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# The Role of Vocational Training in the Skill Enhancement of Persons with Visual Impairment

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# ABSTRACT

This paper examines the role of vocational training in the skill development of individuals with visual impairment. It focuses on the multi-skill training program offered by the Blind Relief Association in Delhi, which is a one-year course specifically designed for visually impaired trainees. Current and former trainees participated in in-depth, open-ended interviews to gather their experiences.

The research findings demonstrate that the program has successfully enhanced the skills of the trainees, leading to improved livelihood opportunities. The training pedagogy of the program is tailored to meet the current market demands, ensuring that the trainees acquire the necessary skills for securing employment. Based on these positive outcomes, the paper proposes the implementation of the vocational training model of the Blind Relief Association in other regions of the country. Furthermore, it suggests expanding the program to accommodate individuals with additional or multiple disabilities.

Keywords: Visual Impairment, Vocational Training, Multi-Skill Training Program, Assistive Technology

# **1. INTRODUCTION:**

In common parlance, visual impairment is referred to as a condition where an individual has certain limitations regarding vision, and which persists even after medical correction. Visual impairment is classified into 'distance vision impairment' and 'near vision impairment' (International Classification of Diseases 11, 2019). In more simple words we can say that a substantial loss of vision that cannot be fully restored with eyeglasses, contact lenses, or medical intervention is referred to as visually impaired or vision loss. It is a condition that impairs a person's capacity for seeing and comprehending visual information. The severity of visual impairment can range from minor vision loss to severe blindness. Some people may only have a small field of vision or partial sight, while others may be completely blind. Globally, the population with distance and near vision impairment constitute around 2.2 billion people (World Health Organization, 2019), and about 20.5% of them are from India (Garewal, 2019).

In the Indian context the definition of visual impairment has been given by, the Rights of Persons with Disabilities Act, 2016, which defines visual impairment as consisting of 'blindness' and 'low-vision'. The Act defines blindness as "a condition where a person has any of the following conditions, after a best condition-total absence of sight; or visual acuity less than 3/60 or less than 10/200 (Snellen) in the better eye with best possible correction; or limitation of the field of vision subtending an angle of less than 10 degrees." And, low-vision as "a condition where a person has any of the following conditions, namely-visual acuity not exceeding 6/18 or less than 20/60 up to 3/60 or up to 10/200 (Snellen) in the better eye with best possible corrections, or limitation of the field of vision subtending an angle of less than 40 degrees up to 10 degrees."

While talking about the reasons for visual impairment, there can be several causes for visual impairment, more importantly, uncorrected refractive errors and cataracts constitute the primary causes of visual impairment in the world. In terms of the causes of blindness, cataracts have a share of over 50% (Pascolini & Mariotti, 2011).

Due to their disability, persons with visual impairment have faced various challenges in their daily lives and these can range from limited participation in education and employment to navigating their environment. There are limited employment opportunities for persons with disabilities compared to persons who are not having any disability (World Report on Disability, 2011). It has been seen if they get employment usually, they are employed in lower-paid positions. Also, the negative attitudes around disability act as a major barrier for persons with disabilities to engage in the labour market (Mitra & Sambamoorthi, 2008).

Making them well paid, there is a need for vocational programs for persons with visual impairment to enhance their skills, and knowledge, build confidence and assist them in leading independent lives. Because the primary aim of the vocational programs is the socio-economic rehabilitation of persons with visual impairment and to help them acquire the skills which are relevant to the job market. The aspect of vocational training has also been

emphasized in the RPwD Act, 2016 in Chapter IV 'Skill Development and Employment'. It is mandated in the Act that persons with disabilities are provided with the facilities and adequate support to take advantage of vocational training.

# 2. LITERATURE REVIEW:

To understand the importance of vocational training and its components for persons with visual impairment a review of some of the major research studies have been done.

The Union of The Physically Impaired Against Segregation (1976) talked about the social model of disability, whereby it emphasized the role of societal barriers in disabling physically impaired persons. Oliver (2013), who is regarded as the father of the social model of disability, saw the model as a tool to enhance the lives of people.

Kirchner et al. (1997) emphasized the employment barriers and strategies for persons with visual impairment. Their study, which was based in Illinois, USA, mentioned that the vocational rehabilitation agencies, attitudes of employers, and the self-confidence and skills of the visually impaired individuals were some of the main contributors to the support or obstacles to employment. Further, they highlighted that compared to visually impaired individuals who were not working, the employed individuals had fewer disadvantages in terms of disability and social characteristics.

Coffey et al. (2014) underlined the barriers to employment for women with visual impairment in their research. As per their research, the most often cited impediments to employment were: unfavourable employer attitudes, the availability of adjustments at work, limited mobility, and having another disability or health condition. Women reported a significantly higher number of hurdles, and they stated that these barriers had a negative impact on their confidence. Their study, moreover, highlighted that despite the fact that technological developments in relation to assistive technology were cited as a very good aspect for persons with visual impairment, there were certain drawbacks to its use, particularly in terms of access to training; compatibility with current platforms; and processing times.

Crudden and McBroom (1999) also focused on the barriers to employment in their study. The absence of role models for persons with visual impairment has been noted by them. While the barriers ranged from the employer's attitudes to transportation issues, the strategies to overcome from these barriers emerged from a personal basis rather than any macro perspective.

Salminen and Karhula (2014) emphasized the challenges of participation in society for young persons with visual impairment. Their study, which was based in Finland, used a generic qualitative multi-method case-study design. It was found in their study that "many of the mildly visually impaired young persons seemed to have particular difficulties in accepting an impairment that had an impact on their participation." The fact that visually impaired young persons had fewer friends was noted in the study.

Dale (2010) through her study explored the impact of negative social attitudes towards visual impairment on the identity formation and sense of self of persons with visual impairment. The feeling of identity, as argued, was impacted by interactions with sighted individuals and a society that prioritised sight and the visual while preventing those with visual impairments from having their voices heard. Davidson (1975) touched on the role of the social structure and the patterns of culture in poor employment outcomes for persons with visual impairment.

Therefore, it is important to address the various barriers that persons with visual impairment face and improve their vocational training and employment opportunities. Kumar et al. (2017) noted that the quality of life for persons with visual impairment and their families can be enhanced by improving the vocational training programs and that the broader economy can be benefitted due to this.

Vocational training plays a crucial role in empowering persons with visual impairment to gain meaningful employment and achieve economic independence. It equips individuals with visual impairments with the knowledge and skills necessary to perform tasks independently. The study by Beadles et al. (2000) underlined the importance of vocational programs for persons with sensory, including visual, impairment. Their study found that 48% of the vocational program graduates whom they had surveyed were competitively employed and that 61% of the employed individuals were earning more than the minimum wage.

A vital objective of vocational programs is to improve the social skills of persons with visual impairment. Many studies, including one conducted by Everhart et al. (1980), have highlighted the passive nature of visually impaired individuals in social situations. Kim (2003) in his study investigated the impact of assertiveness training in enhancing the social skills of adolescents with visual impairment and found that the training had a role to play in increasing the assertiveness and confidence of the participants.

The use of assistive technology to enhance the skill of persons with visual impairment cannot be discounted. McDonnall and Crudden (2009) in their study identified the use of assistive technology as a major variable in the successful employment of transition-age youths with visual impairments. The use of assistive technology enabled them to compete with sighted persons in the job market.

In the Indian context, the importance of assistive technology has been studied by Pal and Lakshmanan (2012). They conducted a qualitative study based in Bengaluru, India and examined the role of assistive technology in the participation of persons with disabilities in the labour market. While it was recognized that access to assistive technology can enhance the socio-economic participation of persons with visual impairment, it was found that most of the participants in the study had very little access to technology and formal education. Moreover, it was also found that firms did not want to invest in the technological needs of persons with visual impairment and this limited their employment opportunities. Another important component of the vocational programs is orientation and mobility skills. Cmar (2015) in her study stressed the significance of orientation and mobility skills as a vital predictor of employment for persons with visual impairment. The study mentioned the strong association between independent travel skills and employment.

# 3. ABOUT THE BLIND RELIEF ASSOCIATION:

The Blind Relief Association, established in 1944, has been one of the premier non-governmental organizations in India working towards empowering and enhancing the lives of persons with visual impairment. Education, vocational training, and rehabilitation services are provided at the Association to cater to the needs of the visually impaired students and trainees. The primary aim of the Association, based on the human rights model, is to provide persons with visual impairment with the right kind of recognition and opportunity in an inclusive environment.

In terms of providing quality education to visually impaired students, the Association runs the Jormal Periwal Memorial Senior Secondary School from Class I- XII. B.Ed. Special Education course is offered at the Association's Durgabai Deshmukh College of Special Education (Visual Impairment). The Association also provides other services such as braille production, audiobook recording, orientation and mobility training, placement, etc.

A major wing of the Association is its vocational training program. It provides vocational training in a wide range of occupations to persons with visual impairment in the age group of 18-35 years. The training programmes are designed to develop and enhance their communication skills, personality development, digital literacy, and Braille. The trainees acquire various skills such as bookbinding and paper crafts, relaxation massage, chair caning, candle making, packaging, stitching, and soap-making.

The placement cell of the Blind Relief Association looks after securing employment for the trainees. It interacts with industrial associations and potential employers for this purpose. The suitability of available jobs is identified and ascertained by the representatives from the cell.

## About the multi-skill training program:

The multi-skill training program of the Blind Relief Association was introduced in 2014 and is one of the vital programs of the Association. The target population for this program is the adult blind (18-35 years) and there is no minimum educational qualification required to apply for the program. The duration of the program is one year, and admissions are held in January and July every year. The intake per batch is 10 trainees. Boarding and lodging are also provided free of cost for the trainees at the Association's premises.

The multi-skill program combines the several skill-specific training that already exists, adds new occupational skills, and supplements the vocational skill training with soft skills and extracurricular activities. Some flexibility is also permitted when taking the trainees' aptitude and needs into account. The skills imparted to the trainees are mentioned below-

- Book-binding & papercraft
- Basic Relaxation Massage: Foot, Head and Body Massage
- Stitching
- Candle Making
- Packaging: Batching, weighing, packing
- Simple manufacturing skills: soap making, incense stick making etc.

Apart from these the supplementary skills include basic computer training, Braille literacy, music, basics of cooking, and orientation & mobility. Regular confidence-building and personality development sessions are also conducted for the trainees.

Upon successful completion of the training, the trainees are provided with certificates from the Association, and it also attempts to secure suitable jobs for the trainees in the open industry. The Association, furthermore, helps the trainees in self-employment.

# 4. OBJECTIVE OF THE STUDY:

To understand the experiences of visually impaired trainees in the Blind Relief Association's multi-skill training program.

# 5. METHODOLOGY:

# Nature of the Study: -

A qualitative approach was used for this study because qualitative research methods offer a way to investigate phenomena, practices, and experiences in sociocultural contexts. This approach enabled the process to understand the in-depth experiences of the visually impaired trainees regarding the multiskill training program. Moreover, the flexible nature of this approach allowed the participants to freely share their views and opinions which helped the researcher understand their feelings and concerns from their contexts (Moen & Middelthon, 2015).

# Sampling Process: -

The participants of this research were the multi-skill trainees of the Blind Relief Association, and it included trainees who were undergoing their training and those who had secured placement after the completion of their training. Ten participants were interviewed (four from the current batch and six from the previous batch of the multi-skill training program).

To select the participants for interviews, purposive sampling was used. As underlined by Etikan et al. (2015), purposive sampling refers to the deliberate selection of a participant based on the subject's personal characteristics. This non-probability technique does not require underlying theories or a predetermined number of participants.

# Sample Description: -

The participants of the study were current and former visually impaired trainees of the multi-skill training program of the Blind Relief Association, Delhi. The age criteria for the multi-skill training program is between 18-35 years, and all the participants fell within this range. The minimum educational qualification for the participants was till 5<sup>th</sup> standard and most of them had studied till the 8<sup>th</sup> standard.

## **Data Collection and Analysis:**

The research study primarily used interviews as the main data collection method. These interviews were open-ended and semi-structured, allowing for detailed information from participants. They were conducted through face-to-face meetings as well as over the phone.

For the analysis purpose, the thematic analysis method of qualitative research has been used to examine the data. It involves identifying and organizing patterns of meaning, known as themes, within the dataset (Braun & Clarke, 2012). The participants' responses have been categorized into major themes. Additionally, to maintain confidentiality, the Participants (trainees) have been labelled with codes and mentioned as either former or current trainees of the multi-skill training program.

# 6. DISCUSSION:

# Impact of the Blind Relief Association-

The participants had very positive remarks about the Association and how it opened new avenues in their lives. Apart from training them on different skills, the responses of the participants emphasized the fact that their self-worth and self-esteem were enhanced after coming to the agency.

"The experience at the Blind Relief Association was life-changing for me. I didn't get the opportunity to study in my village, and my parents were very over-protective and not very keen to let me out of the house. It is only after coming to the Association that I learnt skills like making paper bags, computer training, stitching, candle-making, and relaxation massage. Moreover, my English communication skills developed after the training."

#### -AK (former trainee)

The familial barriers and minimum support from parents were highlighted by another trainee. The overprotective nature of parents in certain cases also limited the development of the trainee. However, after joining the Association his confidence enhanced and he was able to provide for himself. According to the participants, a major learning for them after coming to the Association was becoming self-reliant.

"I got very little support from my family and they didn't want me to come to Delhi. But I was adamant and came to the Association nonetheless. It is here that I learnt to become self-reliant and independent. This is very empowering."

## -PK (current trainee)

It has been found that the social skills of trainees also developed and they make new friends during their training period. Making friends enabled the trainees to relate with others and look beyond their own needs and interests. Moreover, for persons with visual impairment, social skills are extremely important as they enable them to communicate with others and express their needs and concerns.

"Coming to the Association was the first time I went out of my house. I was socially anxious before, but at the Association I made friends and it made me confident."

## -KKG (former trainee)

It has been found that they got the motivation to look forward in life after joining the Association and not getting bowed down due to their disability. It also broadened their outlook towards life and dealing with challenges with a positive frame of mind.

#### Opinion about the multi-skill training program-

The multi-skill training program has been successful in empowering the visually impaired trainees. Moreover, it also enabled them to enhance their skills which aided in their employment opportunities. As mentioned earlier many skills are imparted to the trainees including book-binding, candle-making, stitching, etc. as a part of the training program.

"I learnt stitching under the multi-skill program and it helped me to get a job in the embroidery sector. The communication and personality development classes helped me to work in my workspace and in a group."

#### -PKR (former trainee)

The pedagogy of the multi-skill training program also provides communication and personality development training to its trainees, and as per the participants, this has massively helped them. Many of the participants did not have much knowledge of the English language, and the English communication classes have enabled them to grasp the basics of the language and engage in formal conversation.

"The experience that I got from my training improved my self-confidence and I was able to effectively communicate with my employer. I credit the Association for enhancing my English communication skills as I feel it is important in the job market."

## -AK (former trainee)

The Association added baking classes as a part of the multi-skill training program, and according to the participants, this has enriched their training experience and has added a new option for them in the job market.

"I was not aware that persons with visual impairment could also be involved in learning baking. This was a new experience for me and now I have learnt to make sandwiches and different types of cookies. This can be a new avenue for us as a source of income and livelihood."

## -MI (current trainee)

A major driving force for the success of the multi-skill has been its instructors and the participants had positive opinions on them. According to them, the instructor-trainee relationship has been empowering.

"The instructors are patient with us and train us very well on the different aspects of the training pedagogy. They were supportive and encouraged in every step of our training. For example, mobility is a major challenge for persons with visual impairment, and the orientation & mobility instructor helped us to overcome our fear and navigate confidently in public spaces."

## -JM (current trainee)

It can be emotionally challenging to live with a visual impairment and the role of the instructors becomes extremely significant in creating and nurturing an inclusive atmosphere that fosters acceptance. Furthermore, by offering empathy, they positively contribute to the emotional well-being of the trainees.

# Role of assistive technology-

The computer training class is a mandatory part of the multi-skill training program pedagogy and according to the participants, while it introduced them to computers and new technologies, it also aided them to actively engage in the digital world. the knowledge of computers has become a necessary life skill. Moreover, basic computer skills are vital for employability and efficiency in many sectors.

"Before coming to the Association, I had no experience working with computers. However, now I can work in MS Word, make files, and make lists and bills in MS Excel. The training has been extremely beneficial for me."

## -RS (current trainee)

The above sentiment on how the computer training has helped them was reiterated by all the participants. They also underlined the importance of talkback and screen reader technologies, like JAWS (Job Access With Speech), that were introduced to them in training in their mundane lives.

"Apart from learning typing, the screen reader and talkback software taught to us in class help me to easily navigate devices, like my phone."

-AM (former trainee)

#### Issues and challenges faced by the participants:

The participants faced certain issues and challenges during their training. One of the challenges that most of the participants faced initially was in English communication, which is an important indicator in today's job market. The trainees, due to the lack of access to it in their native places, found it a bit difficult to understand certain aspects of training in their initial phase at the Association.

"Initially, I faced issues in English communication as I did not learn it in school. This posed certain difficulties in my training, for example in computer training as I was not able to understand the commands. However, over time, I have learnt the basics of English and this has gradually reduced my problem."

#### -RS (current trainee)

Another challenge as narrated by a participant is regarding navigating the premises of the Association as some rooms in the building did not have Braille signs outside them. This puts certain limitations on the independent mobility of the participants.

"The major challenge that I have faced in the Association is regarding navigating the different rooms and offices. Outside some classrooms and offices, signs in Braille are not present and I have raised this issue with the authorities."

## -JM (current trainee)

## Suggestions to improve the training program:

Moreover, the participants in their interviews have pointed out certain suggestions which can improve the multi-skill training program. Suggestions ranged from increasing the number of instructors in certain units to increasing the time period of the computer training classes.

"In the book-binding section, there is only one instructor while in the sewing unit, there are two instructors. According to me, the Association can look into this and I feel this can also help the current instructor at the book-binding section. Moreover, paper cup making, which is in growing demand, can be taught to us."

# -AM (former trainee)

The multi-skill training program, as cited by a participant, can also accommodate additional skills regarding the production of certain items which are in demand at the market as this has the possibility to enhance their income sources.

"Agarbatti (incense sticks) and chappal (sandal) making can be included in the training pedagogy as these can add more options for our sources of income."

# -KKG (former trainee)

According to some of the current trainees, the daily time period of the computer training class can be increased from one hour to one and half hour. They believe this can further enhance their understanding of computers and give them more time to explore and learn them.

"As we did not have experience working with computers before coming to the Association, I feel that increasing the time period of the class can help us to learn its features more and eventually in our employment. In today's world, knowledge of computers is a basic necessity."

## -PK (current trainee)

The suggestion to increase the time period of the computer training implies the interest of the participants in the class and in learning electronic devices, vital in contemporary times.

# 7. MAJOR FINDINGS:

- The multi-skill training program of the Blind Relief Association, Delhi has been successful in enhancing the skills of the trainees which aids them in livelihood opportunities. The training pedagogy is aligned to meet and prepare the trainees in the context of the current market and job demands.
- The environment of the Association enables the trainees and gives them the confidence to engage in social interactions and overcome their hesitation and anxieties. The trainees have the chance to make social ties and increase their social networks.
- Assistive technology, as already emphasized, plays a vital role in the lives of persons with visual impairment. The training provided to the trainees on computers and other technologies like JAWS has helped them in enhancing their employability skills apart from improving their daily living skills and making them self-reliant.
- The contributions of the instructors have been appreciated by the trainees. The instructor-trainee relationship has been empowering for the trainees and it helps them to explore different aspects of the training in a safe and secure manner.
- The computer training class has been one of the highlights of the multi-skill training program and the participants have benefitted from this and they have suggested that the time period of the class further increases.

# 8. RECOMMENDATIONS/SUGGESTIONS:

- The enforcement of the Rights of Persons with Disabilities Act, 2016, remains a challenge, for instance, while accessibility is greatly emphasized in the act, many public places are still not fully accessible to persons with disabilities. It is suggested to the government that it ensures the proper implementation of the Act and strict action should be taken against violators.
- The vocational training model of the Blind Relief Association, Delhi has been found beneficial and can be introduced in other parts of the country. The training model can be monitored and evaluated depending on the local context.
- The Association needs to put signs in Braille outside every room/office for easy and independent navigation of the visually impaired trainees. Moreover, a map of the Association in Braille can be put near the main entrance to enhance its accessibility.

• The duration of the computer training class can be extended as cited by the participants. Additionally, to ensure compatibility with developing technologies, the infrastructure for assistive technology should be routinely updated and maintained.

# 9. LIMITATIONS OF THE STUDY:

- The major limitation of this study is that it was conducted only at the Blind Relief Association, Delhi and with its trainees. The social realities of persons with visual impairment have contextual variations so there is a need to conduct a similar study on a broader level.
- Another limitation is that the study was conducted only with certain trainees of the current and previous batch of the multi-skill training program. The experiences of these trainees might not entirely reflect or fit the entire batch.

# **10. CONCLUSION:**

The multi-skill training program of the Blind Relief Association, Delhi has been able to enhance the skill levels of persons with visual impairment and provide them with opportunities to enhance their self-confidence and self-reliance. The experience of the visually impaired trainees has been transformative at the Association and the environment provided to them is safe and conducive for their socio-emotional development. Moreover, as emphasized by Bhaskar et al. (2022) in their study, the support of organizations like the Blind Relief Association can help persons with visual impairment to achieve and sustain success in their careers.

The role of the Association also becomes vital when it comes to attracting employers for its trainees. It actively introduces the trainees to different employment opportunities and further, it facilitates the newly employed in getting familiar with their new work and the workplace environment.

This model of the vocational training program for persons with visual impairment can be adopted in other parts of the country and can also be extended to include persons with other/multiple disabilities.

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