361.18) and building relationships with organizations and educational programs that specifically serve deaf people. Despite these efforts, deaf people continue to face significant barriers that contribute to education and employment gaps between deaf and hearing people. Two Statistics in this report are sourced from the VR case files for the 2017 program year (July 1, 2017 to June 30, 2018). It includes people who applied for services, people who were waitlisted, people with open cases, and people whose cases were closed during the period. These data mainly come from information shared by participants during the intake process.

Quigley, S. P. (1972) did a study entitled ***"The Vocational Rehabilitation of Deaf People".*** This study aims in the identification of the effectiveness of workshop on rehabilitation casework standards for the deaf was to provide an opportunity for specialized counselors to discuss common problems and possible solutions. A major outcome of the workshop was the establishment of a professional association, Professional Rehabilitation Workers with the Adult Deaf. The workshop was organized around six topics: (1) case finding and referral, (2) preliminary case survey, (3) case study, (4) vocational rehabilitation diagnosis, (5) planning goals and services, training and higher education, and (6) provision of services and counseling. Papers presented on each of these topics, with commentaries and discussion summaries, are

included in the report. Most of the workshop participants were rehabilitation counselors who specialized in work with deaf clients, and most of the State vocational rehabilitation agencies were represented. Appended are the bylaws of the professional association, counselor training programs, and a listing of workshop participants. The document is a reissue of the original report, as it continues to be in heavy demand as the main basic guide for effective vocational rehabilitation services to one of the most severely handicapped groups.

Watson, D., Adams, T., Fish, T., Latz, R., & Boone, S. (2008) did a study entitled ***"Model state plan for vocational rehabilitation services to persons who are deaf, deaf-blind, hard of hearing or late deafened".*** From this study, it has been explored that, since the early 70's, the field of deafness rehabilitation has benefited from a series of five editions of a "Model State Plan for Services to Persons who are Deaf or Hard of Hearing." These documents have laid the foundation for quality service delivery across the United States by presenting guidelines on how to initiate and provide services to deaf and hard of hearing persons. Unfortunately, the last Model State Plan was developed over ten years ago. Since that time, there have been many changes in the nation's rehabilitation services legislation, models of service delivery, and the needs of persons who are deaf or hard of hearing. In light of these changes, there is urgent need to develop a new Model State Plan Document to Guide Rehabilitation Services for Persons with Hearing Loss (MSP). This need has been endorsed by the Council of State Administrators of Vocational Rehabilitation (CSAVR) Subcommittee on Deafness as a key goal, leading to a fifth edition of the MSP which will be available for dissemination in 2008.

Dutta, A., Gervey, R., Chan, F., Chou, C. C., & Ditchman, N. (2008) did a study entitled ***"Vocational rehabilitation services and employment outcomes for people with disabilities: A United States study"***. From this study, it is examined that the effect of vocational rehabilitation services on employment outcomes of people with sensory/communicative, physical, and mental impairments in the United States. Methods in this study includes the sample frame includes 5,000 clients for each of the three disability groups whose cases were closed as either rehabilitated or not rehabilitated by state vocational rehabilitation agencies in the fiscal year 2005. The dependent variable is employment outcome. The predictor variables include a set of

personal history variables and vocational rehabilitation service variables. Results Sixty-two percent of the clients in this study were gainfully employed after receiving vocational rehabilitation services. Individuals with sensory/communicative impairments had the highest success rate (75%) compared to 56% for the physical impairments group and 55% for those with mental impairments. Logistic regression analyses identified job placement, on-the-job support, maintenance, and other services (e.g., medical care for acute conditions) as significant predictors of employment success across all impairment groups. In addition, diagnostic and treatment (D&T) services (odds ratio [OR] = 1.57; 95% CI: 1.35-1.82) and rehabilitation technology services (OR = 1.97, 95% CI: 1.67-2.33) were found to uniquely contribute to employment outcomes for the sensory impairments group as well as the physical impairments group (D&T services: OR = 1.31, 95% CI: 1.15-1.48; RT services: OR = 1.41, 95% CI: 1.13-1.75), but not the mental impairments group. Substantial counseling was associated with employment outcomes for the physical (OR = 1.16, 95% CI: 1.02-1.32) and mental impairments groups (OR = 1.18, 95% CI: 1.03-1.35). Miscellaneous training (OR = 1.31; 95% CI: 1.09-1.49) was specifically associated with employment outcomes of the mental impairments group. This study provides some empirical support documenting the association between vocational rehabilitation services and employment outcomes of people with disabilities.

Boutin., L. Daniel (2006) conducted a study on ***"Effectiveness of the state vocational rehabilitation program for consumers with hearing impairments."*** The purpose of the state federal vocational rehabilitation (VR) program is to assist consumers with disabilities to secure and maintain competitive employment. Consumers with hearing impairments have barriers to employment that are unique to the functional limitations imposed by disability and society. The purpose of this study was to examine the outcomes of the VR program for people with hearing loss. Specifically, the study explored the effectiveness of the VR program on consumers who are deaf and hard of hearing with regard to amount of public assistance, VR service delivery, type of occupation, earnings, and the number of hours on the job. Also, characteristics of consumers, such as previous collegiate experience and secondary disabilities, were examined in relation to outcomes. Significant differences were found indicating relationships between (a) public assistance, degree of hearing loss, and the reception of college and university training, (b) VR services and

competitive employment, (c) type of occupation and degree of hearing loss, (d) earnings, degree of hearing loss, and the reception of college and university training, (e) number of hours worked, degree of hearing loss, and the reception of college and university training, (f) previous collegiate experience and competitive employment, and (g) secondary disabilities and competitive employment.

National Association of the Deaf census industry found that people with hearing impairments were working in every. Despite receiving wages 25% below the national average, deaf workers were well represented across most occupations. Then in 1973, the Rehabilitation Act removed barriers to employment for people with disabilities within the federal government and its contractors (Lane et al., 1996). During the period following the Rehabilitation Act of 1973, deaf workers began seeking federal employment and jobs with large corporations who had federal contracts exceeding $10,000. **(Schein & Delk, 1974)**

The 1990 Americans with Disabilities Act (ADA) extended coverage of the Rehabilitation Act of 1973 into the private sector. With the passage of the ADA, deaf workers were protected in recruitment, hiring, promotion, termination, and compensation, among other issues in the work environment (Lane et al.). In addition, the ADA required telephone companies to provide relay services with local and long distance calls. Relay services enable people with any degree of hearing impairments to converse with people without hearing impairments, and vice versa. Finally, deaf and hard of hearing individuals had civil rights protection that enabled them to work in the environment of their choice. As the United States gradually moved from manufacturing to information processing and service industries, more jobs required a college education than in the past. As a result, employees are expected to have competencies in English, reading, mathematics, and computers. Deaf and hard of hearing individuals are finding that, despite legislation removing barriers to work, the minimum set of skills needed to secure employment is greater than it has been in the past. **(Herr, 1999; Lane et al.)**

A major disadvantage for secondary students with hearing impairments is the lack of preparedness for obtaining a job after high school. Overall, students with hearing impairments are behind their hearing peers in reading and mathematics

abilities. In addition, children who are hard of hearing tend to have greater difficulty with academic achievement than students who are deaf **(Marschark, 1997)**

Several reasons may explain why hard of hearing students are more at risk for underachievement. First, mild to moderate hearing loss may be more difficult to identify in children than deafness. Second, parents of children who are hard of hearing may be unaware that their children qualify for educational support services. Third, students with mild hearing loss may not accept support services if they identify with the hearing population (Marschark). Children with mild to moderate deafness may have barriers to education that are unique to the extent of the hearing loss. **(Allen, 1986)**

Some students who are deaf have their own barriers to academic success. Many deaf children do not even have a primary language when they begin school since parents may have encouraged inaccessible language models. Without a first language such as ASL, learning of English or reading becomes a major challenge for students. In addition, children with deafness may have difficulties with function words (e.g., of, but, by) and organizing words into categorical hierarchies (e.g., apple/fruit). Unfortunately, many teachers of the deaf within mainstreamed settings may not be aware of the different methods the deaf use to learn English since hearing the spoken word is not possible for the deaf students. Also complicating matters is that over the last few decades, deaf and hard of hearing students from ethnic minority backgrounds have steadily increased in the schools **(Schildroth, Rawlings, & Allen, 1991)**

Minority students who are deaf often have the unique barriers in which ASL and the language used in their home is unlike the English used in the schools. Lane et al. suggests that deaf students receive English instruction in their native language (i.e., ASL) so that deaf students have bilingual skills in order to secure employment in a hearing world. Perhaps the barriers to achievement experienced by students who are deaf contribute to their tendency to graduate from secondary schools with a third-grade reading level on average (Marschark). Language is a unique barrier to education for some people with severe to profound deafness. **(Lane et al., 1996)**

An important aspect of the transition beyond high school is the ability to plan and implement those plans throughout one's life course for the purpose of vocational success. The researcher compared the transition plans and actual experiences of deaf high school seniors with those of their hearing peers in regard to employment, postsecondary education, and independent living. In addition, the expectations of the students' parents were also studied. The researcher found that, during the final year of high school, both deaf and hearing students agreed that their transition plans were similar to the expectations of their parents. Once the transition occurred, the deaf group was more likely to deviate from their plans than the hearing group. **(Krumboltz, Mitchell, & Jones, 1976)**

The actual transitional experiences of the deaf students were inconsistent according to their plans. Similarly, the expectations of the parents of deaf students were inconsistent with the actual experiences of the deaf students. Put another way, hearing students are more likely than deaf students to implement their plans according to the expectations of their parents. Furthermore, Bullis et al. found that the greatest inconsistency of the deaf group was in regard to employment. The conclusion stated was that adolescents who are deaf either plan to work and then do not, or do not plan to work and then find work. (**Bullis, Davis, Bull, and Johnson, 1997)**

A National Longitudinal Transition Study (NLTS) was conducted to examine transitional experiences of hearing and deaf students 3-5 years out of high school. Although 85% of the deaf group had been employed at least once since leaving high school, only 44% of deaf participants were employed at the 5-year mark of the study. **(D'Amico & Blackorby, 1992)**

A research on the school-to-work experiences of deaf and hearing young adults was conducted. The researchers found that, overall, hearing adults (95% employed) were more likely to be employed than deaf adults (66% employed). When controlling for type of secondary school (i.e., residential, mainstreamed), mainstreamed deaf women (83%) had higher levels of employment than mainstreamed deaf males (70%), as well as residential deaf males (67%) and females. A potential benefit for deaf students in the mainstreamed school is that students are

closer to family supports and networks that could help in locating work. **(Schildroth et al., 1991)**

In a longitudinal study on the career attainments of 57 intellectually gifted deaf and hard of hearing adults, as many as 30% of participants were unemployed. The results of these studies are reflective of a deaf and hard of hearing population that is behind their hearing peers in the workforce. **(Vernon & La Falce Landers, 1993)**

The legislative origin of the State Federal Vocational Rehabilitation (VR) program is the Smith-Fess Act of 1920, which authorized vocational and guidance services for people with disabilities. Since then, millions of people with disabilities have received comprehensive vocational services to assist them to enter or return to work. The 1973 Rehabilitation Act was responsible for the creation of the Rehabilitation Services Administration (RSA), a federal agency within the Department of Education that, among other things, establishes funding for VR agencies in each state and some territories of the United States (Lane et al., 1996). Another mandate of the 1973 legislation was to establish a priority for VR services for people with severe or significant disabilities (Jenkins et al.). The RSA defines significant disability as an individual who (a) has a physical or mental impairment that limits functioning, (b) is expected to require an extended amount of vocational rehabilitation, and (c) has a disability from a pre-selected list. **(Jenkins et al., 1992; Spitznagel, 2002)**

2.3.0 Conclusion

From reviews of previous literature, it may be concluded that, vocational rehabilitation programme and VET has greater impacts on the lives of the persons with hearing impairment. Training in such skills is important for them to live an independent and successful life altogether; by being employed and lead a dignified and meaningful; productive life.

The methodology used for the present study is added in the following chapter.

CHAPTER III

METHODOLOGY

"Methodology is applied ideology." - MASON COOLEY

3.0.0 Introduction

The purpose of this chapter is to explain in detail the research methods implemented for the present study, research approach and the design of the study. The chapter then goes on to discuss the sample size and the sampling strategy applied by the researcher; and the data analysis methods which have been used. It concludes with a brief discussion on the ethical considerations posed by the research methodology as well as limitations encountered during the research.

When we discuss of research methodology we not only talk of research methods but also consider the logic behind the methods we use in the context of our study and explain why we are not using others so that research results are capable of being evaluated either by the researcher himself or by others **(Kothari C.R., 2004)**

Research Methodology is a way to find out the result of given problem on a specific matter or problem that is also referred as research problem. In Methodology, researcher uses different criteria for solving / searching the given research problem. Different sources use different type of methods for solving the problem. If we think about the word Methodology, it is the way of searching or solving the research problem. **(Industrial Research Institute, 2010)**

Research Design is the fundamental element of any research. The following aspects have been discussed which are concerned with the design of the present study entitled **"Strategies to Create Awareness about Vocational Skills among Students with Hearing Impairment"** specifically under the following headings:

3.1.0 Area of the Study
3.2.0 Selection of Sample for Study
3.3.0 Variables of the Study
3.4.0 Design of the Study
3.5.0 Construction of the tool

3.6.0 Details of the Intervention Package

3.7.0 Evaluation of the Efficacy of Intervention Package

3.8.0 Scoring Procedure

3.9.0 Standardization of the tool

3.10.0 Data Collection

3.11.0 Phases of the Study

3.12.0 Conduct of the Study

3.13.0 Implementation of the Study

3.14.0 Data Analysis

3.15.0 Conclusion

3.1.0 Area of the Study

The selection of samples for the study was taken from two distinct schools namely:

- "Holy Cross Service Society, Trichy"
- "T.E.L.C Middle School, Coimbatore," Tamilnadu

3.2.0 Selection of Sample for Study

Selection of samples is one of the most important aspects in any research study. Sample is considered as the true representative of the population. Utmost care is needed in selecting the right sample for the study (Mani, 2002).

Purposive sampling can ensure proper illustration of a cross section of various sections of a universe without actual stratification of the persons handling the operations have full knowledge of the composition of the universe (Sharma, 2004).

Since the present investigation focused on the Hearing Impaired students in the age group 13-18 years and the sample were residing at various regions in Coimbatore and Trichy respectively, purposive sampling method was adopted for selecting the sample. The sample size of the present study consisted of 30 Hearing Impaired students. Among them 15 are boys and 15 are girls. The Hard of Hearing and Deaf were the only criteria which were followed for selection of samples.

The samples selected are illustrated in the following Table 3.2.1

Table 3.2.1 Gender wise Distribution of the Sample

S.No.	Name of the School	No. of Students		
		Boys	Girls	Total
1.	Holy Cross Service Society, Trichy	11	09	20
2.	T.E.L.C Middle School, Coimbatore	04	06	10

3.3.0 Variables of the Study

Selection of Variable is an important aspect in research. Variables are said to be the characteristics of the sample. It varies from group to group, person to person, or even within one person over time. Mainly, the variables are classified into Dependent and Independent Variable. The Independent Variable is the variable that the experimenter manipulates or changes in his or her attempt to ascertain their relationship to observed phenomena. The Dependent Variable is the variable being tested and measured in an experiment.

A good research study depends on how effectively the variables are selected. The types of variables also decide the nature of analysis. The research should contain information on the nature of analysis. The research should contain information on the nature and number of Independent Variables and Dependent Variables used in the study. **(Mani, 2002)**

The selection of a proper variable is an important ingredient of a good research and so the variables selected for the present study are listed below:

Table 3.3.1 Variables and Their Levels -

Variables	Levels
Independent Variables	
Locality	Rural
	Urban
Gender	Boys
	Girls
Grade	VIII - X
	XI - XII
Age	14 - 16
	17 - 18
Mode of Communication	Sign Language
	Sign Language and Oral
Residential Status	Hostelites
	Day Scholars
DEPENDENT VARIABLE	
Strategies Creating Awareness about Vocational Opportunities among Students with Hearing Impairment	Knowledge on Vocational Opportunities
	Awareness on Criterion Requirements for Selection of Vocational Courses
	Awareness on Abilities and Skills for Vocational Training Courses
	Scope of Vocational Training Courses

3.4.0 Design of the Study

The objective of the study aims to create awareness about the numerous vocational opportunities available for the Students with Hearing Impairment. Quasi-Experimental method of study was adopted. The layout of the design carried out in the study is given below. In this study, the researcher selected 30 samples from two special schools. In this study, the researcher identified the Areas of Interest, Skills and Talents of the Students with Hearing Impairment typically for each student individually. Next to these findings, the Professionalism and Career recourses related to those specific skills possessed by the students were duly discussed, instructed and associated eventually. Sensing the need for guidance and moral support; intervention

was given to create awareness about the vocational choices available. Along with which, live exposure to the accessibility of the sources were taught and trained.

Chart I - Design of the Study

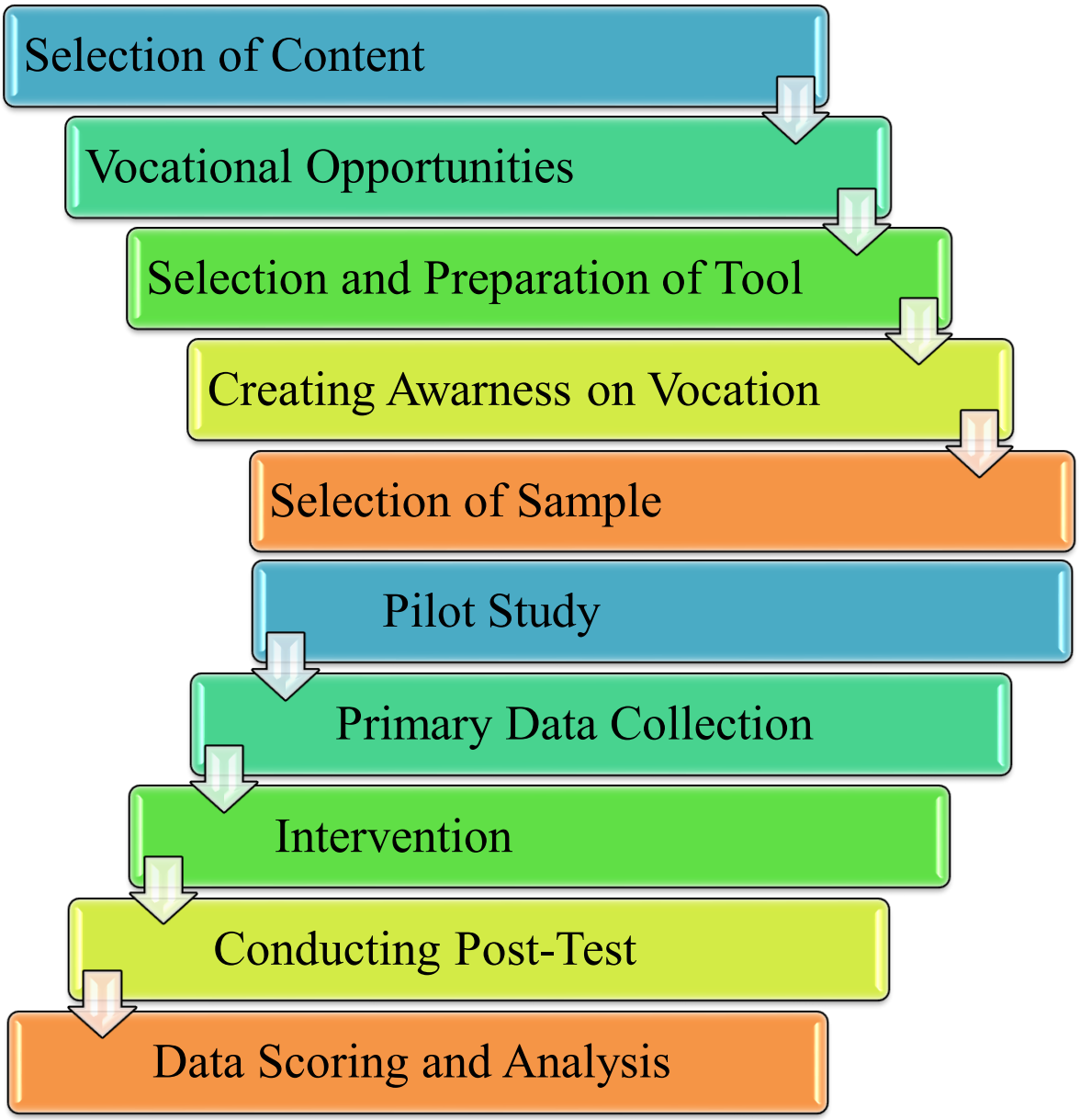

Figure 3.4.1 Flowchart illustration of the steps involved in the study

3.5.0 Construction of the Tool

The tool used in this study **"Strategies to create awareness about Vocational Opportunities among Students with Hearing Impairment"** was made

by the researcher under guidance of the research guide to collect the primary data, conducting pre-test, providing intervention and conducting post-test.

In Section 'A', the "Interview Schedule" used in the study, consists of three consecutive sections; first part was to collect the demographic data and the second part; to collect data regarding the particular students' existing knowledge and awareness about vocational opportunities available for Students with Hearing Impairment.

In Section 'B', a data collection tool was developed under the guidance of the research guide and used by the researcher to collect the data consisted with four consecutive domains related to awareness about vocational opportunities among Students with Hearing Impairment. Each of the domains contains 15 sub-topics with a two scale rating to collect the response from the students. The tool was used to collect both pre-test and post-test responses regarding awareness on vocational opportunities among the hearing impaired students.

3.6.0 Details of the Intervention Package

The researcher made an intervention package in a booklet format; regarding "Intervention Package for Creating Awareness about the Vocational Opportunities among Students with Hearing Impairment" consisting of ten headings. The intervention package was used to provide the primary knowledge about the various employment opportunities and the pre-requisite skills that are required for the hearing impaired students. Each of the heading consists of simple illustrations aimed in making the students understand the numerous choices easily and to develop their mastery over the pre-requisite skills for the particular employment opportunity.

3.6.1 Materials Used for Intervention

The researcher used the Intervention Package booklet, web videos, oral instructions and relevant website links sourcing all the necessary updates and news regarding the numerous vocational opportunities available for the hearing impaired students.

Chart II - Details of the Intervention Package

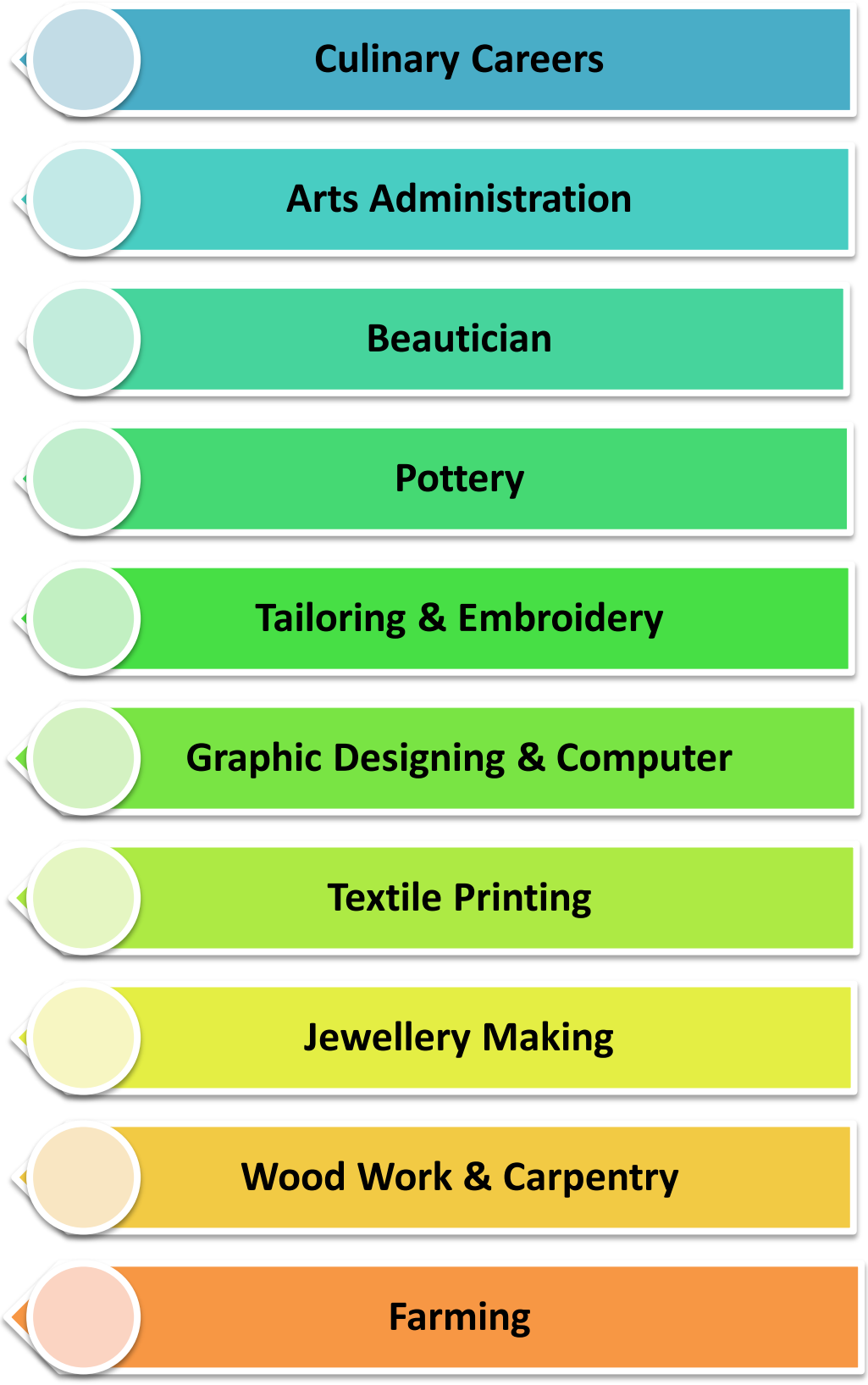

Figure 3.6.1 The Intervention Package

3.7.0 Pilot Study (Evaluation of the Efficacy of Intervention Package)

The intervention package was developed and an online survey - Pilot Study was done among ten faculty members of the department to evaluate it by using 'Google Form'. A two-point rating scale was evolved to assess the efficacy of the same. (Appendix -)

3.8.0 Scoring Procedure

Table 3.8.1 Scoring Procedure of the Evaluation Tool

Divisions	No. of statements	Scores		Total
		Correct response	Incorrect response	
Knowledge on Vocational Opportunities	15	1	0	15
Awareness on Criterion Requirements for Selection of Vocational Courses	15	1	0	15
Awareness on Abilities and Skills for Vocational Training Courses	15	1	0	15
Scope of Vocational Training Courses	15	1	0	15
Total	60	5	0	60

The evaluation consists of 60 statements related to Strategies Creating Awareness about Vocational Opportunities among Students with Hearing Impairment and the detail of scores for one correct response is give in the table above. Thus, the total evaluation tool is for 60 marks (i.e.) 15 marks for Knowledge on Vocational Opportunities, 15 marks for Awareness on Criterion Requirements for Selection of Vocational Courses, 15 marks for Awareness on Abilities and Skills for Vocational Training Courses and 15 marks for Scope of Vocational Training Courses. This scoring method was used for both pre-test and post-test within the study.

3.9.0 Standardization of the Tool:

The modified tool was further scrutinized by expert's committee of Special Educators, General Teachers, Language Teachers (English) and Professors of The

Department of Special Education. The tool was finalized based on their suggestions and hence the tool is considered to be valid for a large sample of students. Also, the tool was found to be reliable to be administered to the whole group of samples. The reliability of the Cronbach Alpha is 0.736

3.10.0 Data Collection

The Hearing Impaired Students were selected by Purposive Sampling method. Interview and Survey method was followed to collect the data. After selecting the samples for the present study, the researcher personally visited the special and inclusive schools respectively and came across the hearing impaired students individually.

3.11.0 Phases of the Study

The study was carried in the following phases -

Phase 1: Identifying the Hearing Impaired students enrolled in Higher Education

General information regarding the primary data collection is given

Phase 2: In this step, an effective rapport was established with the hearing impaired students and their personal data was collected which includes the details about their family and education

Phase 3: In this stage, the pre-test data collection was done among all the hearing impaired students by the researcher

Phase 4: Intervention was given by using the package after conducting pre-test for a period of about 60 days

Phase 5: Post-test was conducted and data was collected from the hearing impaired students' in-order to assess their knowledge, awareness and performance after the intervention

Phase 6: The collected data for the present study was statistically analyzed to identify the effectiveness of the intervention given among the hearing impaired students

3.12.0 Conduct of the Study

After the identification of the samples, background information was collected, and pretest was conducted to assess the current level knowledge and awareness about the external support, work readiness and about the various vocational opportunities available for the hearing impaired students. Intervention was provided by using the Intervention Package booklet, web videos, oral instructions and relevant website links sourcing all the necessary updates and news regarding the numerous vocational opportunities available for the hearing impaired students. The researcher explained each statement to the samples one by one. The intervention was given for a period of 60 days. After the pre-test was conducted among the students to collect the data, the same tool was used in post-test. The result was analyzed both qualitative and quantitatively after gathering the data to recognize the effectiveness of intervention package regarding knowledge and awareness about the external support, work readiness and about the various vocational opportunities available for the hearing impaired students.

3.13.0 Implementation of the Study

The researcher analyzed the employment and productivity status of the hearing impaired students in the society and their choices of career post schooling which were found to be less effective and quite trivial when compared to the aspects of a successful and independent living standard of these special students. With due guidance of various specialists in the special education field; the researcher identified that the major setback causing such a scenario owes to the lack of awareness about the numerous vocational opportunities that are available for the Students with Hearing Impairment among the special needs students respectively. Stepping ahead, the researcher designed an intervention package that was used to create awareness and ideology among the hearing impaired students with regards to the possible and recommended employment options and the work readiness requirements specifically. The researcher selected four major components under this notion and they are:

- Identifying Areas of Interest, Skills and Talents of the Students with Hearing Impairment
- Professionalism and Career recourses related to the specific skills possessed

- ♠ Intervention to create awareness
- ♠ Exposure to the accessibility of the sources

3.14.0 Data Analysis

Statistical technique used in the present study for analyzing the data is given below

Formula to get the pre-test and post-test Mean Scores: $\overline{X} = \frac{\sum x}{n}$

In order to find out the significant difference between Pre-test and Post-test mean scores on components of Strategies creating awareness about vocational opportunities among hearing impaired students; 't' test was used

To study the effectiveness of intervention with respect to the respective Pre-test and Post-test of Locality, Gender, Grade, Age, Mode of Communication and Residential Status on the awareness level about vocational opportunities; Paired t-test was used *(where d: difference per paired value and n: number of samples)*

Formula for Paired t-test

$$t = \frac{\sum d}{\sqrt{\frac{n(\sum d^2)-(\sum d)^2}{n-1}}}$$

3.15.0 Conclusion

In this chapter, the methodology used to conduct the study, selection of the samples, selection of the variables, domains, construction of the tool used, details of intervention package and it evaluation, and the statistics used to analyze the data have been described. The analysis and interpretation of the gathered data are presented in the following chapter.

CHAPTER IV

ANALYSIS AND INTERPRETATION

4.0.0 Introduction

Analysis and Interpretation is the most prominent part of a research study. It refers to the process by which the researcher tries to present answers to the questions that arose during the study. The data which are collected were analyzed and summarized with statistical treatment that helps to understand it easily. The statement of problem mentioned in chapter one; the objectives of the study; questions; concise data and salient results presented with appropriate tables, figures or other forms are recorded in this chapter. The tables and figures were carefully selected for presenting the data.

4.1.0 Purpose

The purpose of analysis and interpretation is to specify the methods used to analyze and summarize the collected data in such a way that they provide logical and clear answers to the research questions of the study. The researcher presented and aligned the data based on the philosophical approaches to the research problem. Finally, a research design was proposed and justified; including multiple research methods and incorporating different methodological approaches.

SECTION A - Quantitative Analysis

The analysis of the study on **"Strategies to Create Awareness about Vocational Opportunities among Students with Hearing Impairment"** is discussed under the following headings:

4.2.0 Background Information of the Selected Samples

4.3.0 Comparison of Pre-test and Post-test scores with respect to the different Dependent Variables

4.4.0 Comparison of Pre-test and Post-test scores in relation to different Independent Variables

4.2.0 Background Information of the Selected Samples

Background information provides the reader with the essential context needed to understand the research problem.

The background information of the selected samples was collected based on their locality, age, gender, grade, mode of communication and their residential status. Further, information was gathered to find out the level of knowledge and awareness related to the various vocational opportunities available for the Hearing Impaired students in the selected samples. The background details and their awareness about career choices related information are discussed under the following headings. It also helps in ensuring the originality and relevance of the research problem. The background information of the study provides context to the information that researcher is discussing in paper. Also, the background information of the study generates the reader's interest in the research question and helps them to understand why the study is important in the researcher's perspective.

a. Personal details of the Students with Hearing Impairment
b. Details of Medium of Instruction
c. Details of Awareness on Vocational Opportunities

All the collected details are presented below in table and chart forms respectively with appropriate descriptions.

a. Personal details of the Students with Hearing Impairment

Collecting data allows a researcher to store and analyze important information about the existing and potential samples. Collecting this information can also save their time by building a database of the selected samples for future interpretations and reference. These data can be used for various research based purposes. This can help in making comparisons between the components and categories individually and specifically if the need be.

The personal details of the hearing impaired students are collected and recorded on the basis of Locality, Age, Grade, Gender and Mode of Communication precisely.

i. Locality

The following table 4.2.1 represents the Locality wise Distribution of the selected Hearing Impaired students

Table 4.2.1 Locality wise Distribution of the selected Hearing Impaired students

Particular	Category	No. of samples	Percentage
Locality	Urban	10	33
	Rural	20	67

It can be discussed from the above Table 4.2.1 that considering the Locality wise distribution of the selected Hearing Impaired students, it is observed that 33% of them belong to the urban area while 67% of them from rural area and a pictorial representation is provided with the following Figure 4.2.1

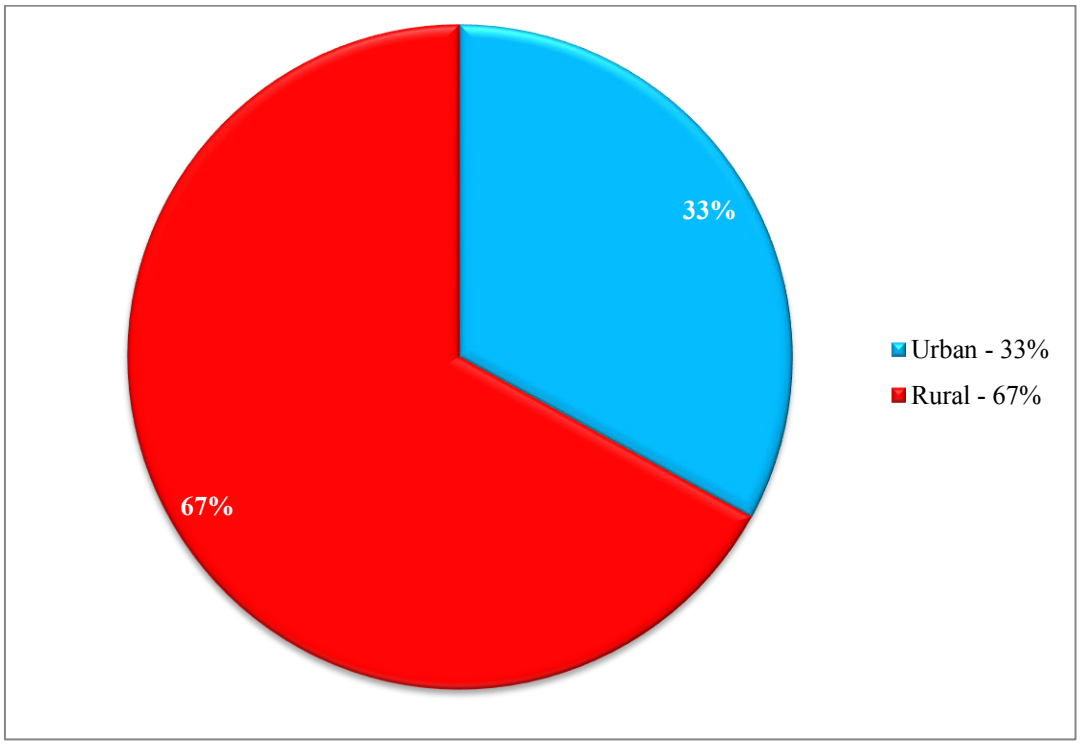

Figure 4.2.1 Locality wise distributions of the selected samples

ii. Age

The following table 4.2.2 represents the Age Group wise Distribution of the selected Hearing Impaired students

Table 4.2.2 Age Group wise Distribution of the selected Hearing Impaired students

Particular	Category	No. of Samples	Percentage
Age Group	14-16	16	53
	17-18	14	47

It can be discussed from the above Table 4.2.2 that while analyzing the age group distribution of the selected Hearing Impaired students; it is identified that 53% of them are from the age group 14-16 while 47% of them belong to the age group 17-18 respectively and a pictorial representation is provided with the following Figure 4.2.2

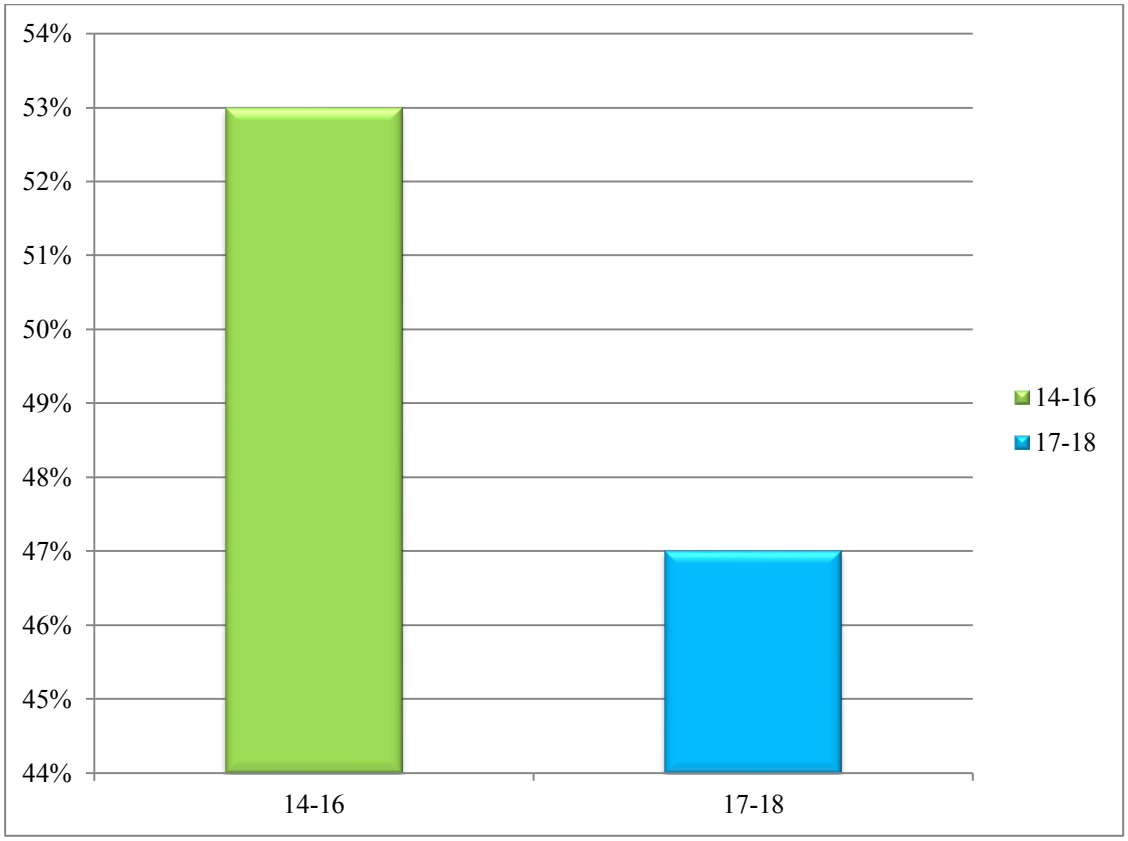

Figure 4.2.2 Age Group wise distributions of the selected samples

iii. Grade

The following table 4.2.3 represents the Grade wise Distribution of the selected Hearing Impaired students

Table 4.2.3 Grade wise Distribution of the selected Hearing Impaired students

Particular	Category	No. of Samples	Percentage
Grade	VIII - X	16	53
	XI - XII	14	47

It can be discussed from the above Table 4.2.3 that considering the grade wise distribution of the selected samples, it is found that 53% of them are in VIII - X level while 47% of them are from XI - XII and a pictorial representation is provided with the following Figure 4.2.3

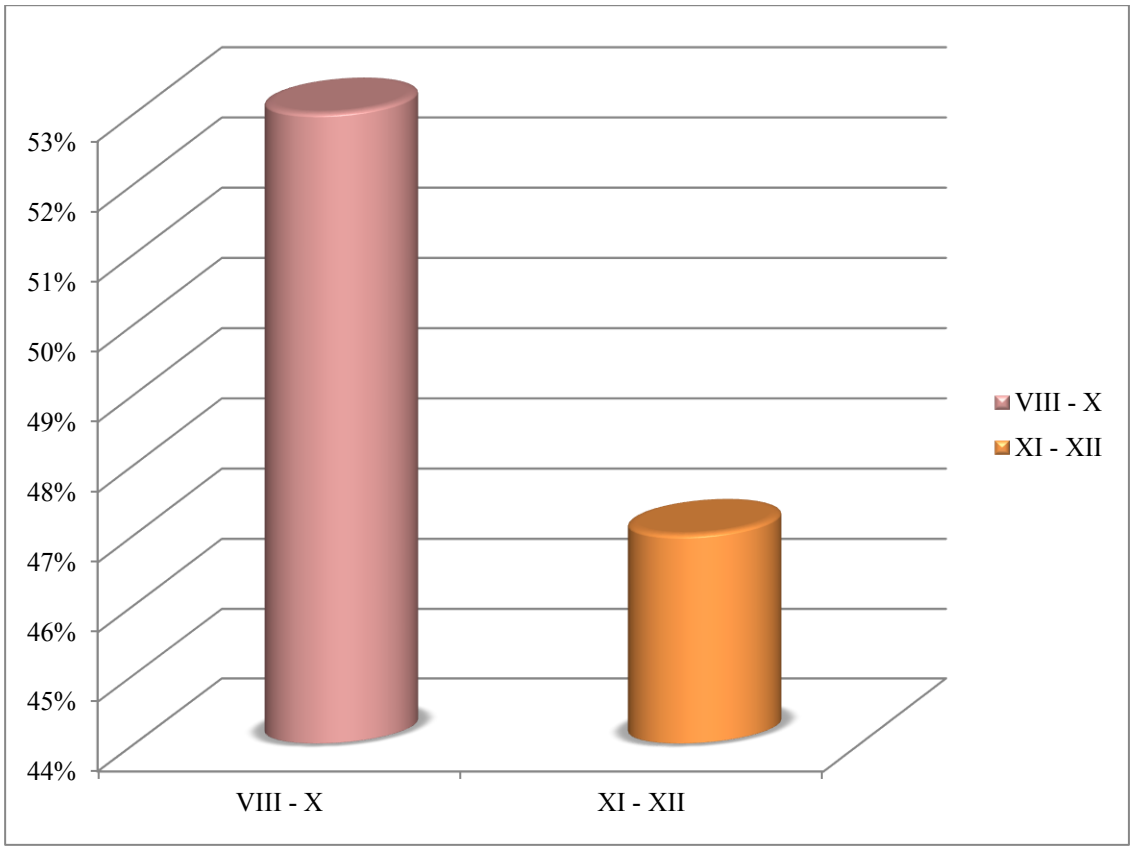

Figure 4.2.3 Grade wise distributions of the selected samples

iv. Gender

The following table 4.2.4 represents the Gender wise Distribution of the selected Hearing Impaired students

Table 4.2.4 Gender wise distribution of the selected Hearing Impaired students

Particular	Category	No. Of samples	Percentage
Gender	Male	15	50
	Female	15	50

It can be discussed from the above Table 4.2.4 that from the above table, it is evident that 15% of the Hearing Impaired students are Male; equally to the 50% of female and a pictorial representation is provided with the following Figure 4.2.4

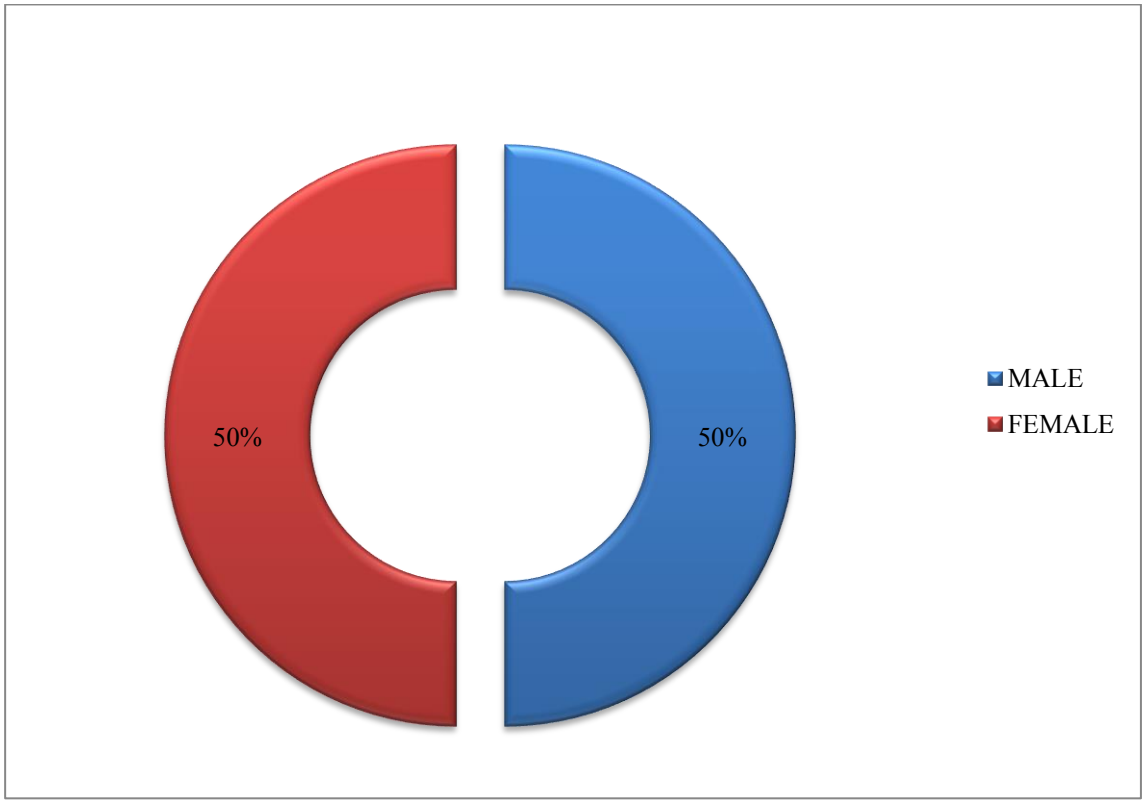

Figure 4.2.4 Gender wise distributions of the selected samples

v. Mode of Communication

The following table 4.2.5 represents the Mode of Communication wise Distribution of the selected Hearing Impaired students

Table 4.2.5 Mode of Communication specific Distribution of the selected Hearing Impaired students

Particular	Category	No. of samples	Percentage
Mode of Communication	Sign Language & Oral	12	40
	Sign Language	18	60

It can be discussed from the above Table 4.2.5 that 40% of the Hearing Impaired students are practicing Sign Language & Oral mode of communication whereas 60% of them are following only Sign Language as their mode of communication and a pictorial representation is provided with the following Figure 4.2.5

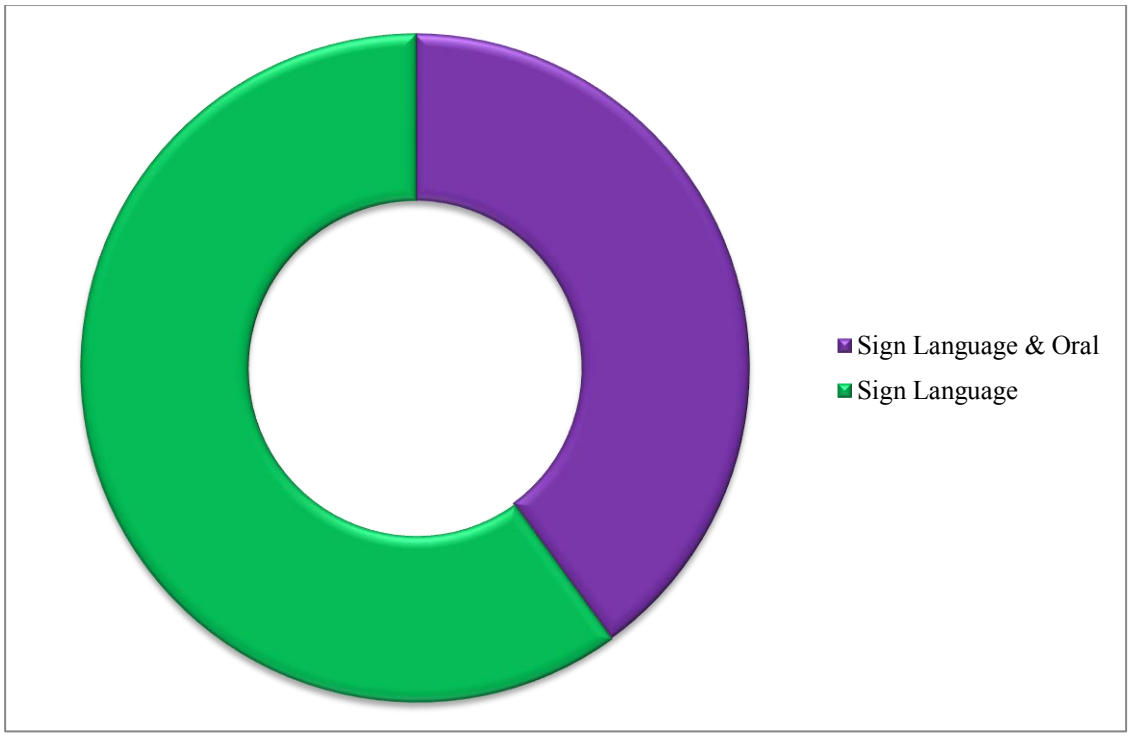

Figure 4.2.5 Mode of Communication wise distributions of the selected samples

vi. Residential Status

The following table 4.2.6 represents the Residential Status wise Distribution of the selected Hearing Impaired student

Table 4.2.6 Residential Status specific Distribution of the selected Hearing Impaired students

Particular	Category	No. of Samples	Percentage
Residential Status	Day Scholar	10	33
	Hostelites	20	67

It can be discussed from the above Table 4.2.6 that considering the Residential Status wise distribution of the selected Hearing Impaired students, it is observed that 33% of them are Day Scholars while 67% of them are Hostelites and a pictorial representation is provided with the following Figure 4.2.6

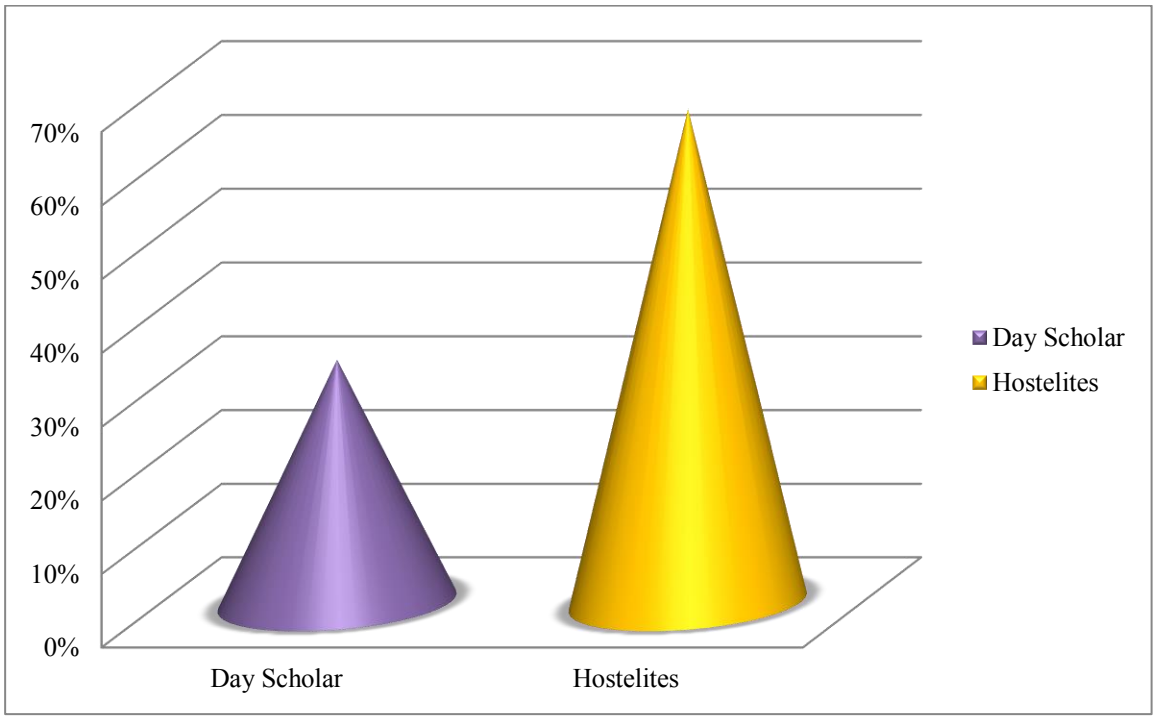

Figure 4.2.6 Residential Status wise distributions of the selected samples

Section B- Qualitative Analysis

4.3.0 Comparison of Pre-Test and Post-Test Scores with Respect to the Different Dependent Variables

In the present study, Pre-test and Post-test was conducted on Awareness level under four components namely Knowledge on Vocational Opportunities, Awareness on Criterion Requirements for Selection of Vocational Courses, Awareness on Abilities and Skills for Vocational Training Courses and Scope of Vocational Training Courses; which helped the researcher to find out the Awareness level about the Vocational Opportunities among Students with Hearing Impairment**.**

4.3.1 Comparison of the Overall Pre-test and Post-test Scores of the selected sample with respect to creating Awareness about Vocational Opportunities among Students with Hearing Impairment:

Performance Scores in Pre-test and Post-test was analyzed and the results are given in the following Table 4.3.1

Table 4.3.1 Comparison of Overall Pre-Test and Post-Test Scores

Variable	Df	N	Testing	Mean	SD	t-value
Awareness on Vocational Opportunities among Students with Hearing Impairment	28	30	Pre-Test	19.60	2.8720	0.071*
			Post-Test	39.40	3.3998	

****Significance at 0.01**

From the table 4.3.1, it is evident that the ***t***-value in comparing the average Pre-test and Post-test scores for the components of Awareness is 0.071 with df = 28 which is highly significant at 0.01 level. It indicates that the mean scores on the components of Awareness before and after the intervention differed significantly. It means that the Students with Hearing Impairment secured higher scores in the Post-test than the Pre-test. In the light of this, the null hypothesis which stated that ***"There is no significant difference in the mean scores of Overall Pre-test and Post-test on Awareness about Vocational Opportunities among Students with Hearing Impairment"*** **is rejected.** Hence, it is inferred that the strategies creating awareness

about the vocational opportunities available for the hearing impaired students were much effective.

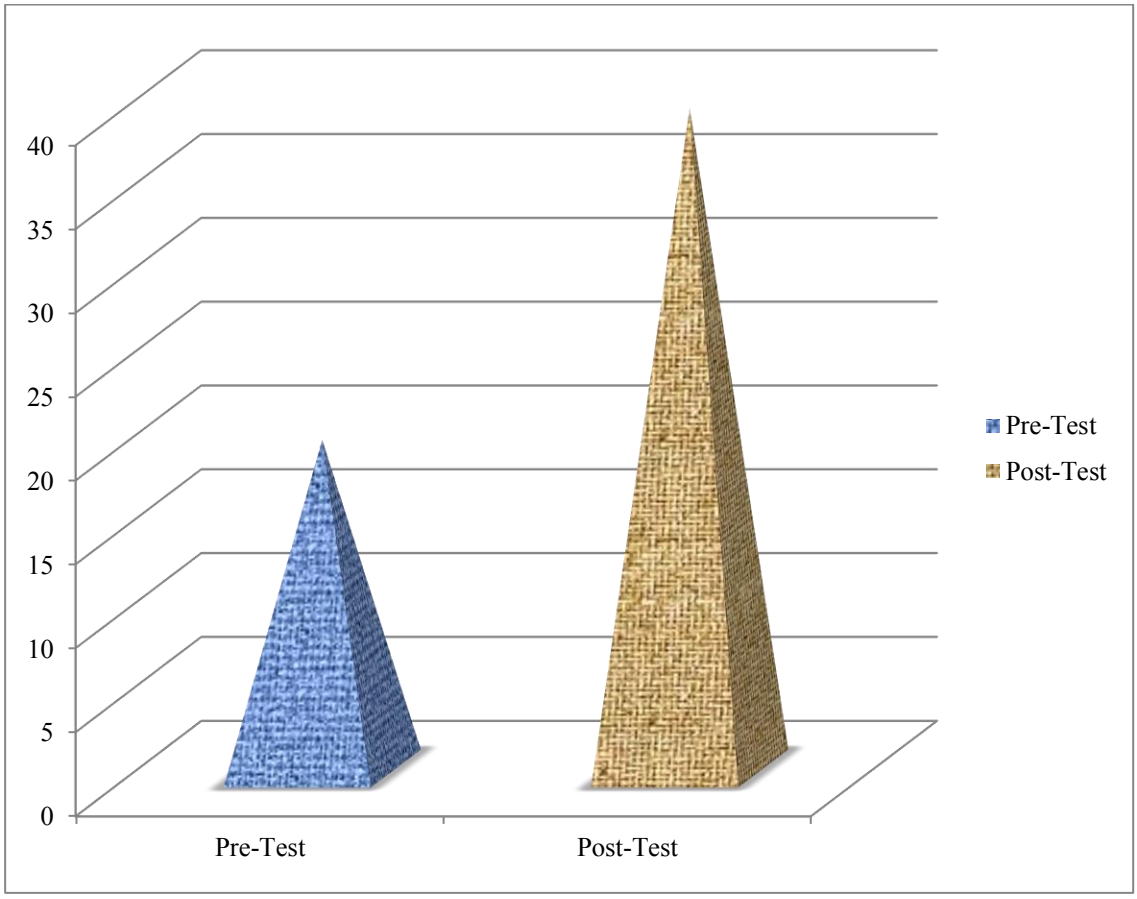

Figure 4.3.1 Comparison of Overall Pre-test and Post-test Scores

4.3.2 Comparison of Pre-test and Post-test scores with respect to Knowledge on Vocational Opportunities for students with hearing impairment:

Performance Scores in Pre-test and Post-test was analyzed and the results are given in the following Table 4.3.2

Table 4.3.2 Comparison of Pre-test and Post-test scores with respect to Knowledge on Vocational Opportunities for students with hearing impairment

Variable	df	N	Testing	Mean	SD	t-value
Knowledge on Vocational Opportunities	28	30	Pre-test	4.46	1.479	0.002**
			Post-test	8.86	1.942	

****Significance at 0.01**

From the table 4.3.2, it is evident that the ***t***-value in comparing the Pre-test and Post-test Scores for Knowledge on Vocational Opportunities is 0.002** with df = 28 which is significant at 0.01 level. It indicates that the mean scores on the component Knowledge on Vocational Opportunities before and after intervention differed significantly. It means that the Students with Hearing Impairment secured higher scores in the Post-test than the Pre-test. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Pre-test and Post-test scores with respect to Knowledge on Vocational Opportunities"*** **is rejected.** Hence, it is inferred that Knowledge on Vocational Opportunities were found to be effective in creating awareness on vocational opportunities.

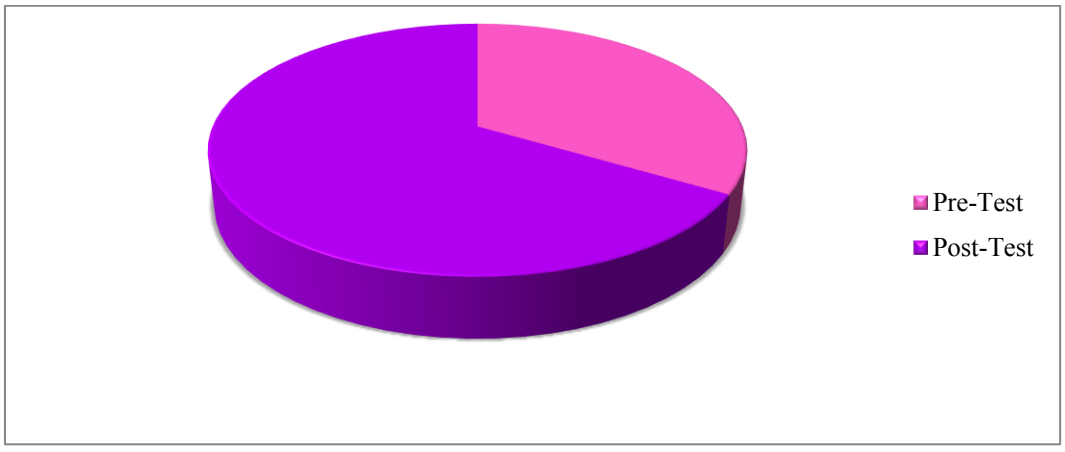

Figure 4.3.2 Comparison of Pre-test and Post-test scores with respect to Knowledge on Vocational Opportunities

4.3.3 Comparison of Pre-test and Post-test scores with respect to Awareness on Criterion Requirements for Selection of Vocational Courses for students with hearing impairment:

Performance Scores in Pre-test and Post-test was analyzed and the results are given in the following Table 4.3.3

Table 4.3.3 Comparison of Pre-test and Post-test scores with respect to Awareness on Criterion Requirements for Selection of Vocational Courses for students with hearing impairment

Variable	df	N	Testing	Mean	SD	t-value
Awareness on Criterion Requirements for Selection of Vocational Courses	28	30	Pre-test	4.83	2.182	0.001**
			Post-test	9.83	2.0692	

****Significance at 0.01**

From the table 4.3.3, it is evident that the ***t***-value in comparing the Pre-test and Post-test Scores for Awareness on Criterion Requirements for Selection of Vocational Courses is 0.001** with df = 28 which is significant at 0.01 level. It indicates that the mean scores on the component Awareness on Criterion Requirements for Selection of Vocational Courses before and after intervention differed significantly. It means that the Students with Hearing Impairment secured higher scores in the Post-test than the Pre-test. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Pre-test and Post-test scores with respect to Awareness on Criterion Requirements for Selection of Vocational Courses"*** **is rejected.** Hence, it is inferred that Awareness on Criterion Requirements for Selection of Vocational Courses were found to be effective in creating awareness on vocational opportunities.

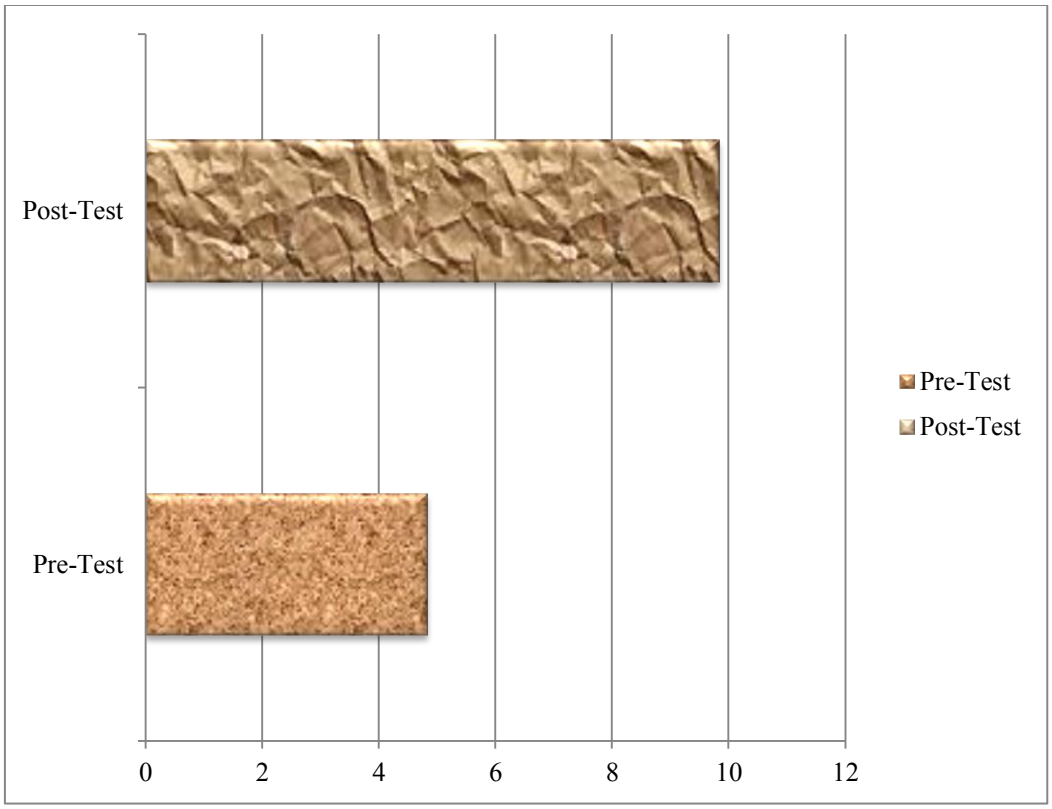

Figure 4.3.3 Comparison of Pre-test and Post-test scores with respect to Awareness on Criterion Requirements for Selection of Vocational Courses

4.3.4 Comparison of Pre-test and Post-test scores with respect to Awareness on Abilities and Skills for Vocational Training Courses for students with hearing impairment:

Performance Scores in Pre-test and Post-test was analyzed and the results are given in the following Table 4.3.4

Table 4.3.4 Comparison of Pre-test and Post-test scores with respect to Awareness on Abilities and Skills for Vocational Training Courses for students with hearing impairment

Variable	df	N	Testing	Mean	SD	t-value
Awareness on Abilities and Skills for Vocational Training Courses	28	30	Pre-test	5.26	1.4368	0.13
			Post-test	10.23	2.0625	

****Significance at 0.01**

From the table 4.3.4, it is evident that the ***t***-value in comparing the Pre-test and Post-test Scores for Awareness on Abilities and Skills for Vocational Training Courses is 0.13 with df = 28 which is significant at 0.01 level. It indicates that the mean scores on the component Awareness on Abilities and Skills for Vocational Training Courses before and after intervention differed significantly. It means that the Students with Hearing Impairment secured higher scores in the Post-test than the Pre-test. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Pre-test and Post-test scores with respect to Awareness on Abilities and Skills for Vocational Training Courses"*** **is rejected.** Hence, it is inferred that Awareness on Abilities and Skills for Vocational Training Courses were found to be effective in creating awareness on vocational opportunities.

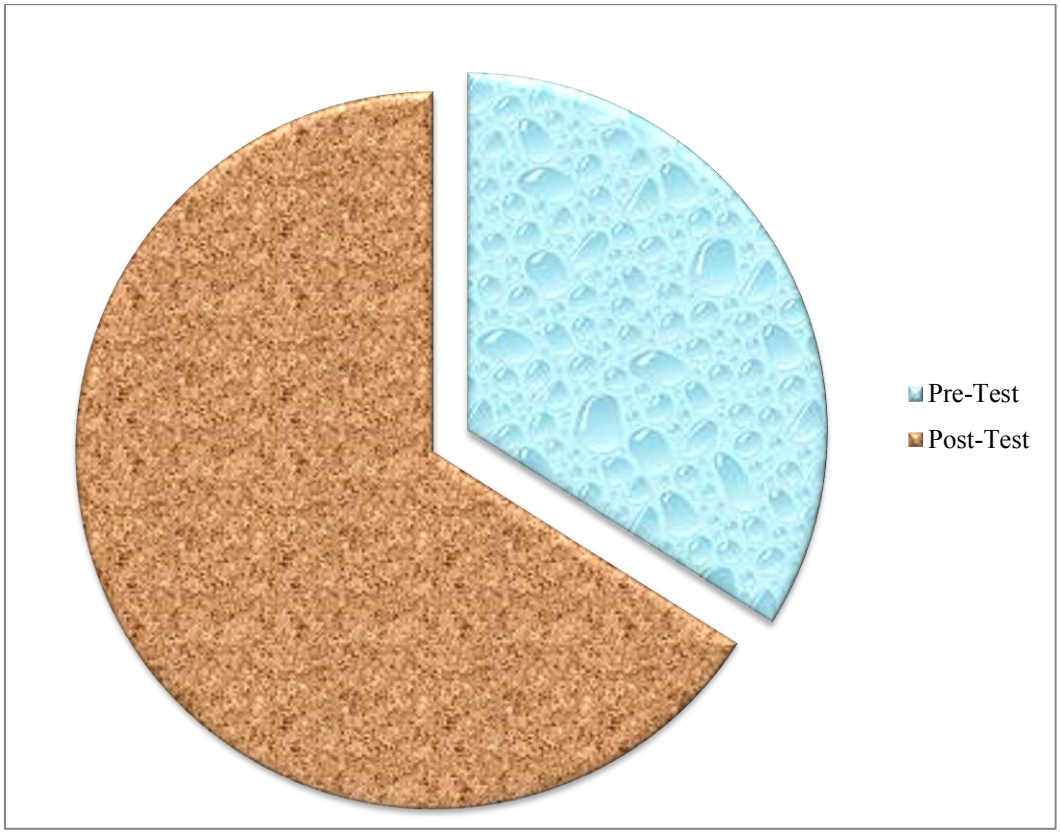

Figure 4.3.4 Comparison of Pre-test and Post-test scores with respect to Awareness on Abilities and Skills for Vocational Training Courses

4.3.5 Comparison of Pre-test and Post-test scores with respect to Scope of Vocational Training Courses for students with hearing impairment:

Performance Scores in Pre-test and Post-test was analyzed and the results are given in the following Table 4.3.5.

Table 4.3.5 Comparison of Pre-test and Post-test scores with respect to Scope of Vocational Training Courses for students with hearing impairment

Variable	df	N	Testing	Mean	SD	t-value
Scope of Vocational Training Courses	28	30	Pre-test	5.033	1.8659	0.059**
			Post-test	10.467	2.1453	

****Significance at 0.01**

From the table 4.3.5, it is evident that the ***t***-value in comparing the Pre-test and Post-test Scores for Scope of Vocational Training Courses is 0.059 with df = 28 which is significant at 0.01 level. It indicates that the mean scores on the component Scope of Vocational Training Courses before and after intervention differed significantly. It means that the Students with Hearing Impairment secured higher scores in the Post-test than the Pre-test. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Pre-test and Post-test scores with respect to Scope of Vocational Training Courses"*** **is rejected.** Hence, it is inferred that Scope of Vocational Training Courses were found to be effective in creating awareness on vocational opportunities.

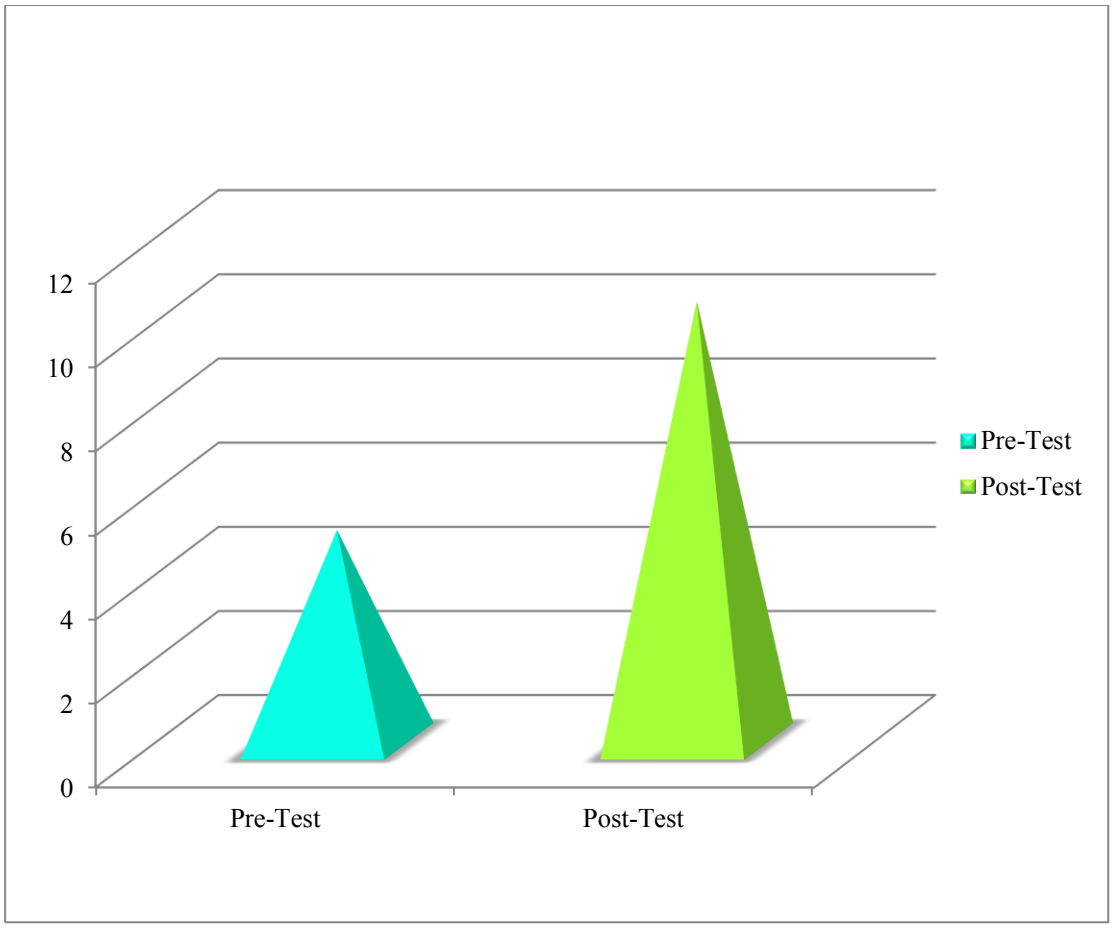

Figure 4.3.5 Comparison of Pre-test and Post-test scores with respect to Scope of Vocational Training Courses

4.4.0 Comparison of Pre-Test and Post-Test Scores in Relation to Different Independent Variables

In the present study, Pre-test and Post-test was conducted to find out the Effectiveness of the Strategies to create Awareness about Vocational Opportunities among Students with Hearing Impairment. The researcher analyzed the effectiveness with respect to different Independent Variables namely Locality, Gender, Grade, Age, Mode of communication and Residential Status.

4.4.1 Comparison of Pre-test and Post-test scores with respect to Locality:

Comparison of scores of Pre-test and Post-test with respect to Locality before and after Intervention was analyzed and the results are given in the following Table 4.4.1

Table 4.4.1 Comparison of Pre-test and Post-test scores with respect to Locality

Variable	Testing	Levels	N	df	Mean	SD	t-values
Locality	Pre-test	Urban	10	28	19.70	3.0569	0.710
		Rural	20	28	19.55	2.8557	
	Post-test	Urban	10	28	40.60	4.4771	0.135
		Rural	20	28	38.80	2.6477	

S-Significant

From the table 4.4.1, it is evident that, Based on Locality, the ***t***-value for the Pre-test Scores in components of Awareness about Vocational Opportunities obtained before Intervention is 0.710 which is not significant. It indicates that the Pre-test Scores of hearing impaired students in Urban and Rural areas do not differ significantly. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Pre-test scores with respect to Locality in Awareness about Vocational Opportunities among Students with Hearing Impairment"*** is accepted**.** Therefore, it is concluded that hearing impaired students in Urban and Rural areas have secured the same scores.

From the table 4.4.1, it is evident that, Based on Locality, the ***t***-value for the Post-test Scores in components of Awareness about Vocational Opportunities obtained after Intervention is 0.135 which is not significant. It indicates that the Post-

test Scores of hearing impaired students in Urban and Rural areas do not differ significantly. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Post-test scores with respect to Locality in Awareness about Vocational Opportunities among Students with Hearing Impairment"*** is accepted. Therefore, it is concluded that hearing impaired students in Urban and Rural areas have secured the same scores.

4.4.2 Comparison of Pre-test and Post-test scores with respect to Gender:

Comparison of scores of Pre-test and Post-test with respect to Gender before and after Intervention was analyzed and the results are given in the following Table 4.4.2.

Table 4.4.2 Comparison of Pre-test and Post-test scores with respect to Gender

Variable	Testing	Levels	N	df	Mean	SD	t-values
Gender	Pre-test	Boys	15	28	19.20	2.1448	0.37
		Girls	15	28	20.00	3.4847	
	Post-test	Boys	15	28	38.73	2.1202	0.39
		Girls	15	28	40.06	4.3006	

S-Significant

From the table 4.4.2, it is evident that, Based on Gender, the ***t***-value for the Pre-test Scores in components of Awareness about Vocational Opportunities obtained before Intervention is 0.37 which is not significant. It indicates that the Pre-test Scores of hearing impaired students of both Boys and Girls do not differ significantly. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Pre-test scores with respect to Gender in Awareness about Vocational Opportunities among Students with Hearing Impairment"*** is accepted**.** Therefore, it is concluded that hearing impaired students of both Boys and Girls have secured the same scores.

From the table 4.4.2, it is evident that, Based on Gender, the ***t***-value for the Post-test Scores in components of Awareness about Vocational Opportunities obtained after Intervention is 0.39 which is not significant. It indicates that the Post-test Scores of hearing impaired students of both Boys and Girls do not differ significantly. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Post-test scores with respect to Gender in Awareness***

about Vocational Opportunities among Students with Hearing Impairment" is accepted. Therefore, it is concluded that hearing impaired students of both Boys and Girls have secured the same scores.

4.4.3 Comparison of Pre-test and Post-test scores with respect to Grade:

Comparison of scores of Pre-test and Post-test with respect to Grade before and after Intervention was analyzed and the results are given in the following Table 4.4.3

Table 4.4.3 Comparison of Pre-test and Post-test scores with respect to Grade

Variable	Testing	Levels	N	df	Mean	SD	t-values
Grade	Pre-test	VIII-X	16	28	19.625	2.6802	0.458
		XI-XII	14	28	19.571	3.1796	
	Post-test	VIII-X	16	28	39.625	3.8794	0.604
		XI-XII	14	28	39.143	2.8785	

S-Significant

From the table 4.4.3, it is evident that, Based on Grade, the ***t***-value for the Pre-test Scores in components of Awareness about Vocational Opportunities obtained before Intervention is 0.458 which is not significant. It indicates that the Pre-test Scores of hearing impaired students in grades 8^{th} to 10^{th} and 11^{th} to 12th do not differ significantly. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Pre-test scores with respect to Grade in Awareness about Vocational Opportunities among Students with Hearing Impairment"*** is accepted**.** Therefore, it is concluded that hearing impaired students in grades 8^{th} to 10^{th} and 11^{th} to 12th have secured the same scores.

From the table 4.4.3, it is evident that, Based on Grade, the ***t***-value for the Post-test Scores in components of Awareness about Vocational Opportunities obtained after Intervention is 0.604 which is not significant. It indicates that the Post-test Scores of hearing impaired students in grades 8^{th} to 10^{th} and 11^{th} to 12th do not differ significantly. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Post-test scores with respect to Grade in Awareness about Vocational Opportunities among Students with Hearing Impairment"*** is

accepted. Therefore, it is concluded that hearing impaired students in grades 8th to 10th and 11th to 12th have secured the same scores.

4.4.4 Comparison of Pre-test and Post-test scores with respect to Age:

Comparison of scores of Pre-test and Post-test with respect to Age before and after Intervention was analyzed and the results are given in the following Table 4.4.4

Table 4.4.4 Comparison of Pre-test and Post-test scores with respect to Age

Variable	Testing	Levels	N	df	Mean	SD	t-values
Age	Pre-test	14-16	16	28	19.625	2.6802	0.458
		17-18	14	28	19.571	3.1796	
	Post-test	14-16	16	28	39.625	3.8794	0.604
		17-18	14	28	39.143	2.8785	

S-Significant

From the table 4.4.4, it is evident that, Based on Age, the ***t***-value for the Pre-test Scores in components of Awareness about Vocational Opportunities obtained before Intervention is 0.458 which is not significant. It indicates that the Pre-test Scores of hearing impaired students in Age groups 14 to 16 years and 17 to 18 years do not differ significantly. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Pre-test scores with respect to Age in Awareness about Vocational Opportunities among Students with Hearing Impairment"*** is accepted**.** Therefore, it is concluded that hearing impaired students in Age groups 14 to 16 years and 17 to 18 years have secured the same scores.

From the table 4.4.4, it is evident that, Based on Age, the ***t***-value for the Post-test Scores in components of Awareness about Vocational Opportunities obtained after Intervention is 0.604 which is not significant. It indicates that the Post-test Scores of hearing impaired students in Age groups 14 to 16 years and 17 to 18 years do not differ significantly. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Post-test scores with respect to Age in Awareness about Vocational Opportunities among Students with Hearing Impairment"*** is accepted. Therefore, it is concluded that hearing impaired students in Age groups 14 to 16 years and 17 to 18 years have secured the same scores.

4.4.5 Comparison of Pre-test and Post-test scores with respect to Mode of Communication:

Comparison of scores of Pre-test and Post-test with respect to Mode of Communication before and after Intervention was analyzed and the results are given in the following Table 4.4.5

Table 4.4.5 Comparison of Pre-test and Post-test scores with respect to Mode of Communication

Variable	Testing	Levels	N	df	Mean	SD	t-values
Mode of Communication	Pre-test	Sign Language	11	28	20.182	2.7863	0.539
		Sign Language & Oral	19	28	19.263	2.9409	
	Post-test	Sign Language	11	28	38.727	4.0023	0.974
		Sign Language & Oral	19	28	39.789	3.0474	

S-Significant

From the table 4.4.5, it is evident that, Based on Mode of Communication, the ***t***-value for the Pre-test Scores in components of Awareness about Vocational Opportunities obtained before Intervention is 0.539 which is not significant. It indicates that the Pre-test Scores of hearing impaired students using Sign Language and Sign Language & Oral do not differ significantly. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Pre-test scores with respect to Mode of Communication in Awareness about Vocational Opportunities among Students with Hearing Impairment"*** is accepted**.** Therefore, it is concluded that hearing impaired students using Sign Language and Sign Language & Oral have secured the same scores.

From the table 4.4.5, it is evident that, Based on Mode of Communication, the ***t***-value for the Post-test Scores in components of Awareness about Vocational Opportunities obtained after Intervention is 0.974 which is not significant. It indicates that the Post-test Scores of hearing impaired students using Sign Language and Sign Language & Oral do not differ significantly. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Post-test scores with respect to***

Mode of Communication in Awareness about Vocational Opportunities among Students with Hearing Impairment" is accepted. Therefore, it is concluded that hearing impaired students using Sign Language and Sign Language & Oral have secured the same scores.

4.4.6 Comparison of Pre-test and Post-test scores with respect to Residential Status:

Comparison of scores of Pre-test and Post-test with respect to Residential Status before and after Intervention was analyzed and the results are given in the following Table 4.4.6

Table 4.4.6 Comparison of Pre-test and Post-test scores with respect to Residential Status

Variable	Testing	Levels	N	df	Mean	SD	t-values
Residential Status	Pre-test	Hostelites	10	28	19.700	3.0589	0.710
		Day Scholars	20	28	19.550	2.8557	
	Post-test	Hostelites	10	28	40.600	4.4771	0.135
		Day Scholars	20	28	38.800	2.6477	

S-Significant

From the table 4.4.6, it is evident that, Based on Residential Status, the ***t***-value for the Pre-test Scores in components of Awareness about Vocational Opportunities obtained before Intervention is 0.710 which is not significant. It indicates that the Pre-test Scores of hearing impaired students as Hostelites and Day Scholars do not differ significantly. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Pre-test scores with respect to Residential Status in Awareness about Vocational Opportunities among Students with Hearing Impairment"*** is accepted**.** Therefore, it is concluded that hearing impaired students as Hostelites and Day Scholars have secured the same scores.

From the table 4.4.6, it is evident that, Based on Residential Status, the ***t***-value for the Post-test Scores in components of Awareness about Vocational Opportunities obtained after Intervention is 0.135 which is not significant. It indicates that the Post-

test Scores of hearing impaired students as Hostelites and Day Scholars do not differ significantly. In the light of this, the null hypothesis stated that ***"There is no significant difference in the Post-test scores with respect to Residential Status in Awareness about Vocational Opportunities among Students with Hearing Impairment"*** is accepted. Therefore, it is concluded that hearing impaired students as Hostelites and Day Scholars have secured the same scores.

4.5.0 Conclusion

The findings of the study are summarized and presented in the next chapter.

CHAPTER V

SUMMARY AND CONCLUSION

5.0.0 Introduction

Students who are Hearing Impaired have a multifaceted effect on their regular life. Deafness and Hard of Hearing cause barriers in multiple ways on their life, at workspace, in behaviour or function of the people. They lack the awareness about the various possible opportunities which enables them to move skillfully and independently; and have ambiguous knowledge about the important concepts. A hearing impaired person can achieve happiness and self-sufficiency in life by learning basic academic; deeper and more vocational skills. Thus, an attempt has been made in this study to provide the basic knowledge among the Students with Hearing Impairment by supporting and training them in becoming knowledgeable about the vocational opportunities that are available for the hearing impaired students who are in higher education.

The informative intervention package was made to instill confidence, awareness and courage within the hearing impaired students to grow and develop; to take prompt decisions regarding their career choices for their independent, successful and meaningful life.

The present study entitled **"Strategies to Create Awareness about Vocational Opportunities among Students with Hearing Impairment"** is to the find out the effectiveness of the awareness created about the basic and various Vocational Opportunities among the hearing impaired students. This study was Quasi-Experimental in nature where Awareness about Vocational Opportunities among Students with Hearing Impairment Intervention Package was used for Grade 8 to 12 hearing impaired students to learn and enhance their knowledge about the various vocational choices available for them.

Chapter V is discussed under the following headings:

5.1.0 Objectives of the Study

5.2.0 Methodology

5.3.0 Follow up Evaluation of Intervention Package

5.4.0 Major Findings of the Study

5.5.0 Recommendations

5.6.0 Implications of the Study

5.7.0 Conclusion

5.1.0 Objectives of the Study

The present study on **"Strategies to Create Awareness about Vocational Opportunities among Students with Hearing Impairment"** has been undertaken with the following objectives to:

1. Identify the Students with Hearing Impairment and their areas of interest along with their individual talents and skills possessed
2. Develop a tool to conduct a survey related to the awareness about vocational opportunities among the students with hearing impaired in special and inclusive classroom
3. Develop an intervention package for enabling the students with hearing impairment in realizing and identifying their areas of interest and wide range of employment opportunities that can be accessed by them
4. To find out the significant influence of Locality, Gender, Grade, Age, Mode of Communication, Residential Status and Awareness level about Vocational Opportunities among hearing impaired students
5. Compare the Pre-test and Post-test Scores with respect to the Dependent Variables of the study that includes Knowledge on Vocational Opportunities; Awareness on Criterion Requirements for Selection of Vocational Courses; Awareness on Abilities and Skills for Vocational Training Courses and Scope of Vocational Training Courses

5.2.0 Methodology

A study was conducted by the researcher to analyze the level of awareness about the various vocational opportunities among the Students with Hearing Impairment. The sample for the presented study was selected through purposive sampling method regardless of their varying background. The sample size for the present study consists of n=30 in the age group of 14-18 years.

Interview schedule was conducted by the researcher individually to collect their information like name, age, grade, gender, locality and mode of communication. A rating scale was developed by the researcher to analyze the level of awareness based on knowledge on career choices, qualification and eligibility, realization of skills possessed and scope of field respectively.

5.3.0 Follow up Evaluation of Intervention Package

Intervention package developed to create awareness about vocational opportunities among Students with Hearing Impairment as a follow up on evaluation was stated by the special educators or resource teachers to be of immense use as a training material for the in-service training programs in future.

5.4.0 Major Findings of the Study

The major findings of the study have been summarized below:

- The study reveals that Strategies to create Awareness about Vocational Opportunities has enhanced and improved the knowledge about vocational choices among the Students with Hearing Impairment
- According to the Locality wise distribution of the selected samples, the percentage of the hearing impaired students from Urban area are 33% and from Rural area are 67% respectively
- According to the Age wise distribution of the selected samples, the percentage of the hearing impaired students from 14-16 years are 53% and from 17-18 years are 47% respectively
- According to the Grade wise distribution of the selected samples, the percentage of the hearing impaired students from VIII-X grade are 53% and from XI-XII grade are 47% respectively
- According to the Gender wise distribution of the selected samples, the percentage of the hearing impaired students for Boys area are 50% and for Girls are 50% respectively
- According to the Mode of Communication specific distribution of the selected samples, the percentage of the hearing impaired students using Sign Language & Oral are 40% and the percentage of the hearing impaired students using Sign Language are 60% respectively

- According to the Residential Status specific distribution of the selected samples, the percentage of the hearing impaired students who are Day Scholars are 33% and who are Hostelites are 67% respectively
- The Overall Pre-test and Post-test Scores of Students with Hearing Impairment before and after the intervention differed significantly. The scores of Post-test (M=39.40) is higher than Pre-test (M=19.60)
- The Knowledge on Vocational Opportunities among Students with Hearing Impairment improved after the Intervention. (Pre-test score Mean = 4.46 and Post-test score Mean = 8.86)
- The score in the awareness about Criterion Requirements for Selection of Vocational Courses among Students with Hearing Impairment has increased after the quality insights being provided. (Pre- test Mean=4.83 and Post-test Mean=9.83)
- Performance of Students with Hearing Impairment in the component Awareness on Abilities and Skills for Vocational Training Courses has progressed after the intervention. (Pre- test Mean=5.26 and Post-test Mean=10.23)
- Knowledge about Scope of Vocational Training Courses among Students with Hearing Impairment has been explicated after due intervention. (Pre-test Mean=5.03 and Post-test Mean=10.46)
- The results reveal that there is no significant influence on Locality, Gender, Grade, Age, Mode of Communication and Residential Status while creating awareness about the vocational opportunities among hearing impaired students. All these aspects (or) components are independent of their own.

5.5.0 Recommendations

The current study revealed the effectiveness of the Strategies to Create Awareness about the Vocational Opportunities for hearing impaired students. Based on the results, certain recommendations have been made:

- Developing the Strategies to create Awareness about Vocational Opportunities among hearing impaired students required minimum number of resources and minimum direct teaching; and hence it can be easily implemented in from elementary school to higher education programme

- The training institutes can incorporate the Awareness on Vocational Opportunities component in the adapted curriculum so that teacher trainees may introduce the programme during their practice of teaching and hence widely popularize the technique for improvising the knowledge n vocation for hearing impaired students
- Awareness on Vocational Opportunities can be used to create an insight and provoke the knowledge about employability in special schools by providing equal opportunities in learning and gaining new knowledge, irrespective of nature and level of disabilities

5.6.0 Implications of the Study

- It is an innovative and an integrative intervention approach for Students with Hearing Impairment as it gives more visual cues, knowledge clarity and deeper insights
- The findings of this research facilitates the teachers to teach, train and guide about vocation and employability of the hearing impaired students easily and effectively
- It enables the Students with Hearing Impairment to proceed with their opted choices and decisions independently and successfully as well
- Quality knowledge and awareness about the vocational opportunities available for a hearing impaired provokes the interest of students to learn the concepts and its associated skills in an effective manner
- This study fosters the ideology and reach for employability in general public and with Students with Hearing Impairment
- This research study has ensured that with timely assistance, guidance and support; students with hearing impairment may happen lead an independent, successful and meaningful life

5.7.0 Conclusion

Creating quality awareness about vocational opportunities among the Students with Hearing Impairment is a highly essential and a mandatory requirement that needs to be provided to the students eventually. More specifically, these aspects have the

potential to help develop academic skills as well as vocational skills and motivation in students with special needs.

The findings of this study will be an eye-opener to the professionals as well as the public and would urge them to provide these students with the quality awareness and knowledge about vocational opportunities. In short, it will pave the way for good employability based on equity and equality, which is the ultimate aim of Inclusive education.

As a part of conclusion, the strategies to create awareness about vocational opportunities among the Students with Hearing Impairment will promote and enrich their learning skills, vocational skills and good economic status to lead a healthy, meaningful, independent and successful life.

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APPENDIX - I

INTERVIEW SCHEDULE TO ELICIT

BACKGROUND INFORMATION OF SELECTED SAMPLES

Name	:		
Date of Birth	:		
Age	:		
Gender	:		
Education	:		
Father's Name	:		
Father's Occupation	:		
Mother's Name	:		
Mother's Occupation	:		
Total Family Income	:		
Address for Communication	:		
Locality	:	□ Rural	□ Urban
Language Spoken by the Student	:		
Type of Family	:	□ Nuclear	□ Joint
Consanguinity	:	□ Yes	□ No

APPENDIX - II

INTERVIEW SCHEDULE TO ELICIT

DISABILITY-SPECIFIC INFORMATION OF SELECTED SAMPLES

Type of Disability : □ Mild □ Moderate □ Severe

Age of Onset : □ Congenital □ Adventitious

Type of Institution : □ Co-education □ Girls □ Boys

Medium of Instruction:
□ Sign Language □ Sign Language & Oral □ Total Communication

Able to follow Oral Instruction : □ Yes □ No

APPENDIX - III

KNOWLEDGE ON VOCATIONAL OPPORTUNITIES

S.No.	Areas of Assessment	Yes	No
1.	Getting a job will be difficult for me because of disability		
2.	Getting a job of my passion is easy even if I am disabled		
3.	Lack of information on choice of course		
4.	Lack of awareness about the choice of institution for getting a professional degree		
5.	Limited opportunity for higher education		
6.	Lack of choice of vocational education and training		
7.	Lack of guidance from teachers		
8.	Parental support in career suggestions		
9.	Aware and realized my talents, skills and abilities		
10.	Confident about peer support during professional course and training		
11.	Always confident about my passion and decisions		
12.	Aware of using Google chrome to enquire about career choices		
13.	Lack of field research on my career idea(s)		
14.	Prepared with the list of jobs to explore		
15.	Aware about the specific resume and interview requirements		

APPENDIX - IV

AWARENESS ON CRITERION REQUIREMENTS FOR SELECTION OF VOCATIONAL COURSES

S. No.	Areas of Assessment	Yes	No
1.	Lack of knowledge about the course name		
2.	Lack of awareness on the particular skills required		
3.	Aware about the eligibility criteria of hearing impaired		
4.	Aware about the training centres or institutes		
5.	Aware about the course details		
6.	Aware about the duration of course		
7.	Can get prepared with the required qualifications easily		
8.	Aware about all the career options which I am eligible to apply		
9.	Lack of ability to communicate with total communication		
10.	Lack of sign language interpreter at work place		
11.	Need assistance of sign language interpreters in interview and training		
12.	Require peer assistance during training of the course		
13.	Require special accommodations and amplifiers at training institutions		
14.	Need special accommodations and amplifiers at work place		
15.	Need some recommendations and guidance to get the job		

APPENDIX - V

AWARENESS ON ABILITIES

AND SKILLS FOR VOCATIONAL TRAINING COURSES

S. No.	Areas of Assessment	YES	NO
1.	Aware of Vocational education, training and skills		
2.	Feeling positive during vocational education		
3.	Interested in general subjects		
4.	Interested in vocational subjects		
5.	Satisfied with current grades in general subjects		
6.	Well aware of areas of interest		
7.	Getting low marks in general subjects gives feel of frustration		
8.	Desire to continue my vocational education after high school		
9.	My parents / guardian will support me for my vocational skills development		
10.	Aware about the benefits of my abilities as a profession		
11.	School supports me with vocational training		
12.	Teachers encourage to learn and develop vocational skills		
13.	Mentors help to develop the innate skills and talents		
14.	Teachers help in identifying my areas of interest		
15.	Having some experience of the work related to my talents		

APPENDIX - VI

SCOPE OF VOCATIONAL TRAINING COURSES

S. No.	Areas of Assessment	Yes	No
1.	Lack of knowledge about the scope of my favourite / dream job		
2.	Lack of information about the courses and job nature		
3.	Aware about the benefits of the profession in choice		
4.	Aware about the locality of job location		
5.	Aware about the financial security of the list of jobs chosen		
6.	Lack of details about the salary package		
7.	Aware about the risks involved in the specific job type		
8.	Willing to meet challenges in the desired profession		
9.	Aware about the demand and competition for the job I choose		
10.	Lack of experience to get the desired job offer		
11.	Easy access to get the job of my interest		
12.	Aware about self development while working in my dream job		
13.	Ready to choose job of my passion even if it is of less scope		
14.	Lack of job security		
15.	Aware about the work durations and timelines specifically		

APPENDIX- VII

EFFICACY OF THE INTERVENTION PACKAGE

S. No	Particulars	Response		
		Yes	No	Not Sure
1.	It is simple and informative for the Students with Hearing Impairment			
2.	Covers the basic information about the skills and awareness needed for a special student to decide on his career			
3.	Easy to administer			
4.	Useful for the students with Hearing impairment at the higher education level moving towards work and placement			
5.	Easy to evaluate			
6.	All areas are covered satisfactorily			
7.	Hands-on-experience provided within the intervention is helpful for enhancing their career choices			
8.	Motivates the hearing impaired students to acknowledge about the scenario they would face in the workplace			
9.	Helpful for the Students with Hearing Impairment to develop self-confidence and Decision Making Skills			
10.	Special Educators/Resource Teachers can use the intervention package for the Persons with Hearing Impairment to create awareness about the various vocational opportunities available for the special needs students; especially after their education (if)			