

CHAPTER 1

INTRODUCTION

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1.1 Disability in a Global Perspective

The experience and conceptualization of disability differ across cultures, time periods, and geographic regions. From a global standpoint, understanding disability involves recognizing the diverse ways societies perceive, treat, and support individuals with disabilities.

1.1.1 Defining Disability: The World Health Organization (WHO) describes disability as a complex, dynamic, multidimensional, and culturally defined issue. The International Classification of Functioning, Disability and Health (ICF) characterizes it in terms of impairments, activity limitations, and participation restrictions (World Health Organization, 2001). A disability, as defined by the Americans with Disabilities Act (ADA), refers to a physical or mental impairment that substantially limits one or more major life activities, a record of such an impairment, or being regarded as having such an impairment (U.S. Department of Justice, 1990).

The UNCRPD stands for the United Nations Convention on the Rights of Persons with Disabilities. Adopted in 2006, the convention is an international human rights treaty aimed at promoting and protecting the rights and dignity of persons with disabilities.

The definition of "disability" as per the UNCRPD is a bit different than other traditional definitions, as it is framed more in the context of societal interaction and barriers than solely on the basis of medical conditions or impairments. Here's the relevant passage from the Preamble of the convention:

"Disability is an evolving concept and that disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others."

From this definition, there are a few themes which emerges:

1.1.1.1 Evolving Concept: This indicates that the understanding and categorization of disability might change over time based on societal, technological, and other developments.

1.1.1.2 Interaction between Persons and Barriers: The definition acknowledges that disability is not just about the presence of a physical, mental, intellectual, or sensory impairment. Instead, it results from the interaction of such impairments with societal barriers, both attitudinal (e.g., discrimination, stigma) and environmental (e.g., lack of accessibility in buildings or public transport).

1.1.1.3 Full and Effective Participation: A core aim of the UNCRPD is to ensure that persons with disabilities can participate fully and effectively in society, emphasizing that barriers (not the impairments themselves) are often what prevent this participation.

The UNCRPD's perspective on disability is grounded in the social model of disability. This model posits that disability is created by societal barriers rather than by individual impairments, contrasting with the medical model which focuses mainly on the impairments themselves. By emphasizing societal barriers and the interaction between impairments and these barriers, the UNCRPD encourages changes in society to enhance inclusivity and accessibility.

The Disability itself is defined by its term that it doesn't have a one definition that means every organization has defined disability with their own perspective and understanding. This is why disability is knowledge and everyone has considered it in their own way. This gives a fragmented structure of disability therefore efforts so far put in to bring disability into the mainstream are also diverse in nature and couldn't yield results as it is supposed to be. If address disability is in one uniform and collective way then it becomes a force to be reckoned with. The entire population of disabled on the globe is not a minority but treated as a minority in one's own sovereignty.

1.2 Global Prevalence: Over a billion people, or approximately 15% of the world's population, have some form of disability. The prevalence is higher in developing countries due to factors like poverty, inadequate medical care, and lack of access to education (World Report on Disability, WHO, 2011). The prevalence of disability varies across countries and is affected by several factors, including different cultural understandings of disability, available infrastructure and support, and methods of measurement. Additionally, lower-income countries tend to have higher prevalence

rates, often due to lack of access to health care, preventative measures, and greater risk factors such as malnutrition, poor water, sanitation and war.

1.2.1 War and Armed Conflict: These have pervasive and long-lasting consequences on the health and wellbeing of populations. Since the start of the new millennium, the world has witnessed several wars, prolonged conflicts, and insurgencies. One of the unfortunate outcomes of these conflicts is the surge in the number of people living with disabilities as a direct consequence of war-related incidents.

Though not solely responsible, the wars and conflicts since 2000 have undoubtedly contributed to the disabled population.

Post-2000 wars like the ongoing conflicts in Afghanistan, Iraq, Syria, Yemen, and several African nations have led to devastating consequences for civilians. Direct injuries from bombings, shootings, and shrapnel often lead to physical disabilities. In Afghanistan alone, the International Committee of the Red Cross (ICRC) has reported treating tens of thousands of amputees since 2001 (ICRC, 2020). Many survivors suffer from loss of limbs, reduced mobility, or other physical impairments.

Apart from physical injuries, the psychological impact of wars is substantial. The trauma resulting from witnessing acts of violence, losing loved ones, or being personally subjected to violence can result in mental disabilities. Conditions such as post-traumatic stress disorder (PTSD), severe anxiety, and depression have become prevalent in war-torn regions. For instance, a study in Iraq showed that 17% of the population reported suffering from mental health disorders, with conflict being a significant factor (Alhasnawi et al., 2009).

Additionally, the use of certain weapons has posed long-term disabilities. The use of depleted uranium in Iraq and the explosion of landmines in places like Afghanistan and Africa have resulted in not just immediate physical harm but also long-term health issues, including birth defects and cancer. As per Landmine Monitor Report, over 120,000 casualties from landmines and explosive remnants of war were recorded between 2000 and 2018, many of which resulted in permanent disabilities (Landmine and Cluster Munition Monitor, 2019).

The repercussions of these disabilities extend beyond the immediate victims. Families and communities experience socio-economic challenges, as they might lose primary breadwinners or need to allocate resources for the prolonged care of a disabled

member. This ripple effect exacerbates the poverty cycle, particularly in countries with limited resources.

However, it's essential to note the resilience and strength exhibited by war survivors with disabilities. With the support of international organizations and local NGOs, many have found ways to reintegrate into society, securing employment and advocating for the rights of the disabled.

The wars and conflicts since 2000 have significantly contributed to the global prevalence of disability. From direct physical injuries to the deep psychological traumas and the aftermath of particular weaponry, the scars of war are profound and multifaceted. Addressing the needs and rights of war-induced disabled individuals is crucial for global health and socio-economic stability. These wars and conflicts involve a huge amount of capital and destruction. If half of the amount incurred in these wars and conflicts, this amount would have the entire population of disabled rehabilitated and financially independent, of course an inclusive world.

1.2.2 Road Accidents and Natural Calamities: In the early 21st century, the world has faced numerous challenges, including natural disasters and road accidents, both of which have significantly affected public health and well-being. While much research has concentrated on immediate mortality rates, the long-term disabilities resulting from these events are often less explored. This study offers an overview of the prevalence of disabilities resulting from these incidents since the year 2000 (World Health Organization, 2018; United Nations, 2015).

Data was gathered from sources such as the World Health Organization, the World Bank, and national disaster management authorities. Disabilities were categorized into physical, sensory, intellectual, and mental impairments. Since 2000, there has been a gradual rise in road accidents, particularly in low- and middle-income countries. While many accidents led to fatalities, a significant proportion resulted in long-term disabilities. By 2020, road accidents accounted for about 20% of disabilities, including conditions such as limb amputations, traumatic brain injuries, and sensory impairments (World Health Organization, 2018).

Natural disasters like tsunamis, earthquakes, and hurricanes have also had a lasting impact. Events such as the 2004 Indian Ocean tsunami, the 2010 Haiti earthquake, and various cyclones across Southeast Asia have caused severe injuries. These

disasters contributed to approximately 10% of new disabilities reported since 2000, with injuries ranging from spinal cord damage to psychological effects like post-traumatic stress disorder (United Nations, 2015).

In addition, occupational hazards continue to play a role in the development of disabilities. Disability is a complex and recurring issue, often resulting from events beyond individual control, such as natural disasters, wars, road accidents, and workplace risks. It is essential to foster greater inclusion of people with disabilities into mainstream society, as these conditions arise from circumstances for which no one is personally at fault (World Bank, 2007).

1.3 Socio-Cultural Understandings: Disabilities are physical, cognitive, sensory, or psychiatric, can be understood and experienced differently across various cultural and social contexts. These differences in understanding and experience arise primarily due to the socio-cultural influences that shape our perceptions, attitudes, and beliefs about disability.

1.3.1 Historical Context and Evolution: Historically, many societies viewed disability through a medical lens, treating it as a deviation from the 'norm' that needed to be fixed (Oliver, 1990). However, with the rise of the social model of disability, there was a shift towards understanding disability as a result of societal barriers rather than just individual impairments. This model challenged societies to change the environment and attitudes that prevent individuals with disabilities from fully participating in society.

1.3.2 Cultural Beliefs and Attitudes: Cultural beliefs often influence how disability is understood and experienced. Some cultures view disability as a result of past karma, others as a spiritual test, and some might perceive it as a medical condition (Ingstad & Whyte, 1995). Such beliefs can lead to stigma, where individuals with disabilities might be treated as outcasts or even as possessing special spiritual powers. For example, in certain African communities, albinism has been associated with both reverence and revulsion (Brocco, 2016).

Furthermore, the value a culture places on independence, productivity, and conformity can influence the way it perceives disability. Highly individualistic societies might emphasize self-reliance, leading to possible marginalization of those with disabilities,

whereas collectivist societies may emphasize community support and may be more inclusive.

1.3.3 Social Constructs and Norms: Society's expectations about roles and behaviors, often termed social constructs, can impact the lived experience of disability. These constructs can lead to assumptions about what individuals with disabilities can or cannot do, often underestimating their potential. For instance, the expectation that a "productive" individual must work in a traditional 9-to-5 job can limit opportunities for those with disabilities, who might need flexible work hours or accommodations.

1.3.4 Media Representation: The way the media portrays disability significantly influences public perception. A lack of representation or stereotypical portrayals, such as the "helpless victim" or the "inspirational hero," can perpetuate misconceptions and biases (Haller, 2010). On the flip side, accurate and diverse portrayals can foster understanding and acceptance.

1.3.5 Legal and Policy Framework: Socio-cultural attitudes also shape, and are shaped by, legal and policy frameworks. In countries where there is strong legislation supporting the rights of people with disabilities, like the Americans with Disabilities Act in the U.S., there is a greater emphasis on inclusion, accessibility, and equal rights. Such policies can reflect and further nurture positive societal attitudes.

No doubt socio-cultural factors exert a profound influence on how disability is perceived, experienced, and addressed in society. From deeply rooted cultural beliefs to media representations and legal frameworks, multiple facets of society shape our understanding of disability. It is crucial for policymakers, educators, and the general public to recognize these influences and work towards a more inclusive and understanding society for all.

1.4 Rights-Based Approach to Disability

Historically, disability was perceived primarily through a medical or charity model. People with disabilities were seen as "suffering" from impairments and were often treated as objects of pity, passive recipients of care, and subjects of charity. This perspective led to their exclusion, discrimination, and the violation of their fundamental rights. However, in the last few decades, there has been a paradigm shift.

The rights-based approach to disability emerged, emphasizing the human rights and inherent dignity of persons with disabilities.

1.4.1 The Rights-Based Approach: The rights-based approach posits that people with disabilities are not objects of charity or merely patients needing medical treatment. Instead, they are holders of rights, just like everyone else. This perspective reframes disability as a social issue, recognizing that barriers in the environment, society, and policies - not the disability itself - are what disables people (Oliver, 1996). Thus, the onus is on society to adapt and become more inclusive, rather than expecting people with disabilities to change or fit into a predominantly able-bodied world.

1.4.1.2 Core Principles of Right Based Approach: The rights-based approach, as articulated by the United Nations Convention on the Rights of Persons with Disabilities (CRPD) in 2006, is founded on the principle that persons with disabilities should enjoy their human rights on an equal basis with others. This framework highlights the importance of inclusivity and accessibility in all aspects of life, recognizing the inherent dignity and worth of every individual, regardless of their abilities. It emphasizes that disability should not be a reason for exclusion or marginalization, but rather an aspect of human diversity that must be respected and celebrated.

One of the core principles of this approach is **respect for inherent dignity**. It asserts that all individuals, irrespective of their physical or mental abilities, deserve respect and autonomy. This perspective recognizes the value of every person and the importance of ensuring that their rights are upheld in a manner that affirms their dignity.

Another critical aspect is **non-discrimination**, which requires that no one be denied their rights due to a disability. This principle calls for proactive measures to ensure inclusivity, ensuring that barriers preventing persons with disabilities from full participation are removed. The focus is not just on avoiding discrimination but actively promoting equality by creating an environment that enables everyone to thrive.

The **principle of participation and inclusion** further underscores that persons with disabilities should not be sidelined. Instead, they should be active contributors to

society, participating in all spheres of life, including education, employment, and social activities. This ensures that the voices of persons with disabilities are heard and considered in decision-making processes that affect them.

Respect for difference is another fundamental principle. It promotes the view that disability is a natural part of human diversity, deserving of recognition and celebration rather than pity or avoidance. By fostering respect for this difference, society can build a more inclusive and understanding environment.

Lastly, **equality of opportunity** is crucial. This principle asserts that people with disabilities should have the same opportunities as others, free from systemic barriers that limit their potential. It calls for the removal of physical, social, and institutional obstacles, enabling individuals with disabilities to achieve their aspirations and fully engage in society.

1.4.2 Benefits of the Rights-Based Approach

The rights-based approach promotes **empowerment** by positioning people with disabilities as active participants in society, recognizing that they have the same rights and responsibilities as others. This framework encourages individuals with disabilities to take ownership of their lives and participate fully in social, economic, and political spheres. Rather than viewing disability from a charity or medical model, it sees people with disabilities as equal members of society, capable of contributing to and shaping their communities (Quinn & Degener, 2002).

Another crucial aspect of this approach is that it **encourages social change**. It challenges the notion that the primary barriers faced by people with disabilities stem from their impairments. Instead, it identifies societal structures and attitudes as the major obstacles. By pushing for policy reforms and societal shifts, this approach advocates for a more inclusive society where barriers—whether physical, attitudinal, or institutional—are systematically removed, creating a more accessible environment for all.

The rights-based approach also **supports accountability**. It holds governments, institutions, and other entities responsible for ensuring the rights of people with disabilities are upheld. This means that policymakers must implement and enforce laws that protect these rights, and organizations must develop practices that foster inclusivity. The approach ensures that there is a legal and moral obligation to protect

the rights of people with disabilities, ensuring that they are not overlooked or marginalized.

Finally, this approach promotes **holistic development** by recognizing disability as a cross-cutting issue. It emphasizes that disability rights must be integrated into all sectors of development, including education, employment, healthcare, and infrastructure. This ensures that individuals with disabilities are considered in every aspect of planning and implementation, resulting in a more inclusive and equitable society where they have the opportunity to thrive in all areas of life.

The rights-based approach to disability is a transformative framework that moves away from seeing disability as a personal tragedy or a medical problem and towards recognizing it as a human rights issue. By focusing on the rights, dignity, and capacities of persons with disabilities, this approach promotes inclusivity, equality, and social justice. It acknowledges that all individuals, regardless of their abilities, are valuable contributors to society and deserve equal opportunities and respect.

1.5 Intersectionality and Disability: A Multifaceted Perspective

The concept of intersectionality is rooted in an understanding that individuals' identities are multi-faceted and that various aspects of these identities can intersect to create unique experiences of oppression or privilege (Crenshaw, 1989). Disability, as an aspect of identity, does not exist in isolation. Instead, it interacts with other dimensions of identity, such as race, gender, class, and sexuality. This intersectional perspective on disability offers a nuanced view of the experiences of disabled individuals, emphasizing that there is no singular "disabled experience" (Anastasiou & Kauffman, 2013).

To understand the intersectionality of disability, it's important to first acknowledge that disability, whether visible or invisible, physical or mental, is not merely a medical condition but a social category. Society often places barriers that limit the participation and rights of people with disabilities, leading to systemic discrimination (Shakespeare, 2006). However, when other marginalized identities intersect with disability, these barriers can be magnified.

For instance, consider the experience of a disabled woman of color. Not only does she face the societal barriers associated with her disability, but she also contends with systemic racism and sexism. These multiple forms of discrimination can compound, resulting in unique challenges that differ from those faced by white disabled women or able-bodied women of color (Erevelles & Minear, 2010).

Similarly, socio-economic class plays a crucial role. People with disabilities who come from low-income backgrounds might face more significant challenges in accessing healthcare, assistive devices, and quality education, exacerbating the inequalities they experience. The socioeconomic divide can lead to a significant disparity in quality of life and opportunities available for disabled individuals (Barnes, Mercer, & Shakespeare, 2010).

1.5.1 Sexuality: It interacts with disability in meaningful ways. Disabled LGBTQ+ individuals often report feeling marginalized within both disabled and LGBTQ+ communities. They might encounter barriers in accessing LGBTQ+ spaces due to physical inaccessibility or negative societal attitudes towards their disability within these spaces. Additionally, they might face skepticism or bias when seeking disability services or support because of their sexual or gender identity (McRuer, 2006).

Importantly, intersectionality is not just about understanding oppression; it's also about recognizing resilience, agency, and resistance. Many disabled individuals who hold multiple marginalized identities have been at the forefront of advocacy movements, bringing attention to the nuances of intersectional discrimination and driving change in policies and societal attitudes (Gill, 1997).

To truly understand and address the challenges faced by disabled individuals, it's crucial to adopt an intersectional lens. Recognizing the complexities of overlapping identities can lead to more inclusive policies, better support services, and a more holistic understanding of the diverse experiences within the disabled community. Embracing intersectionality in discussions about disability ensures that no voice is left unheard and that the unique challenges faced by those with intersecting marginalized identities are addressed.

1.6 Global Economic Disparities

Worldwide, individuals living with disabilities encounter significant disparities in economic engagement. These disparities are evident in their lower rates of participation in economic activities, higher instances of unemployment, and often reduced earning potential in comparison to those without disabilities. The underlying causes of this economic marginalization are multifaceted. Limited access to quality education tailored to their needs restricts the acquisition of skills necessary for securing stable employment. Moreover, discriminatory attitudes prevalent in workplaces contribute to a hostile environment that hinders their career advancement. These factors combined contribute to the pronounced economic imbalances

experienced by people with disabilities (Mizunoya & Mitra, 2013). In capitalism, capital is your measure of your existence and defines your identity as per your possession of capital. One of the reasons for disability to be remaining excluded and marginalised is the perception of the majority in society about their ability for productivity. There is no right based approach, only charity based for hiring disabled. The impact of economic disparities such that effect and affect disabled community in all spheres of life majorly is as follows: People with disabilities frequently encounter formidable barriers when attempting to access essential healthcare services. The obstacles encompass both physical and attitudinal aspects. Physical barriers arise from inadequately designed medical facilities that lack accommodations for individuals with mobility impairments or other disabilities. Concurrently, the scarcity of healthcare personnel trained to address the unique needs of disabled patients further impedes their access to quality care. This scenario is exacerbated by discriminatory attitudes that may result in unequal treatment or even denial of medical services. These challenges cumulatively contribute to the pronounced health disparities experienced by the disabled population (Maart & Jelsma, 2014).

1.6.2 Disability and Education: On a global scale, children with disabilities often encounter obstacles in accessing education. They are less likely to initiate their educational journey and are more prone to discontinuing or transferring between schools. These disparities in educational participation and attainment stem from a lack of inclusive educational environments. Traditional teaching methods and infrastructures often fail to accommodate the diverse learning needs of disabled students, leading to exclusion and disengagement. In response, international efforts are underway to adopt inclusive educational practices that cater to the requirements of all students, ensuring their equitable access to quality education (UNESCO, 2019).

1.6.3 Technology's Impact and Accessibility: Technological advancements have introduced both opportunities and challenges for individuals with disabilities. Innovations such as voice-activated software and advanced prosthetics have significantly enhanced their ability to communicate and interact with the world. However, the digital realm remains marked by obstacles due to a lack of universal accessibility design. While strides have been made, many digital platforms, websites, and applications still lack adequate provisions to cater to the needs of disabled users. This underscores the need for comprehensive integration of accessibility features to

ensure that technological progress benefits all members of society (Goggin & Newell, 2003).

1.6.4 Advocacy and Activism Across Continents: Globally, individuals with disabilities and their advocates have taken on active roles in promoting awareness, fighting for rights, and striving for equal opportunities across all sectors of society. Through dedicated activism and advocacy efforts, they seek to challenge existing prejudices, eliminate discriminatory practices, and ensure that disabled individuals can fully participate in all aspects of life. This collective movement, fueled by a desire for recognition and equal treatment, continues to shape societal attitudes and policies toward disability, gradually fostering a more inclusive and equitable world (Charlton, 1998).

India is home to the largest disability community in the world. Being the most populated country of humans in the world, India has its own way of dealing with the disabled population. It's necessary for the world to understand how India so far considering disability community with its own ethos of “One World, One Family & One Future – **Vashudhay kutumbakam**”



Figure 1: Vasudhaiva Kutumbakam

Source<https://www.indiatimes.com/amp/news/india/as-world-sees-wars-un-invokes-indias-vasudhaiva-kutumbakam-philosophy-617420.html>

1.7 Disability from an Indian Context

India, with its diverse cultural heritage, is home to a multitude of indigenous communities, each with unique customs, traditions, and languages. These communities include those with a long history of dealing with deafness (Ladd, P., 2003). The perception and acknowledgment of disability in India have undergone significant transformations over time, reflecting the country's cultural shifts, political dynamics, and the influence of rights-based movements. Understanding the Indian viewpoint on disability requires delving into its historical, cultural, and legislative intricacies.

The history of smallpox in India as the history of a disease: Medical historians of India have shown that the idea of "disease" was unfamiliar to the Indian setting prior to the introduction of modern medicine through foreign rule and interactions with European culture and education. In the past two decades, both historians and anthropologists have emphasized that smallpox was revered in India as *amman* (mother), *Sitala* (the cool one), or *Mariamamma* (Mother Mari, who is thought to be an incarnation of *durga* or *kali*, Hindu goddesses), depending on the situation. Several aspects of this way of thinking demonstrate that it did not resemble a disease in the local imagination. Smallpox was portrayed in the West as an illness that caused incapacitating consequences including deformity and blindness. Both Frédérique Apffel-Marglin's 1990 anthropological analysis of the disease and David Arnold's 1993 historical study of smallpox in colonial India provide crucial context for discussions about crippling diseases in the South Asian region. In their own interpretation of India, colonial India rewrites the concept of disability in this way. This paper will also outline the indigenous approach to deafness, how that approach has been shaped by colonial and western mindsets, and how it will be treated in an indigenous manner once more.

Usha Bhatt's history of disability in India explored various aspects of India's historical perspective on disabled people as early as 1963. She claimed that people from the Andaman Islands, an Indian tribe known as the *Todas*, were considerate to both adults and children who had impairments and did not sacrifice them. The *Todas* believed that it was sinful to hurt people who were deemed to be "deformed," "deaf and dumb," or the "weaklings" of society (*ibid.*, p. 85).

Bhatt goes on to say that Manu's laws and epics like the Mahabharata both served to encourage a generally helpful and benign outlook. Manu's laws offer context-specific regulations to the householder, the monarch, etc. while the Mahabharata's narrative sympathetically depicts persons with various impairments. In the Mahabharata, Dhritrashtra, the king, was blind.

The physically disabled were not an issue in ancient India because the State, the joint family, and to some extent the caste took care of those who required shelter and protection from the hardships of life. The job of ensuring the welfare of the community's needy and handicapped members fell to the headman of the small rural settlement (*ibid.*, p. 96).

By emphasizing the virtues of "mercy, charity, truth, purity, kindness, goodness and above all, non-violence," Buddhism intervenes later and encourages a more accepting attitude toward impaired individuals (*ibid.*). According to Bhatt, during the reign of Chandragupta Maurya, the first steps toward what we would now refer to as vocational rehabilitation for people who were deemed to be physically, socially, and economically disadvantaged inside the kingdom were taken. The generosity of Ashoka the king allowed for widespread charitable endeavor in accordance with Buddhist principles.

This is with reference to Anita Ghai's assertion that characters from ancient discourses like Surdas, a blind poet and musician, and Ashtavakra, famed for his eight deformities, are emblematic of those who battled disability persecution. Both of these individuals were believed to be children of god and were considered to have inherent rights.

According to the karma, a person's disability was thought to be the result of "wrong actions" in either a previous incarnation or the current. Caraka, an early Indian physician who wrote the Caraka Samhita, claimed that diseases in this life are a result of bad deeds committed in a previous life. Even traditionally, Indian society perceived disability through the prism of karma, linking it to actions in past lives. This perspective often associated disability with consequences of previous misdeeds (Bharath, S., & Kumar, K. V. (2010). Disability and Rehabilitation. *Indian Journal of Psychological Medicine*). The Indian Prime Minister proposed that Vikalang be

renamed Divyang in 2015 to do away with the idea that people with disabilities are cursed and subject to karma.

1.7.2 Cultural Significance (Societal): India boasts a rich cultural heritage spanning thousands of years, within which the concept of disability holds particular significance. Historically, societal attitudes towards disability in India have been moulded by a confluence of religious, traditional, and regional factors (Sharma & Mor, 2016).

In ancient epics like the Ramayana and Mahabharata, characters with disabilities held significant roles, indicating that disability was acknowledged in society. However, interpretations of disability varied across these narratives (Zutshi, B., & Zutshi, A. (2015). *Disability in Indian Mythology*. IOSR Journal of Humanities and Social Science).

A prevalent belief, anchored in Hindu philosophy, is the concept of karma, which suggests that actions from past lives influence current circumstances. For some, disabilities might be interpreted as outcomes of past transgressions (Das, 2010). However, it's crucial to recognize the heterogeneity of beliefs within India's diverse population, as not all interpret or endorse this perspective.

Epics such as the Mahabharata and Ramayana shed light on disability, offering narratives of characters like Dhritarashtra, the blind king, and Shabari, an elder with mobility challenges. These characters are not just defined by their disabilities but play pivotal roles in the overarching stories (Menon, 2005). Such representations have historically shaped public perceptions, potentially highlighting both the challenges and capabilities of individuals with disabilities.

Modern-day India, however, grapples with the practical implications of disability. While urban infrastructure increasingly recognizes the need for accessibility, rural areas often lag behind, exacerbating social stigmatization (Kumar & Ruro, 2018).

The silver lining is India's evolving legislative framework. The Rights of Persons with Disabilities Act, 2016, underscores the nation's progressive stance towards inclusivity, aiming to bridge historical biases with contemporary needs (Ministry of Law and Justice, 2016).

India's cultural narrative around disability is intricate, oscillating between historical beliefs and contemporary reforms. As the nation strides forward, the confluence of tradition and modernity will dictate the trajectory of disability rights and recognition.

1.7.3 Colonial Influence: The colonial period in India, under British rule, introduced multifarious changes in various facets of society, including perceptions and treatments of disability. Prior to colonial influence, disabilities in India were predominantly viewed through religious and cultural lenses, with interpretations varying from karma and reincarnation to spiritual gifts or curses (Addlakha, R. 2007). However, British colonialism introduced the Western medical model, shifting the discourse around disability from a socio-cultural understanding to a pathologized, medical condition that necessitated institutionalization or treatment.

During the colonial era, the British Empire imported Victorian values and notions of "normality" which stigmatized disabilities (Miles, M. 2001). The colonial government established asylums and institutions, drawing inspiration from the European model, which aimed to segregate and "treat" people with disabilities away from society. This not only alienated them but also reinforced the notion of disability as an aberration rather than a natural human variation.

Furthermore, the British introduced legislative measures, such as the Census, that for the first time quantified and categorized disabilities in India (Staples, J. 2007). The census documentation of the late 19th and early 20th century often used pejorative terms and focused on the economic "burden" of disability, perpetuating negative stereotypes.

While traditional Indian views of disability were varied and often rooted in spiritual and cultural beliefs, the British colonial period saw a marked shift towards the Western medical model. This paradigm change not only led to the marginalization of disabled individuals but also introduced a legacy of stigmatization that has persisted in some ways to the present day. The colonial influence, therefore, played a significant role in shaping modern Indian discourses and policies around disability.

During the British colonial period, the perception of disability took on a medical and charitable approach. The focus shifted towards rehabilitation and efforts to 'cure' disabilities. This change in perspective was influenced by the colonial regime's

influence and policies (Addlakha, R. (2007). Deconstructing mental illness in India: Challenge and hope. *The Indian Journal of Psychiatry*).

1.7.4 Legislation and Policy Framework: A pivotal stride in promoting equity, the Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 marked a turning point by striving for parity. This landmark was succeeded by the Rights of Persons with Disabilities Act in 2016, which not only upheld the essence of equal opportunities but also expanded the contours of disability categories, embracing a more comprehensive perspective (Mitra, S., & Sambamoorthi, U. (2014). Disability prevalence among adults: Estimates for 54 countries and progress toward a global estimate. *Disability and Rehabilitation*).

1.7.5 Education Advancements: In recent years, India has made significant strides in the realm of inclusive education, particularly for students with disabilities. Historically, many disabled individuals faced barriers in accessing quality education due to social stigmas, physical challenges, and lack of specialized resources (Srivastava, de Boer, & Pijl, 2015). However, contemporary efforts indicate a transition towards a more inclusive educational environment.

One noteworthy progression is the introduction of the Rights of Persons with Disabilities Act (RPDA) in 2016, which replaced the 1995 version of the act. The RPDA emphasizes the importance of inclusive education, mandating that children with disabilities have the right to free and compulsory education just like their peers (Ministry of Law and Justice, 2016). This legal foundation serves as a benchmark for schools and educational institutions, urging them to develop infrastructural facilities and training for teachers.

Furthermore, the Sarva Shiksha Abhiyan (SSA), a government program, has actively sought to make education accessible to all, including children with special needs. As a result, several model inclusive schools have been established throughout the country, showcasing how inclusive practices can be seamlessly integrated (Singal, 2008). The Sarva Shiksha Abhiyan and the Right to Education Act stand as beacons for inclusive education, emphasizing the importance of providing education to all. However, bridging the gap between theory and practice remains a challenge, as effective implementation encounters hurdles (Jha, M. M. (2002). Barriers to access and success: Is inclusive education an answer? (*The Journal of Disability Policy Studies*).

Yet, challenges persist. Accessibility to physical infrastructure remains a barrier in many schools. Moreover, teacher training and curriculum development need more emphasis to fully support the diverse needs of disabled students (Sharma, Moore, & Sonawane, 2009).

While India has made commendable advancements in promoting inclusive education for disabled individuals, continued investment in infrastructure, training, and resources is essential. As the nation works towards a more equitable education system, the focus should remain on ensuring that every child, regardless of their abilities, has the right to learn.

1.7.6 Economic Empowerment of People with Disabilities in India: India has steadily recognized the potential and rights of its disabled populace. Addressing economic barriers is pivotal for integrating the disabled into mainstream economic activities. Recent legislative measures and technological advancements signal a promising future.

Despite legislative endeavors such as the National Policy for Persons with Disabilities in 2006, which champions vocational training and self-employment, economic avenues for individuals with disabilities remain constricted. The reality of limited economic prospects persists, necessitating ongoing efforts (Jeffery, R., & Singal, N. (2008). Measuring disability in India. *Economic and Political Weekly*).

The Rights of Persons with Disabilities Act, 2016 forms the legislative backbone for the inclusion of the disabled (Ministry of Law and Justice, 2016). It ensures non-discrimination and mandates a 4% reservation in government jobs. More significantly, it emphasizes creating a physical and digital infrastructure that is accessible to all, thereby opening a plethora of economic avenues that were previously out of reach. This act signifies the nation's commitment to tapping into the vast potential of its disabled citizens by ensuring they have equal footing in economic activities.

Technological strides further this goal. Innovations in assistive technologies, such as voice-assisted software, Braille-enabled devices, and mobility solutions, are not just leveling the playing field but are actively expanding economic opportunities (World Health Organization, 2018). For instance, visually impaired individuals, with the help of screen reading software, are breaking into fields like software development, content creation, and digital marketing.

However, it's crucial to continuously bridge the gap between policy design and implementation. Local governance, public-private partnerships, and NGOs play an essential role in ensuring that the benefits of these measures permeate to the grassroots level (Chakraborty & Joseph, 2020).

The economic **environment** for people with disabilities in India is undergoing significant transformation. With progressive legislation and advancements in technology working in tandem, there is hope for a future where disability does not limit economic potential. The synergy between these two forces is reshaping opportunities, providing a more equitable setting. However, ensuring that these initiatives reach every corner of society requires effective implementation and collaboration among local governments, public-private partnerships, and NGOs. This combined effort promises a more inclusive and accessible future, where individuals with disabilities can fully participate in economic activities.

1.7.7 Societal Perceptions: India, a country enriched by its diverse culture and ancient history, has always had a complex relationship with its disabled population. Historically, the disabled in India were often marginalized and faced challenges in integration due to a combination of societal, religious, and cultural factors. The perception of disability was largely influenced by karma, where many believed that disabilities resulted from past life transgressions (Mitra & Sambamoorthi, 2014). This perspective contributed to a certain level of stigma and alienation, with disabled individuals sometimes being viewed as a burden by their families and communities.

Embedded social perceptions, often shaped by misconceptions, pose substantial barriers for disabled individuals. Yet, progress emerges as society undergoes a gradual transformation. Awareness initiatives and media portrayals work in tandem to recalibrate societal attitudes, fostering a more inclusive narrative (Thomas, M. (2005). Disability, poverty and the Millennium Development Goals: Relevance, challenges and opportunities for DFID. ADD International).

In the urban regions, as India underwent rapid modernization, there was a gradual shift in attitude. Globalization and awareness campaigns have played a role in reshaping societal perceptions, making urban populations more accepting and accommodating of the disabled. There has been a push towards inclusivity, with

legislation such as the Rights of Persons with Disabilities Act, 2016 ensuring equal rights and protection against discrimination (Government of India, 2016).

However, in many rural areas, traditional beliefs persist and accessibility remains a major concern. Infrastructure and facilities are often not designed for the differently-abled, thereby limiting their mobility and participation in daily life.

Education and employment opportunities for the disabled have also seen improvement in recent years. Special schools, inclusion programs, and quotas in government jobs ensure that the disabled have avenues to thrive (World Bank, 2007). Yet, disparities exist, and more needs to be done to level the playing field.

While perceptions and treatment of the disabled in India are slowly changing for the better, there still exists a dichotomy between urban and rural regions. As the country moves forward, it will be crucial to address these disparities to build a truly inclusive society.

1.7.8 Rights-Oriented Approach: In India, the rights-oriented approach for persons with disabilities (PWDs) is transforming traditional perspectives that often perceive disability as a medical or charitable concern. Grounded in human rights, this paradigm shift views PWDs as rights-bearing individuals, entitled to equal opportunities and full participation in society (World Health Organization, 2011).

The Rights of Persons with Disabilities Act (RPWD) of 2016 represents a significant stride in adopting this rights-based framework. The Act was conceived in harmony with the United Nations Convention on the Rights of Persons with Disabilities (CRPD), to which India is a signatory. The RPWD guarantees PWDs equal access to education, employment, and other public facilities, while also emphasizing the need for dignity, autonomy, and non-discrimination (Ministry of Law and Justice, 2016).

Such legislation underscores the necessity for infrastructural and attitudinal shifts. For instance, creating accessible public spaces and transportation systems not only facilitates physical movement but also promotes social inclusion. Furthermore, equal access to education and employment opportunities would cultivate a sense of purpose and belonging among PwDs (Sharma, Bakhshi, & Kumar, 2017).

While progress has been made, a truly inclusive India requires continued efforts to materialize the principles of the rights-oriented approach. Active collaboration between government agencies, civil society, and the PWD community is paramount in

ensuring that every individual, irrespective of their disability, enjoys the rights and freedoms they inherently deserve.

Campaigns for change have underscored a departure from conventional welfare and charitable approaches, favoring instead a rights-centered standpoint. This paradigmatic shift directs attention towards fundamental aspects such as autonomy, respect, and the assurance of equal rights for individuals with disabilities (Dhanda, A. (2000). *Legal capacity in the disability rights convention: Stranglehold of the past or lodestar for the future.* Syracuse Journal of International Law and Commerce).

1.7.9 The Complex Intersections of Disability in India: India, home to over 26.8 million people with disabilities, carries the responsibility of addressing their diverse needs (Census 2011, Ministry of Statistics and Programme Implementation, 2016). The experiences of individuals with disabilities are shaped by intersecting layers of social identity, including caste, religion, gender, and economic status. These intersections significantly impact their access to services, discrimination, and opportunities, making it clear that disability is deeply intertwined with multiple societal dimensions.

Disability does not exist in isolation; it is compounded by factors such as gender, caste, and socio-economic status. Understanding these intersections is crucial to providing meaningful support. The hierarchical caste system, for instance, exacerbates social exclusion for individuals with disabilities, especially those from lower castes. These individuals face dual discrimination—both from their caste status and their disability—making their path toward empowerment and inclusion particularly challenging (Mandal & Shukla, 2018).

Religion also plays a pivotal role in shaping the lives of disabled individuals. In some cases, religious beliefs interpret disability as a consequence of past life actions or a test of faith, reinforcing stigmatizing attitudes. This further complicates their access to religious spaces, many of which lack accessibility features.

Gender is another critical factor. Disabled women, especially those in rural areas, are doubly marginalized, facing both gender-based and disability-related discrimination. They often endure heightened vulnerability and have less access to rehabilitation services compared to their male counterparts, making their struggles more acute (Mitra, Posarac, & Vick, 2013).

Economically, most individuals with disabilities in India belong to lower-income brackets. Economic hardships limit their access to essential services such as healthcare, assistive devices, and education. Unemployment remains high due to systemic barriers, leaving many without adequate opportunities for economic advancement (World Bank, 2007).

The intersection of disability with caste, religion, gender, and economic status creates a complex web of challenges for individuals with disabilities in India. Addressing their needs requires a deep understanding of these intersecting realities, so that policies and interventions can be crafted to ensure true inclusivity and empowerment for all.

1.7.10 The Role of Technology in Empowering Disabled Individuals in India: In a country as vast and demographically diverse as India, around 2.68% of the population lives with some form of disability (Census 2011). Historically, this population has faced numerous challenges, ranging from socio-economic inequalities to limited accessibility. However, the fusion of technology in recent years has begun to address these issues, fostering greater inclusivity and improving the quality of life for disabled individuals.

One of the most groundbreaking developments is the rise of assistive technologies powered by artificial intelligence (AI). Applications that convert speech to text or vice versa have significantly empowered those with hearing or speech impairments. Additionally, voice-activated systems, such as home automation devices, are offering individuals with mobility challenges greater independence by allowing them to control their environment through voice commands.

India's ongoing technological revolution has placed increased focus on ensuring that technological advancements are accessible to everyone. The goal is to empower people with disabilities by using technology to break down barriers and enable their full participation in society and the economy (Pal et al., 2009). This push toward inclusivity is helping dissolve the long-standing obstacles that disabled individuals face.

India's ventures into virtual reality (VR) and augmented reality (AR) are also opening up new opportunities for education and therapy. Schools and therapy centers are adopting these technologies to create immersive learning experiences tailored to the

unique needs of disabled students (Rao, 2020). These tools are enhancing engagement and providing new ways for disabled individuals to interact with their environment.

Moreover, the Indian government's digitization initiatives have accelerated the inclusion of disabled individuals into mainstream society. Digital platforms now feature accessibility tools like screen readers for the visually impaired, while initiatives such as the "Accessible India Campaign" prioritize technological solutions to create a barrier-free, inclusive environment (Ministry of Social Justice and Empowerment, 2015).

The integration of technology for people with disabilities in India is not just a passing trend but a critical necessity. Although challenges remain, continuous technological advancements are steadily breaking down barriers and paving the way for a future of inclusivity and empowerment for all.

1.7.11 Exploring Disability Framework in India: Disability, a complex social construct with profound implications, ripples through individuals, families, communities, and societies. Within the tapestry of India—a nation celebrated for its diversity spanning culture, language, geography, and socioeconomic status—the issue of disability takes on a multifaceted and pivotal role. This research thesis endeavors to intricately dissect the disability landscape in India, illuminating the obstacles that persons with disabilities (PWDs) encounter, while also unearthing prospects for an inclusive trajectory of growth and advancement. Through an exploration of sociocultural dynamics, economic factors, and policy dimensions, this study aspires to enrich the comprehension of PWDs' journeys and the intricate forces influencing their assimilation across various spheres of the Indian societal fabric.

1.7.12 The Prevalence of Disability in India

India, home to an expansive population exceeding 1.3 billion, shelters a significant share of individuals living with disabilities. According to the World Health Organization's World Disability Report, roughly 15% of the global populace grapples with some form of disability, and within India, this prevalence is anticipated to be higher due to factors such as inadequate healthcare, poverty, educational deficiencies, and restricted access to rehabilitative services (WHO, 2011). As attested by the 2011 Census of India, more than 26.8 million individuals within the nation self-identified as disabled, constituting 2.21% of the total populace (Census of India, 2011).

Nevertheless, this official figure is widely recognized as a conservative estimate owing to an array of obstacles—ranging from societal stigma and cultural beliefs to the challenges of accurately identifying and reporting disabilities, particularly within rural and marginalized communities (Groce et al., 2011).

1.8 Challenges Encountered by Persons with Disabilities

The challenges encountered by PWDs in India are inextricably interwoven with the nation's societal fabric and systemic hindrances. Access to education, healthcare, employment, and communal engagement is a labyrinth riddled with inconsistencies and often proves elusive for a significant fraction of PWDs. The shadows of discrimination, stigma, and marginalization continue to loom, impeding their full and meaningful integration into the societal tapestry. The lack of universally inclusive design and accessibility within infrastructure compounds these tribulations, rendering public spaces, transportation, and communication zones unattainable for PWDs (Kaur & Archana, 2019). Furthermore, at the crossroads of gender and disability, vulnerabilities are compounded, intensifying the challenges faced by disabled women and girls and fostering layers of discrimination (Sen, 2011).

The endeavor to address the hurdles confronted by persons with disabilities (PWDs) in India has been paralleled by the establishment of legal and policy frameworks intended to safeguard their rights and integrate them into society. A pivotal stride in this trajectory is the enactment of the Rights of Persons with Disabilities Act (RPWD) in 2016. This legislation stands as a monumental leap, harmonizing India's legal landscape with the principles enshrined in the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). The RPWD Act holistically acknowledges an array of rights, encompassing education, employment, accessibility, and social protection, while vehemently striving to dismantle the barriers of discrimination that hinder PWDs (Government of India, 2016). Nonetheless, translating these legal tenets into effective real-world implementation remains a concern, as a disconnect persists between policy aspirations and the realities faced on the ground (Sarkar & Patnaik, 2018).

1.9 Avenues for Holistic Development of PWDs

Within the labyrinth of challenges, there exist encouraging prospects for cultivating an all-encompassing milieu that empowers PWDs and harnesses their potential to

contribute to the nation's progress. The global discourse amplifying the significance of inclusive education underscores the imperative of extending equitable access to quality education, regardless of individual abilities. Recent years have witnessed the emergence of initiatives such as accessible digital technologies and vocational training programs. These endeavors seek to equip PWDs with skill sets that augment their employability and foster greater self-sufficiency (Choudhury & Mohanty, 2020). Furthermore, the roles played by advocacy groups, civil society organizations, and grassroots movements in amplifying the voices of PWDs and steering policy transformations should not be underestimated (Roul & Sarangi, 2017).

The intricate tapestry of disability in India necessitates a comprehensive comprehension, spanning sociocultural, economic, and policy dimensions. This research thesis undertakes the noble endeavor of enriching this understanding by critically dissecting the challenges encountered by persons with disabilities (PWDs), meticulously evaluating the extant legal and policy frameworks, and meticulously identifying avenues for fostering inclusive growth. Through this holistic and exhaustive analysis, the aspiration is for this study to illuminate the trajectory toward a more comprehensive, equitable society—a space where the rights and dreams of every individual, irrespective of their abilities, are not only preserved but also embraced and celebrated.

1.10 The Worldwide Impact of Hearing Disabilities

Hearing impairment, colloquially known as deafness, resonates across the globe, affecting a substantial populace. The World Health Organization (WHO) gauges that over 5% of the global population—roughly 466 million individuals—battle with debilitating hearing loss (World Health Organization, 2018). The global perspective on deafness assumes a position of paramount importance, necessitating a profound comprehension of its prevalence, root causes, and interventions requisite to provide unwavering support to those impacted by this condition.

1.10.1 Exploring Deafness: Prevalence, Causes, Socio Economic Impact, and Interventions: In order to support people with hearing impairments, there has been a rising understanding of the importance of adopting and revitalizing these ancient practices in recent years. The significance of conserving traditional methods of

treating deafness in India and the possible advantages they may have for contemporary society are examined in this article.

1.10.2 Global Patterns in Deafness: Globally, the grasp of hearing loss extends to encompass approximately 34 million children, rendering it a principal contributor to disability (World Health Organization, 2018). The distribution of its prevalence displays regional diversity, with escalated instances of hearing impairment noted in regions like South Asia, the Asia Pacific, and Sub-Saharan Africa. This upsurge is often more pronounced in low- and middle-income countries, primarily due to the dearth of access to healthcare, preventive measures, and early intervention avenues (Olusanya, Neumann, & Saunders, 2014).

1.10.3 Etiologies Underlying Deafness

The roots of deafness are diverse and multifaceted, encompassing various factors:

1.10.3.1 Genetic Influences: Hereditary mutations can lead to congenital deafness. Preventable causes contribute to about 60% of childhood hearing loss, with a significant share attributed to genetic factors (Smith, Bale, & White, 2005).

1.10.3.2 Infections: Conditions such as meningitis, measles, and mumps can precipitate hearing loss. Prolonged untreated ear infections also have the potential to result in deafness (Kolo, Salisu, & Yaro, 2012).

1.10.3.3 Physical Trauma: Damage to the ear, particularly the inner ear, can culminate in impaired hearing.

1.10.3.4 Age-Related Changes: Presbycusis, characterized by age-related hearing loss, impacts a third of individuals over 65 years in developed nations (Lin, Ferrucci, Metter, & An, 2011).

1.10.3.5 Noise Exposure: Prolonged exposure to loud noise is a catalyst for noise-induced hearing loss. This form of impairment is increasingly prevalent among the youth due to factors like extensive exposure to loud music (Nelson, Nelson, Concha-Barrientos, & Fingerhut, 2005).

1.11 Socio Economic Implications of Deafness

Hearing loss exerts far-reaching socioeconomic implications. Unaddressed hearing impairment in children often translates to educational hurdles, consequently limiting future job prospects and earning potential in adulthood. The World Health

Organization approximates the global financial toll of unattended hearing loss at roughly \$750 billion annually, encompassing costs related to healthcare, educational assistance, and productivity losses (World Health Organization, 2018).

1.12 Intervention Strategies in Addressing Deafness

Significant progress has been made in the field of deafness through various intervention strategies. Early detection plays a crucial role, with newborn hearing screenings allowing for the timely identification of hearing loss, leading to prompt support and intervention (Yoshinaga-Itano et al., 1998). Hearing aids, though effective, remain out of reach for most individuals, with only 10% of those who need them having access, primarily due to high costs and lack of awareness (World Health Organization, 2018). Cochlear implants, surgically implanted devices, provide a sense of hearing to those with profound deafness or severe hearing impairment, offering a significant solution for many (Wilson & Dorman, 2008). Additionally, the formal recognition of sign languages and ensuring education in sign language are vital steps for integrating deaf individuals into society, helping to bridge communication gaps and enhance inclusion (Kusters, De Meulder, & O'Brien, 2017).

1.13 Deafness and Society

The global panorama of deafness serves as a poignant illustration of the formidable hurdles confronting individuals with hearing impairments. However, this landscape also holds within it the promise of transformation. As awareness deepens, resources expand, and interventions evolve, societies stand poised to dismantle the notion that deafness is a hindrance to leading a rich, purposeful, and thriving existence. By fostering inclusivity and harnessing the potential of advancements, the path is paved toward ensuring that the vibrancy of life remains accessible to all, regardless of their auditory capabilities.

1.14 Exploring Realities and Avenues for Growth of Deafness in India

1.14.1 Indian Traditional Approaches to Deafness: Promoting Inclusion and Cultural Integration

Indigenous cultures in India have a deep awareness of hearing loss and deafness that has evolved over ages. Traditional methods of coping with deafness have long placed an emphasis on cultural inclusion and integration in India, where diversity is woven

into the fabric of daily life. Deafness is now acknowledged as a natural component of human diversity rather than a disability thanks to these time-tested techniques.

1.14.2 Sign Language

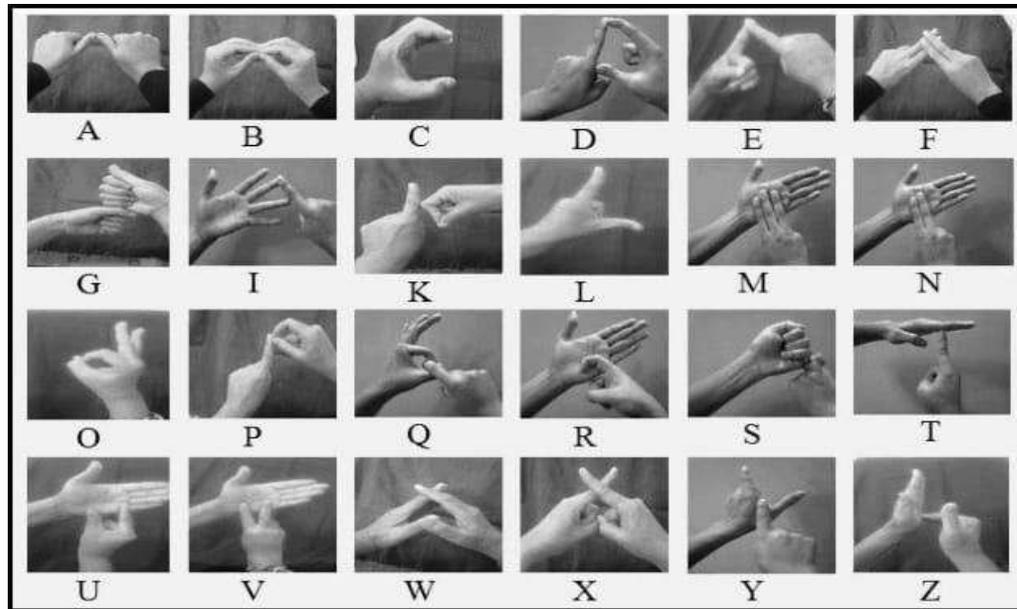


Figure 2 Indian Sign Language Alphabets

Source: <https://images.app.goo.gl/A979g4nAPdoi8uCu7>

Gesture and non-verbal communication become components of sign language when there is lifelong and permanent communication in these forms and hindered comprehension through aural-oral communication, such as in people with hearing loss.

These sign languages are used by deaf people all around the world as a form of communication. A manual representation of spoken language is not what sign language is. The syntax and structures of sign language are specifically designed to represent complicated conversation. Deaf people who use sign language are given a separate cultural and linguistic identity than those who are labelled disabled due to hearing loss. Like any other spoken language, sign language developed by the Deaf and has morphological, syntactic, and semantic foundations. Hand shapes or combinations with movement in a location or orientation in respect to the physical bodies make up sign language. Sign language is a complete language and authentic with specially evolved phonology, semantics and syntax of their own (Kyle & Woll,

1985; Wilbur, 1987; Armstrong Et al, 1995; Martin & Pitcher, 2006; Armstrong & Wilcox, 2007).

1.14.2.1 Indian Sign Language (ISL)

Orientation, movement, facial expression, and location are the five components that make up ISL. ISL differs from other sign languages due to its unique cultural and geographical background. In contrast to other sign languages, such as British Sign Language (BSL), American Sign Language (ASL), Australian Sign Language (Auslan), and Ameslan, ISL places more emphasis on facial expression and hand movement. Indian Sign Language, like any other spoken language in India, has its own regional Signlect (dialects) spread throughout the subcontinent, such as the Delhi-Karachi dialect, Kolkata-Dhaka, and Bengaluru-Chennai variations, while maintaining 60% to 75% similarities across the regions (Bellugi & Fischer, 1973; Siple, 1978; Vashista, 1980; Zeshan 1998; Zeshan, 1996; Zeshan, 2002).

India is a country with many different languages and dialects, and through many generations, distinct sign languages have developed within many indigenous tribes. These indigenous sign languages are entire, sophisticated communication systems that represent the cultural nuances and identities of the groups that use them. They are not merely substitutes for spoken languages. Indian customs celebrate the linguistic diversity that exists in the nation by recognizing and promoting various sign languages, bridging the communication gap between the hearing and deaf communities.

1.14.2.2 Sign Language Storytelling and Performing Arts

Indian performing arts and storytelling have a long history. Indian fine arts, classical music, folk music, and dance have a 4,000-year history. Bharatnatyam, Kathak, Kathakali, Kuchipudi, Manipuri, Mohiniattam, and Odissi are a few of the well-known dance styles that originated and developed in India. All of these dance styles were initially performed in temples to amuse various Gods and Goddesses and share a common language of expression known as "mudras," or hand signals. In addition to entertaining the audiences, they were successful at passing down the many legendary tales from one generation to the next. It finally formed a component of "Natya Shashtra," which Sage Bharata proposed in order to assemble and provide certain rules and guidelines for the performing arts. These mesmerizing performances, which

incorporate deft hand gestures, expressive facial expressions, and body language, break down barriers between hearing and deaf audiences and improve cultural understanding.

1.14.3 Inclusive Education

Deaf children in India have always received their education from peers, teachers, and parents who live in the same neighborhood as them. Deaf students were able to gain academic content as well as useful life skills in inclusive learning environments that respected their cultural background. Recently, there has been a resurgence of interest in promoting inclusive education, which allows deaf children to attend regular classrooms.

1.14.4 Traditional Healing Practices

Traditional healing techniques have been applied in numerous Indian communities to manage health issues, including deafness. These techniques, which are frequently based on holistic theories, take into account a person's complete health and emphasize reestablishing balance between the body, mind, and spirit. Although there is no medical treatment for deafness, these customs assist build community ties and guarantee that the deaf people are respected and supported in their cultural setting.

1.14.5 Cultural Celebrations and Festivals

Indian holidays and celebrations have always been times for joy and community, and they have a big part to play in promoting cross-cultural understanding. Native sign languages help to facilitate the inclusive involvement of deaf people in these events, ensuring that they are not left out and can actively participate in the festivities.

The traditional Indian approaches to dealing with deafness show how deeply committed the country is to inclusion and cultural diversity. India demonstrates its respect for the variety of human experiences by recognizing and promoting indigenous sign languages, offering inclusive education, embracing sign language storytelling and performing arts, honoring traditional healing practices, and ensuring participation in cultural celebrations. By keeping these age-old customs, the country not only caters to the special requirements of the deaf community but also helps to create a society where everyone is accepted and appreciated for their cultural identity, regardless of their skills. Going forward, sustained attempts to revive and modernize

these traditions can result in a more inclusive and peaceful society where everyone values the depth of India's cultural legacy.

1.14.6 Current Institutionalization of Deafness in India

In scholarly writing, we frequently use notions that emerged in the historical context of one culture to explore other cultural situations. Since the discipline of study itself was largely established in the USA and UK during the second half of the 20th century, deafness and its deaf cultures are primarily derived from Western histories. Deaf history appears to have implicitly undertaken a global goal to identify the causes of the current marginalization of deaf people in various areas of the world, although without taking into account its own ancestry, as a result of the place where its disciplinary evolution took place. As a result, the discourse of deaf culture offers us a model of topics, themes, and theoretical frameworks with which to examine the development of deafness as a distinct category of the human condition.

Therefore, how does a researcher who is interested in researching the historical development of deaf people in a non-Western setting go about carrying out his or her work? Many academics are forced to conduct their study using Western scholarship as a model; as a result, the histories of disability in some parts of Africa and Asia are similar to those of Europe and America when it comes to deaf people. In addition to outlining a methodological intervention to better understand how corporeal differences are conceptualized in the Indian (South Asian) cultural context, this paper provides a critique of such pervasive historical writing practices that have served as a model for future histories.

The institutionalization of deafness in India has recently come to light as a deviation from traditional norms that historically prioritized cultural inclusiveness and inclusion. The influence of Western ideas on deafness, technological developments in medicine, and the rising frequency of segregated educational and healthcare systems are only a few of the causes that have contributed to this transformation. The contemporary institutionalization of deafness in India is examined in this article along with its effects on inclusion and cultural integration.

1.14.6.1 Medical Model Dominance: In India, the medical model of deafness has become more popular, which views the condition as largely a disability that has to be cured or treated. The main treatments for deaf people nowadays are frequently viewed

as hearing aids, cochlear implants, and other assistive technologies. Even though these developments have the potential to be very beneficial, they frequently ignore the cultural and linguistic aspects of deafness, moving away from traditional Indian viewpoints that valued diversity and saw deafness as a normal component of human variation.

1.14.6.2 Segregated Educational Systems: In India, segregated educational systems are becoming more prevalent, and many deaf students are now enrolled in institutions created especially for those with hearing impairments. Even though these institutions may provide specialized assistance, they may unintentionally cause deaf children to become isolated from the rest of society, which would make it difficult for them to integrate into their cultures and engage in common social activities.

1.14.6.3 Loss of Indigenous Sign Languages: The use and transmission of native sign languages within different Indian deaf have been dwindling as a result of the institutionalization of deafness. The rich linguistic and cultural history connected to these indigenous sign languages has been marginalized and may eventually be lost due to the focus on conventional sign languages and spoken languages in segregated educational environments.

1.14.6.4 Cultural Disconnection: Deaf people's cultural isolation from their own cultural roots as a result of the institutionalization of deafness has, in certain situations, been a problem. It is possible that the distinctive identities and customs that historically valued deaf people's deafness as an essential component of their community will be lost when deaf people are urged to accept the standards of the dominant society.

1.14.6.5 Lack of Inclusive Opportunities: The availability of inclusive options for deaf people in all spheres of life, including education, work, and community participation, has also been constrained by the rising institutionalization of deafness. This exclusionary attitude might feed prejudices and prevent society from appreciating the capabilities and contributions of the deaf population.

There is an urgent need to celebrate the variety of deafness, conserve indigenous sign languages, and advance inclusive educational and social opportunities in order to create a society that is more diverse and culturally integrated. India can advance toward a future where all people, regardless of their hearing abilities, are equally

accepted and supported by adopting a more holistic approach that values the special cultural identities of the deaf community.

1.14.7 Embracing Cultural Diversity & Inclusivity in Dealing with Deafness in India

There has been a noticeable return of traditional practices that emphasize respecting cultural variety and inclusiveness despite the growing institutionalization of deafness in India. This rebirth is the result of a deliberate attempt to rediscover the nation's rich history and to take back the indigenous ideologies that formerly embraced the variety of human experiences, including deafness.

1.14.7.1 Indian Sign Languages Revival: The Indian government has made substantial efforts in sign language over the past ten years, approving the establishment of the Indian Sign Language Research & Training Center (ISLRTC) in 2015 and is working on creating a sign language dictionary.

Mr. Narendra Modi, the Prime Minister of India, declared that sign language would become an academic topic in schools under the New Education Policy 2020 in 2021. There is no doubt still a long way to go.

1.14.7.2 Inclusive Educational Settings: A shift away from segregated educational institutions toward more inclusive settings where hearing and deaf students can learn side by side is being made. A more thorough awareness and respect for one another's skills and perspectives are fostered by inclusive education in addition to enabling meaningful social connections. The deaf community can preserve its cultural roots and forge connections with the larger society through inclusive education.

1.14.7.3 Cultural Celebrations and Festivals: Deaf people are actively being included in the redesign of traditional festivals and cultural events. To guarantee that deaf attendees may fully participate in the celebrations, organizers are using Indian sign languages, visual arts, and other means of communication. India reiterates its commitment to cherishing and conserving the unique identities of all its residents by embracing cultural diversity and inclusivity in these events.

1.14.7.4 Community Support and Inclusivity: Supporting deaf people and their families is a major responsibility of local communities. Community members are working together to offer inclusive possibilities for social engagement, employment,

and education. Traditional support structures are being revived, where everyone shares in the responsibility for the welfare of those who have hearing problems.

1.14.7.5 Promoting Holistic Approaches: Holistic approaches to deafness are increasingly valued, in contrast to the medical model, which primarily emphasizes medical interventions. The general health of the deaf people is being addressed through the integration of traditional healing techniques with contemporary healthcare. These holistic methods place a strong emphasis on emotional, social, and spiritual components, highlighting the connections between people and their cultural backgrounds.

Embracing each person's uniqueness, regardless of their talents, strengthens the social fabric as a whole, as this revival demonstrates. India is paving the way for a more diverse and culturally integrated future as these traditional customs gain pace, one in which the deaf minority is welcomed and honoured for its invaluable contributions to the nation's cultural history.

1.15 Implications of Traditional Indian Methods for Dealing with Deafness

The revival of traditional Indian methods for addressing deafness carries profound implications not only for the deaf community but also for society at large and the preservation of cultural diversity. By embracing indigenous sign languages, rituals, and customs, the deaf community strengthens its cultural identity and pride, fostering a deeper connection to its heritage. This resurgence also promotes inclusion and empowerment, enabling deaf individuals to participate fully in education, employment, and social life, thus contributing to the nation's progress. Moreover, by documenting and passing down these traditions, India safeguards its unique cultural legacy, preventing the loss of invaluable indigenous knowledge, such as traditional healing methods. Integrating these customs into contemporary society encourages greater cultural understanding and acceptance, fostering empathy and compassion within the broader community. Traditional approaches to deafness often adopt a holistic view, considering not only the physical but also the emotional, social, and spiritual aspects of well-being, offering a more comprehensive perspective on deafness that complements modern medicine. The revival of these practices strengthens community bonds, as individuals come together in support, fostering a cohesive and caring society. Furthermore, inclusive education opens up new

opportunities for deaf individuals, empowering them to pursue diverse careers and contribute meaningfully to the economy. This revival serves as a powerful symbol of India's commitment to cultural diversity, emphasizing the nation's respect for all its citizens, regardless of their background or abilities. By reconnecting with its rich cultural heritage, India not only reaffirms its identity but also creates a more inclusive and harmonious future, where the unique contributions of the deaf community are celebrated as an integral part of the nation's cultural flavour.

1.15.2 Exploration of Alternate Techniques

The exploration and implementation of alternative approaches to addressing deafness have important implications for both the deaf community and society, particularly in terms of inclusivity, communication, and empowerment. By adopting diverse methods of communication, society becomes more inclusive and accessible, allowing individuals with hearing impairments to feel a greater sense of belonging. These alternative techniques also contribute to linguistic diversity by acknowledging and preserving various sign languages and communication systems, which adds cultural richness to the nation (World Federation of the Deaf, 2016).

In education, these techniques allow for more individualized and effective teaching strategies, enabling deaf individuals to reach their full potential. The pursuit of new methods also drives technological innovation, resulting in the development of advanced assistive devices and applications that enhance the quality of life for people with hearing impairments (World Health Organization, 2018). Furthermore, these efforts help preserve the unique aspects of deaf culture, as the use of indigenous sign languages celebrates India's cultural heritage while embracing contemporary advancements (UNESCO, 2019).

The empowerment of the deaf community is further strengthened as their involvement in shaping accessibility policies increases, leading to greater societal integration. In the workplace, companies that adopt alternative communication techniques create a more inclusive environment, benefiting from diverse perspectives that drive innovation. Additionally, community outreach initiatives such as workshops and awareness campaigns help bridge the gap between the deaf and hearing communities, fostering mutual understanding and empathy (National Association of the Deaf, 2020).

On a global scale, India can engage in international cooperation by learning from successful practices in other countries and enhancing its own support systems for the deaf community. Overall, the adoption of alternative techniques not only promotes inclusivity and cultural diversity but also encourages innovation and empowers individuals with hearing impairments, contributing to a more compassionate and equitable society. Through collaboration and open-mindedness, India can ensure that all individuals, regardless of their abilities, are respected, valued, and provided with equal opportunities to thrive.

1.15.3 Overall Integration of Deaf into Society

The integration of individuals with hearing impairments into society through the adoption of alternate techniques and inclusive practices offers significant benefits across social, economic, and cultural dimensions. By embracing diverse communication methods, society fosters greater social inclusion, allowing deaf individuals to engage in meaningful relationships and actively participate within their communities. Access to inclusive education further empowers deaf individuals, enabling them to pursue academic and career opportunities on par with their hearing peers, ultimately contributing to economic empowerment through gainful employment and a more diverse workforce. Culturally, the recognition of the deaf community's unique linguistic and cultural expressions deepens societal appreciation for diversity, fostering empathy and respect. This integration also enhances civic engagement, as the perspectives of deaf individuals become more prominent in public life, contributing to more inclusive decision-making processes. Technological advancements driven by the needs of the deaf community not only improve communication but also lead to more accessible innovations for society at large. Additionally, as families and communities become more accommodating and supportive of their deaf members, stronger bonds and a sense of unity are created. Reducing stigma and discrimination is another critical outcome, as inclusive practices challenge negative stereotypes and promote a culture of acceptance. Overall, the integration of individuals with hearing impairments helps build a more inclusive, equitable, and compassionate society where everyone is respected, valued, and given equal opportunities to thrive. In India, the revival of indigenous perspectives on deafness offers a powerful avenue to celebrate diversity, preserve cultural heritage,

and ensure that all individuals, regardless of their abilities, are recognized and supported, paving the way for a more connected and harmonious future.

1.16 Accessibility for Deaf Individuals -Education, Communication, and Information

1.16.1 Enhancing Accessibility in Education

In the past, formal education was often inaccessible to Deaf individuals, who typically attended residential schools where sign language was the primary mode of instruction. However, during the late 19th and early 20th centuries, oralism gained prominence, focusing on speech and lip-reading instead of sign language (Moores, 2001). In more recent years, there has been a positive shift toward bilingual-bicultural education, which honors Deaf culture by embracing both sign language and the dominant spoken language (Snoddon & Underwood, 2020). This approach recognizes the linguistic richness of sign languages while fostering inclusivity. Technological advancements, such as hearing aids, cochlear implants, and sound field systems, have further expanded educational opportunities for Deaf students (Niparko et al., 2010). Yet, these tools must be paired with effective educational strategies to maximize their benefits. The trend toward mainstreaming Deaf students into regular classrooms has also gained momentum, though it requires essential support services like interpreters, notetakers, and specialized teacher training to be truly effective (Antia et al., 2002). Additionally, the rise of digital platforms offering courses in sign language and Deaf culture has further broadened access to education for both Deaf individuals and their hearing peers.

1.16.2 Communication

Sign languages, such as American Sign Language (ASL) and British Sign Language (BSL), are fully developed languages with their own unique grammar, syntax, and vocabulary. Contrary to the common misconception, these languages are not universal and vary significantly across different cultures (Senghas & Monaghan, 2002). In terms of communication support, the availability of sign language interpreters has improved, especially in areas like legal, medical, and educational settings. However, there is still a shortage of interpreters in specialized fields, which remains a challenge (Winston, 2004). Technological advancements, such as Video Relay Services (VRS), have made it easier for Deaf and hearing individuals to communicate via video

platforms with the help of interpreters, bridging the communication gap (Brunson, 2008). Additionally, Automatic Speech Recognition (ASR) technology, which converts spoken words into written text, shows promise for real-time captioning, although it is still under development and not yet fully reliable (Mullaney, 2019).

1.16.3 Accessible Information Landscape

Media accessibility has seen a significant transformation over the years, enhancing inclusion for Deaf and hard-of-hearing individuals. Closed captioning, introduced in the 1970s, has now become a standard feature across television and online platforms, ensuring that content is accessible to those with hearing impairments (Ellis & Kent, 2011). Streaming platforms like Netflix and YouTube have further expanded accessibility by integrating subtitles and even offering some content in sign language. In the digital space, both challenges and opportunities arise. The Web Content Accessibility Guidelines (WCAG) have been established to ensure that websites are inclusive for all users, including those with hearing impairments (Caldwell et al., 2008). Additionally, online communities like DeafRead and ASLized provide curated content for the Deaf community, creating a sense of belonging and connection. These advancements, combined with the ongoing efforts to enhance accessibility in education, communication, and information sharing, reflect a growing commitment to building a more inclusive and equitable world for all.

1.16.3.5 Inclusive Access for Deaf Individuals

Significant progress has been made in improving accessibility for Deaf individuals in education, communication, and information sharing. However, the journey toward true inclusivity is ongoing and requires continuous advocacy, technological advancements, and a commitment to education. In today's increasingly digital world, ensuring that online platforms are accessible to the Deaf community is more important than ever. As services, information, and activities increasingly move online, any gaps in accessibility can unintentionally marginalize those already striving for equal participation. Since Deaf individuals often rely on visual cues like sign language, lip-reading, or written text for communication, it's essential that digital platforms account for these needs in their design. One key challenge is balancing auditory and visual content, as the widespread use of sound in videos, webinars, and online courses can create barriers for Deaf users, excluding them from important

information and context. To build a truly inclusive digital landscape, it's not just about addressing technical issues—it's about understanding the diverse ways people interact with content and ensuring that all auditory, visual, and textual elements are accessible, thereby fostering a more equitable and empowered digital experience for everyone.

1.16.3.6 Enhancing Strategies for Digital Accessibility for the Deaf

A key component of digital accessibility for the Deaf is the use of comprehensive captions and subtitles for audio content. Closed captioning goes beyond simple transcription, incorporating essential auditory cues such as [door slamming, laughter, applause] to provide the necessary context for full understanding (Wyden, 2019). In addition, platforms that rely heavily on sound must integrate visual indicators like flashing notifications for alarms or messages and on-screen alerts for system warnings (Smith & Jones, 2018). For audio-based content like podcasts and webinars, providing complete written transcripts ensures that Deaf users can access the same information as their hearing counterparts (Adams & Davis, 2020). Incorporating sign language interpretation into educational or informational videos further enhances accessibility (Clark, 2021). Finally, video and audio players should be designed with features that allow users to toggle captions, adjust text size, and customize backgrounds for better visibility, while ensuring that controls are easily navigable via screen readers or keyboard shortcuts (Johnson, 2017). These features work together to create a more inclusive digital experience for Deaf individuals.

1.16.3.7 Navigating Challenges in Implementation

Implementing accessibility measures such as high-quality captioning and sign language interpretation can present financial challenges, making it difficult to balance these needs with budgetary constraints (White, 2020). Additionally, the diversity of sign languages used around the world means that global platforms must accommodate multiple interpretations, which can be logistically complex (Roberts, 2019). Furthermore, providing real-time captions or sign language interpretation for live online events requires specialized skills and resources, making the pursuit of seamless accessibility in these situations resource-intensive (Lee, 2018). These factors contribute to the ongoing challenges in making digital content fully accessible to Deaf individuals.

1.16.3.8 Adhering to the Best Practices

Engaging Deaf individuals in the design and testing phases of accessibility initiatives is crucial, as their insights provide valuable information about authentic accessibility needs (Turner, 2019). Collaborating directly with the community you aim to support ensures that the solutions developed are genuine and effective. Additionally, it is important for platforms to conduct regular accessibility audits to ensure they comply with guidelines and continually improve (Harrison, 2020). This ongoing commitment to assessment drives consistent enhancements in accessibility. Furthermore, fostering awareness among content creators on the platform is vital. By equipping them with the necessary tools and knowledge to promote accessibility, they can create content that effectively meets the needs of Deaf individuals (Lopez & Gonzalez, 2021).

1.17 Inclusion Unveiled

Ensuring digital platform accessibility for the Deaf transcends compliance—it embodies inclusivity and equity. In a digital era that continues to redefine human interaction, the principle of accessibility underscores that every individual's engagement is a right, not a privilege.

Incorporating the Deaf Community into Mainstream Indian Society: Education, Employment, and Entrepreneurship.

The pursuit of an all-encompassing society, where every individual is accorded equal opportunities regardless of physical or psychological disabilities, remains a critical goal for any forward-looking nation. In recent times, the Deaf community in India, a significant yet often marginalized group, has progressively gained prominence, particularly concerning their integration into conventional educational institutions, the labor force, and independent business ventures. This section delves into the obstacles, progressions, and potential endeavors associated with integrating the Deaf populace into the realms of education, employment, and self-employment within India.

1.17.1 Educational Integration

Within India, the educational landscape for the Deaf has historically been confined to specialized establishments, resulting in their segregation from mainstream educational trajectories. However, the turn of the century initiated a notable transformation.

The introduction of the Right to Education (RTE) Act in 2009 significantly enhanced the focus on including children with disabilities in mainstream educational institutions. This important legislation ensured free and mandatory education for children aged 6 to 14, effectively reducing the marginalization of students with disabilities (Ministry of Law and Justice, 2009). One of the primary challenges faced by Deaf students in these schools is overcoming language barriers. To tackle this issue, initiatives promoting Indian Sign Language (ISL) have emerged, with the establishment of the Indian Sign Language Research and Training Centre (ISLRTC) in 2015 marking a significant milestone. This center has played a crucial role in popularizing and standardizing ISL within academic settings (Ministry of Social Justice and Empowerment, 2015).

1.17.2 Employment for PWDs

Within the sphere of employment, the inception of the Persons with Disabilities (Equal Opportunities, Protection of Rights, and Full Participation) Act, 1995, set the stage for change. However, significant advancements emerged with its revised iteration in 2016.

The Rights of Persons with Disabilities Act of 2016 mandates a 4% reservation for individuals with disabilities in all government positions, promoting fair representation for the Deaf community (Ministry of Law and Justice, 2016). In the corporate sector, many private companies have embraced inclusive hiring practices, driven by Corporate Social Responsibility (CSR) and a genuine appreciation for the valuable contributions that Deaf individuals can make. Additionally, collaborations between businesses and NGOs have been formed to provide specialized training and employment opportunities tailored specifically for the Deaf (Drishti, 2018).

1.18 Self-Employment and Entrepreneurship

Efforts to promote self-sufficiency and entrepreneurship among the Deaf have been gathering momentum, thanks to coordinated initiatives by the government, NGOs, and the larger community.

The Ministry of Skill Development and Entrepreneurship oversees the Skill Council for Persons with Disability (SCPwD), which focuses on empowering individuals with disabilities, including the Deaf, through skill training aimed at promoting self-employment (Ministry of Skill Development and Entrepreneurship, 2015).

Government initiatives, such as the Deendayal Disabled Rehabilitation Scheme (DDRS), provide financial assistance to NGOs offering vocational training for individuals with disabilities, along with incentives for startups led by disabled individuals. These efforts encourage entrepreneurship within the Deaf community (Ministry of Social Justice and Empowerment, 2019). Overall, the journey toward fully integrating the Deaf into Indian society—across education, employment, and entrepreneurship—has seen significant legal advancements, shifting societal attitudes, and increased recognition of their potential. However, continued commitment, ongoing awareness campaigns, and improved policies are crucial to creating a society that not only accommodates the Deaf community but also celebrates their contributions. On a global scale, entrepreneurship knows no boundaries when it comes to hearing abilities. Despite facing societal misconceptions and various challenges, the global Deaf community has made remarkable progress in diverse business fields. This section highlights the trends, challenges, and success stories within the international Deaf entrepreneurial landscape. According to the World Health Organization, over 5% of the global population suffers from disabling hearing loss (World Health Organization, 2019), yet Deaf entrepreneurs have established themselves across many sectors, including technology and the arts. Nevertheless, these entrepreneurs encounter significant challenges, as navigating a predominantly auditory world complicates daily communication and often leads to misunderstandings (Smith & Andrews, 2015). They also face bias from potential investors who may underestimate their capabilities due to their disabilities, creating obstacles in securing funding and support for their businesses (Johns & Luby, 2018). Additionally, while there are entrepreneurship support networks available in many countries, few specifically address the unique challenges faced by Deaf entrepreneurs, limiting their chances of successfully launching and maintaining businesses in a competitive landscape (Foster & Geyen, 2016).

1.18.1 Prominent Trends and Success Stories

Many Deaf entrepreneurs are making significant strides in the tech sector by creating products aimed at improving accessibility for individuals with hearing impairments. This includes innovations like visual alert systems, captioned telecommunication services, and applications for sign language interpretation (Hoffmeister & Harvey, 2014). Additionally, the artistic and cultural landscape showcases the talents within

the Deaf community, with Deaf-owned art galleries, theater companies, and other cultural initiatives highlighting their creative contributions (Jones & Pullen, 2020). Furthermore, the rise of Deaf-owned service businesses, such as the well-known "Signs Restaurant" in Toronto, demonstrates the potential for enterprises that serve both Deaf and hearing customers while fostering an inclusive environment (Barnett, McKee, Smith, & Pearson, 2017).

1.18.2 Strategies to Nurture Deaf Entrepreneurship

To empower Deaf entrepreneurs, it's crucial to provide tailored education and training, such as business courses offered in sign language, which can equip them with essential skills for success (Steinberg, Sullivan, & Loew, 2011). Additionally, organizing networking events specifically for Deaf entrepreneurs can foster a sense of community, encourage collaboration, and create platforms for sharing success stories (Napier, Rohan, & Sutherland, 2018). Government policies that offer financial incentives and support for entrepreneurial initiatives within the Deaf community can further stimulate growth (Kim & Paul, 2019). Like their hearing peers, Deaf entrepreneurs exhibit the determination, vision, and resilience needed to thrive in business, while also bringing unique perspectives that prioritize inclusivity and accessibility. By understanding the challenges they face and implementing strategies to overcome these barriers, societies can benefit from the rich diversity of innovation and creativity that Deaf entrepreneurs contribute.

1.19 Entrepreneurship within the Deaf Community in India

This section delves into the emerging phenomenon of entrepreneurship among India's Deaf community. Through an exploration of the distinctive obstacles, supportive frameworks, and instances of success, we intend to illuminate how the Deaf community is reshaping the entrepreneurial landscape of India.

India, with its vast and diverse populace, houses a significant number of Deaf individuals. In a society where disability often carries social stigma, entrepreneurship has surfaced as a viable path for the Deaf community to achieve economic self-reliance and societal empowerment.

1.19.1 Background of Deaf Individuals

Historically, Deaf individuals in India have encountered barriers when it comes to accessing formal education and employment (Mani, A. R., 2018). However, recent

years have witnessed a surge in entrepreneurial endeavors initiated by Deaf individuals, propelled by a combination of personal passion, market prospects, and supportive structures.

1.19.2 Challenges Encountered by Deaf Entrepreneurs

The Deaf community often faces significant societal biases and misunderstandings, with many people mistakenly believing that deafness indicates a lack of ability in various areas, including business (Sharma & Agarwal, 2019). Communication barriers further complicate matters, as Indian Sign Language (ISL) is the primary means of communication for many Deaf individuals, yet the general population is largely unfamiliar with ISL, creating obstacles in business interactions (Rangasamy, 2017). Additionally, Deaf entrepreneurs frequently struggle to access essential resources such as training programs, financial services, and networking opportunities, largely due to a lack of provisions for accessibility (Chandra & Dey, 2020).

1.19.3 Facilitative Structures and Initiatives

Specialized organizations such as the Noida Deaf Society and The Deaf Way Foundation have been instrumental in providing vocational training and entrepreneurial support to Deaf individuals (Noida Deaf Society, 2019). In addition, the Rights of Persons with Disabilities Act of 2016 prohibits discrimination in employment, including self-employment, which has opened up opportunities for government initiatives aimed at assisting Deaf entrepreneurs (Government of India, 2016). Furthermore, entrepreneurial networks and associations tailored for Deaf individuals promote the sharing of knowledge, collaboration, and mentorship, fostering a supportive environment for business development within the community (Kumar & Sharma, 2021).

1.19.4 Instances of Achievement

Café de L'Arche, founded by a Deaf entrepreneur in Bangalore, has become a beacon of inclusivity by employing Deaf staff and contributing to the city's diverse culinary scene (Das, A., 2019). Similarly, Atulyakala, a lifestyle brand and social enterprise, is celebrated for its handmade products created by Deaf artisans, highlighting their talent while raising awareness about Indian Sign Language (Mehra, P., 2020). The entrepreneurial landscape within India's Deaf community is vibrant and full of potential. As these individuals continue to defy stereotypes and break down barriers,

they are not only building a more inclusive economic environment but also enhancing the richness of India's entrepreneurial spirit.

1.20 Need for the Study

You can tell the condition of a nation by looking at the status of its disabled community- *Investigator*

1.20.1 Disability in India

India is home to a significant number of people with disabilities.

In India, the recorded population of people with disabilities is approximately 26.8 million, making up 2.21% of the total population according to the 2011 Census. However, estimates from the World Bank suggest the number could be significantly higher, ranging between 40 and 80 million. Disability rights advocates and academics argue that the census vastly underrepresents the actual numbers. Remarkably, the disabled population in India surpasses the combined populations of countries like Ireland, New Zealand, Austria, Uruguay, and Kuwait. Globally, India stands out for having one of the largest populations of people with disabilities, with key types of impairments including movement, hearing, vision, and multiple disabilities. According to the 2011 Census, 20% of individuals have mobility impairments, 19% have visual impairments, 19% have hearing impairments, and 8% live with multiple disabilities. The largest proportion of this population is found in the 10-19 age group, representing 46.2 lakh individuals.

1.20.2 Who is a Person with Disability?

The United Nations Conventions on the Rights of Persons with Disabilities defines disability differently. It says: Disability results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others. Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others.

A person with a disability is an individual who experiences enduring physical, mental, cognitive, or sensory impairments that can impede everyday activities or their participation in typical societal roles (Smith, J., & Jones, M., 2021). These

impairments might be congenital, or they could result from disease, trauma, or other causes. According to the World Health Organization (WHO, 2018), disability is a multifaceted concept and can be better understood as the interaction between individuals with a health condition and the societal and environmental barriers that hinder their full and effective participation in society on an equal basis with others. In this light, the focus is not only on the individual's limitations but also on the societal structures that can either restrict or enable their participation. It is crucial to emphasize that a person with a disability is not defined solely by their impairment but by the interplay of their health condition and the environment in which they live (Adams, L., & Thompson, C., 2020).

Disability is not a homogeneous concept, as it varies from person to person. From the conceptual point of view, there is no universal definition of what constitutes a disability or of who should be considered as having a disability. Moreover, there is no one static condition of disability. A disability is a result of the interaction between a person with a health condition and a particular environmental context as per the Ministry of Statistics and Programme Implementation, Government of India

1.20.3 Why is there a large population of Persons with Disabilities?

The significant population of persons with disabilities can be attributed to a variety of medical, societal, and environmental factors. Disabilities are generally classified into two categories: those present at birth, such as congenital disabilities and conditions arising from birth complications, which remain major causes of disabilities worldwide (WHO, 2018), and acquired disabilities that develop later in life. A large portion of individuals with disabilities results from a confluence of factors, including aging populations, where the prevalence of disabilities tends to increase due to chronic health issues associated with aging, such as arthritis, dementia, and vision impairments (WHO, 2018). Additionally, the rise in chronic health conditions, including diabetes, cardiovascular diseases, and mental health disorders, significantly contributes to global disability rates, often leading to long-term impairments (Prince et al., 2015). Accidents and injuries, including road traffic incidents and workplace accidents, also play a crucial role, with road traffic injuries predicted to become the seventh leading cause of death by 2030 (WHO, 2018). Inadequate access to effective health care in some regions can result in treatable conditions becoming disabling (Mitra, Posarac, & Vick, 2013). Moreover, armed conflicts can lead to injuries that

result in permanent disabilities, with limited access to medical services exacerbating the situation in conflict zones (Eide & Loeb, 2006). Lastly, environmental factors, such as exposure to harmful substances and living in areas with poor infrastructure, can further contribute to disabilities (Mitra et al., 2013).

1.20.4 Reasons for Disability: The lack of good and accessible medical facilities, especially in underprivileged areas, significantly impacts maternal and child health. Pregnant mothers often receive inadequate care during pregnancy, leading to complications that could have been prevented with proper medical attention. This lack of care contributes to the high number of children born with disabilities, especially in poor households where access to quality healthcare is limited. In these settings, the absence of prenatal care, proper nutrition, and timely medical interventions exacerbates health risks for both mother and child, perpetuating a cycle of poverty and disability.

The recognition and classification of disabilities have also evolved over time. As awareness and understanding of disabilities have grown, more conditions might be recognized as disabilities today than in the past, adding to the perceived increase in the number of people with disabilities.

1.20.4.1 Strategies to Reduce the Population of Persons with Disabilities

Reducing the population of persons with disabilities is a significant challenge for governments, particularly in the context of combating poverty, which can contribute to both the birth of individuals with disabilities and the onset of disabilities later in life. To address this issue, state governments must make substantial investments in their health sectors, as health falls under the 'state subject' according to our constitution. One effective approach is the promotion of maternal health; providing comprehensive prenatal care, including proper nutrition, vaccinations, and screenings for pregnant women, can significantly decrease the likelihood of birth defects (World Health Organization, 2016). Additionally, implementing widespread vaccination programs is crucial, as many disabilities, particularly in developing countries, stem from preventable diseases (World Health Organization, 2019).

Enhancing road safety is another critical area, as road traffic injuries often result in permanent disabilities. By enforcing road safety regulations and improving infrastructure, governments can help prevent these injuries (Peden et al., 2004). Public

health initiatives aimed at reducing the spread of diseases such as polio and malaria can also play a role in lowering the incidence of disabilities associated with these illnesses (World Health Organization, 2017). Furthermore, promoting safe work practices is essential, as a significant number of disabilities are caused by workplace injuries (Takala et al., 2014). Finally, to mitigate the risk of falls among the elderly, which is a leading cause of disability, creating safer living environments and encouraging physical activity are vital steps (World Health Organization, 2018). By addressing these areas, governments can make meaningful progress in reducing the population of persons with disabilities.

Disability need not be an obstacle to success. We have a moral duty to remove the barriers to participation, and to invest sufficient funding and expertise to unlock the vast potential of people with disabilities. Governments throughout the world can no longer overlook the hundreds of millions of people with disabilities who are denied access to health, rehabilitation, support, education and employment, and never get the chance to shine - Stephen Hawking (Hawking, S. (2012). *The grand design*)

1.20.5 Act for reservation in jobs (Rights for Persons with Disabilities Act, 2016)

Increased the quota of reservation for persons with disabilities from 3% to 4% in government jobs and 3% to 5% in higher education institutions.

A lot of posts, especially in group A and group B services in the government, continue to lie vacant. And it is the same in higher education institutions.

1.20.5.1 Deaf Education: Deaf education in India has seen considerable evolution. First deaf school started in 1884 in Mazgaon, Bombay. Historically, oralism, emphasizing speech over sign language, dominated deaf education (Erting, 1996). However, recent years have witnessed increased advocacy for the use of Indian Sign Language (ISL) in educational settings. A landmark moment was the official recognition of ISL in 2016 by the Indian government (The Rights of Persons with Disabilities Act, 2016). Nonetheless, challenges persist. Many schools for the deaf continue to use a mixed approach, combining oralism with elements of signing, often leading to mixed results (Moores & Panara, 2016). Additionally, a shortage of trained ISL instructors and insufficient resources hinder optimal deaf education. At present

there are only about 250 certified sign language interpreters in India, translating for a deaf population of between 1.8 million and 7 million

Further, the varying socio-economic backgrounds and regional diversities in India make it challenging to ensure consistent, quality education for all deaf students. Advocacy groups, such as the National Association of the Deaf (NAD) in India, have been pushing for more inclusive policies, emphasizing the importance of ISL in ensuring equal educational opportunities (Kumar & Lata, 2020). There was approval of establishment of ISLRTC (Indian Sign Language research & Training Centre) in 2015..In 2021 Prime Minister of India Mr Narender Modi under New Education Policy 2020 announced to make sign language an academic subject in school. Investigator's paper "The Comprehension of Basic Mathematics among Children with Hearing Impairment using Multimedia in Accessible and Non- Accessible Format- A Comparative Study" published in IEEE" and other paper "Usage of Textbook and Accessible Electronic Multimedia Textbook for Children with Hearing Impairment in Terms of Information and Education- A Comparative Study" in International Conference on Disability Communication, ICDC 2017, Department of Communication and Journalism, University of Mumbai, in collaboration with AYJNISHD (D) Mumbai and the research group Communication, Culture & Diversity (CCD) at Jonkoping University, Sweden. Investigator research paper has been a reference for NIOS to start Gyan Amrit channel 30 on Swayam Digital platform for imparting education in sign language.

1.20.5.2 Challenges Faced by the Deaf Community in the Indian Education System

The Indian education system increasingly reveals its limitations in producing candidates with disabilities who possess the necessary qualifications for government exams or higher education. Systemic discrimination often leads employers to overlook the potential of hiring individuals with disabilities, particularly impacting the deaf community, which faces unique challenges. Within this group, discrimination persists even among other disability categories.

While the deaf community has the ability to perceive visual stimuli, this capability can sometimes be a disadvantage, as visual input alone is insufficient for cognitive development. Although they think visually, the cognitive growth of deaf individuals

requires more than mere visual stimuli; it necessitates the use of sign language, their mother tongue. Unfortunately, the outdated label "deaf and dumb" diminishes their potential and overlooks their capabilities. Deaf individuals often have shorter memory spans, and unlike their hearing counterparts, who may have an inner voice, deaf individuals possess an inner sign language.

For hearing children, cognitive development is nurtured through exposure to spoken language, but for deaf children, sign language is crucial. Therefore, early childhood interventions must integrate sign language to support cognitive development effectively. Our study emphasizes the urgent need for play schools designed specifically for deaf children, providing them with an environment that utilizes sign language to promote their cognitive growth from an early age.

1.20.5.3 Assistive Device for Deaf

The Deaf community has historically been underserved when it comes to assistive devices, unlike the blind community, which benefits from a range of technologies like Braille, screen readers such as JAWS and NAV, and mobile apps designed to enhance accessibility. For instance, apps like LookTel help identify money, KNFB Reader reads text aloud, and Be My Eyes connects visually impaired users with volunteers in real-time. These tools significantly enhance the quality of life for blind individuals by providing them with independence and accessibility.

However, similar advancements have not been made for the Deaf community. One of the main reasons is the complexity of developing assistive devices that cater to the specific needs of the Deaf. Sign language, the primary mode of communication for many Deaf individuals, is a rich and intricate language that involves not only hand gestures but also facial expressions, body orientation, and spatial references. Creating technology that accurately captures and translates these nuances into accessible forms is a formidable challenge. As a result, there are currently no apps that effectively convert speech or text into sign language.

Moreover, the official status of Indian Sign Language (ISL) remains unrecognized, which hampers the development of technologies tailored to the Deaf community. Without this recognition, there is little motivation or funding to advance research and create tools specifically designed for ISL. This lack of support extends to educational resources as well, further stalling progress.

Additionally, the diversity of sign languages across India complicates the creation of universal assistive tools. Different regions have their own distinct versions of sign language, such as Gujarati Sign Language or Telugu Sign Language, making it difficult to develop a one-size-fits-all solution. This linguistic diversity adds another layer of complexity to an already challenging field, leaving the Deaf community with limited access to assistive technologies.

1.21 Deaf in the time of COVID

People with disabilities, particularly deaf & those from economically deprived sections, continue to suffer severe hardship. Without access to food or money, many are faced with starvation. Caregivers have been unable (and sometimes unwilling) to reach those who need their critical support. Many have lost access to vital medical attention and peer support systems. Livelihoods and support systems have been all but destroyed.

1.21.1 Financial Challenges

In many states (like Maharashtra) pensions to persons with disabilities have not been released. In states like Jharkhand and Bihar, payment has been delayed by 5 months, and is being released very slowly. At the same time, large numbers have lost their jobs/source of livelihood. There are many persons with disabilities who are in financial distress, but do not officially come under the BPL category, as a result of which they are not receiving any financial assistance or free ration. Financial challenges are made worse by the fact that inflation has gone up and salaries have been drastically reduced. In Delhi, there have been cases where landlords are demanding rent, and threatening to double the amount in case of default. In Karnataka, 2 months' pension was released by the state but the beneficiaries were asked to come and collect the amount themselves. Thus, due to accessibility issues, many were not able to get their dues. Majority of persons with disability are engaged in the unorganised sector. Many earned their living as small vendors (e.g. a roadside bar, or a tiny stall selling food or other items). These people have had their livelihoods completely destroyed due to the lockdown. Many of them are the bread earners in their families. In spite of their loss of livelihood, they are not receiving any relief from the government.

The National Social Assistance Programme (NSAP) is a centrally sponsored scheme administered by the Ministry of Rural Development, Govt. of India. This programme is being implemented in rural areas as well and urban areas.

The central government has announced that it will provide three months' pension in advance to persons with disabilities under its NSAP. It also announced an ex-gratia of ₹1,000 over three months in two installments for them.

The Delhi government has doubled the pension for widows, persons with disabilities, and the elderly for the month of March. The state of Kerala has not only released payments but also made advance payments to help disabled people cope with this challenge. Kerala has also ensured that even students with disabilities receive 5000 rupees ex gratia payment Source: Locked Down & Left Down -National Centre for Promotion of Employment for Disabled People (NCPEDP)

Pradhanmantri Svanidhi Yojana for vendors & small owners and Mudra Loan for small scale industries. **No such schemes reach to deaf people as this information is not accessible to them .No communication to deaf in sign language. No helpline for Deaf, even for Emergency, Police & Fire.**

Therefore we figure out that there is a need for study on employability for deaf with these research questions and statement of problem.

1.22 Research Questions

1.22.1 What is the significance in the usage of accessible digital media on entrepreneurship for deaf in terms of planned behaviour?

1.22.2 Does the accessible digital media entrepreneurship for deaf influence the learning behaviour of the Deaf?

1.22.3 Do the viewing the module in accessible format increase the understanding of the module on entrepreneurship for deaf

1.23 Statement of Problem

“Designing and Development of accessible digital media on Basics of Entrepreneurship for Deaf.”

1.24 Objectives of the Study:

1.24.1 To prepare a profile of the deaf respondents from the **National Institute Speech & Hearing, Thiruvananthapuram, Kerala.**

1.24.2 To **design & develop** a **module I** on "Interest" in accessible digital media in video format for deaf respondents.

1.24.3 To study the **overall effectiveness** of the developed **module I** on "Interest" in terms of comprehension of selected deaf respondents.

1.24.4 To study the **differences in the overall effectiveness** of the developed **module I** on "Interest" in terms of comprehension of selected deaf in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.24.5 To study the **overall accessibility** of the **developed module I** on "Interest for being an entrepreneur" for selected deaf respondents.

1.24.6 To study the **differences in the overall accessibility** of the **developed module I** on "Interest for being an entrepreneur" for selected deaf respondents in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.24.7 To study the **accessibility** of the **developed module I** on "interest for being an entrepreneur" with reference to the following **features**:

- The Content
- The Sign Language
- The Visuals
- The Captions

1.24.8 To prepare a **profile** of the deaf respondents from the **North-East (Dimapur-Nagaland, Imphal-Manipur & Shillong-Meghalaya).**

- 1.24.9** To **design & develop a module II** on "Place/Convenience" for being an entrepreneur in accessible digital media in video format for the selected deaf respondents **North-East (Dimapur-Nagaland, Imphal-Manipur & Shillong-Meghalaya)**.
- 1.24.10** To **study the overall effectiveness** of the **developed module II** on "Place/Convenience" in terms of comprehension of the selected deaf respondents **North-East (Dimapur-Nagaland, Imphal-Manipur & Shillong-Meghalaya)**.
- 1.24.11** To study the **differences in the overall effectiveness** of the developed **module II** on "Place/Convenience" in terms of comprehension of the selected deaf **North-East (Dimapur- Nagaland, Imphal-Manipur & Shillong-Meghalaya)** in relation to the following **variables**:
- Age
 - Gender
 - Education
 - Exposure to Social Media
 - Exposure to Accessible Media
- 1.24.12** To study the **overall accessibility** of the **developed module II** on "Place/Convenience" for the selected deaf respondents **North-East (Dimapur-Nagaland, Imphal-Manipur & Shillong-Meghalaya)**.
- 1.24.13** To study the **differences in the overall accessibility** of the developed **module II** on "Place/Convenience" for the selected deaf respondents **North-East (Dimapur-Nagaland, Imphal-Manipur & Shillong-Meghalaya)** in relation to the following **variables**:
- Age
 - Gender
 - Education
 - Exposure to Social Media
 - Exposure to Accessible Media
- 1.24.14** To study the **accessibility** of the **developed module II** on "Place/Convenience" with reference to the following **features**:
- The Content
 - The Sign Language

- The Visuals
- The Captions

1.24.15 To prepare a **profile** of deaf respondents from the **Special Industrial Training Institute for PWDs, Jatni, Odisha**.

1.24.16 To **design & develop** a **module III** on "Finance/Money: To start your own Business/Enterprise" for being an entrepreneur in accessible digital media in video format for deaf respondents from the **Special Industrial Training Institute for PWDs, Jatni, Odisha**.

1.24.17 To **study the overall effectiveness** of the **developed module III** on "Finance/Money: To start your own Business/Enterprise" in terms of comprehension of the selected deaf respondents from the **Special Industrial Training Institute for PWDs, Jatni, Odisha**.

1.24.18 To study **the differences in the overall effectiveness** of the **developed module III** on "Finance/Money: To start your own Business/Enterprise" in terms of comprehension of the selected deaf respondents from the **Special Industrial Training Institute for PWDs, Jatni, Odisha** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.24.19 To study the **overall accessibility** of the **developed module III** on "Finance/Money: To start your own Business/Enterprise" for the selected deaf respondents from the **Special Industrial Training Institute for PWDs, Jatni, Odisha**.

1.24.20 To study **the differences in the overall accessibility** of the **developed module III** on "Finance/Money: To start your own Business/Enterprise" for selected deaf respondents from the **Special Industrial Training Institute for PWDs, Jatni, Odisha** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.24.21 To study the **accessibility** of the **developed module III** on "Finance/Money: To start your own Business/Enterprise" with reference to the following **features:**

- The Content
- The Sign Language
- The Visuals
- The Captions

1.24.22 To prepare a profile of deaf respondents from the **Government College for Deaf, Jaipur, Rajasthan.**

1.24.23 To **design & develop** a **module IV** on "Resource Management: How to Manage Resources" for being an entrepreneur in accessible digital media in video format for deaf respondents from the **Government College for Deaf, Jaipur, Rajasthan.**

1.24.24 To study the **overall effectiveness** of the **developed module IV** on "Resource Management: How to Manage Resources" in terms of comprehension of the selected deaf respondents from the **Government College for Deaf, Jaipur, Rajasthan.**

1.24.25 To study the **differences in the overall effectiveness** of the **developed module IV** on "Resource Management: How to Manage Resources" in terms of comprehension of the selected deaf respondents from the **Government College for Deaf, Jaipur, Rajasthan** in relation to the following **variables:**

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.24.26 To study the **overall accessibility** of the **developed module IV** on "Resource Management: How to Manage Resources" for the selected deaf respondents from the **Government College for Deaf, Jaipur, Rajasthan**.

1.24.27 To study the **differences in the overall accessibility** of the **developed module IV** on "Resource Management: How to Manage Resources" for the selected deaf respondents from the **Government College for Deaf, Jaipur, Rajasthan** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.24.28 To study the **accessibility** of the **developed module IV** on "Resource Management: How to Manage Resources" with reference to the following **Features**:

- The Content
- The Sign Language
- The Visuals
- The Captions

1.24.29 To prepare a **profile** of the deaf respondents from the **Institute of Sign Language Research & Training Centre, New Delhi**.

1.24.30 To **design & develop a module V** on "Concept of Marketing" in accessible digital media in video format for deaf respondents from the **Institute of Sign Language Research & Training Centre, New Delhi**.

1.24.31 To study the **overall effectiveness** of the **developed module V** on "Concept of Marketing" in terms of comprehension of selected deaf respondents from the **Institute of Sign Language Research & Training Centre, New Delhi**.

1.24.32 To study the **differences in the overall effectiveness** of the **developed module V** on "Concept of Marketing" in terms of comprehension of the selected deaf respondents from the **Institute of Sign Language Research & Training Centre, New Delhi** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.24.33 To study **the overall accessibility** of the developed **module V** on "Concept of Marketing" for the selected deaf respondent from the **Institute of Sign Language Research & Training Centre, New Delhi**.

1.24.34 To study **the differences in the overall accessibility** of the developed module V on "Concept of Marketing" for selected deaf respondents from the **Institute of Sign Language Research & Training Centre, New Delhi** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.24.35 To study the **accessibility** of the **developed module V** on "Concept of Marketing" with reference to the following **features**:

- The Content
- The Sign Language
- The Visuals
- The Captions

1.24.36 To prepare a **profile** of deaf respondents from the **Indore Deaf Bilingual Academy, Indore**.

1.24.37 To study **the overall effectiveness** of the **designed & developed module** on "Basics of Entrepreneurship" in terms of **comprehension** amongst the selected deaf respondents from the **Indore Deaf Bilingual Academy, Indore**.

1.24.38 To study the **significant differences in the overall effectiveness** of the developed module on "Basics of Entrepreneurship" in terms of the

comprehension of the selected deaf respondents from the **Indore Deaf Bilingual Academy, Indore** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.24.39 To study **the overall accessibility** of the **developed module** on "Basics of Entrepreneurship" for the selected deaf respondents from the **Indore Deaf Bilingual Academy, Indore**.

1.24.40 To study the **differences in the overall accessibility** of the developed module on "Basics of Entrepreneurship" for the selected deaf respondents from the **Indore Deaf Bilingual Academy, Indore** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.24.41 To study the **accessibility** of the **developed module** on "Basics of Entrepreneurship" with reference to the following **features**:

- The Content
- The Sign Language
- The Visuals
- The Captions

1.24.42 To study **the module-wise effectiveness** in terms of the comprehension amongst the selected deaf respondents from the **Indore Deaf Bilingual Academy, Indore**.

1.24.43 To study the **significant differences in the module-wise effectiveness** in terms of comprehension of the selected deaf respondents from the **Indore Deaf Bilingual Academy, Indore** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.24.44 To study the **module-wise accessibility** for the selected deaf respondents from the **Indore Deaf Bilingual Academy, Indore.**

1.24.45 To study the **differences in the module-wise accessibility** of the developed module for the selected deaf respondents from the **Indore Deaf Bilingual Academy, Indore** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.24.46 To study the **module-wise accessibility** of the developed module with reference to the following **features**:

- The Content
- The Sign Language
- The Visuals
- The Captions

1.25 Null Hypotheses of the Study:

1.25.1 There will be no significant differences in the **overall effectiveness of the developed module I on "Interest"** in terms of comprehension of the selected deaf respondents **from the National Institute Speech & Hearing, Thiruvananthapuram, Kerala.** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.2 There will be no significant differences in the **overall accessibility of the developed module I on "Interest"** for the selected deaf respondents **from the National Institute Speech & Hearing, Thiruvananthapuram, Kerala** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.3 There will be no significant differences in the **overall effectiveness of the developed module II on "Place/Convenience"** in terms of comprehension of the selected deaf respondents from the **North-East (Dimapur-Nagaland, Imphal-Manipur & Shillong-Meghalaya)** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.4. There will be **no significant differences in the overall accessibility of the developed module II on "Place/Convenience"** for the selected deaf respondents from the **North-East (Dimapur-Nagaland, Imphal-Manipur & Shillong -Meghalaya)** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.5. There will be **no significant differences in the overall effectiveness of the developed module III on "Finance/Money: To start your own Business Enterprise"** in terms of comprehension of the selected deaf respondents from the **Special Industrial Training Institute for PWDs, Jatni, Odisha** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.6 There will be **no significant differences in the overall accessibility of the developed module III on "Finance/Money: To start your own Business Enterprise"** for the selected deaf respondents from the **Special Industrial Training Institute for PWDs, Jatni, Odisha** in relation to the following variables:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.7 There will be **no significant differences in the overall effectiveness of the developed module IV on "Resource Management: How to Manage Resource"** for being an entrepreneur in terms of comprehension of the selected deaf respondents from the **Government College for Deaf, Jaipur, Rajasthan** in relation to the **following variables:**

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.8 There will be **no significant differences in the overall accessibility of the developed module IV on "Resource Management: How to Manage Resource"** for being an entrepreneur for the selected deaf respondents from the **Government College for Deaf, Jaipur, Rajasthan** in relation to the **following variables:**

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.9 There will be **no significant differences in the overall effectiveness of the developed module V on "Concept of Marketing"** in terms of comprehension of the selected deaf from the **Institute of Sign Language Research & Training Centre, New Delhi** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.10 There will be **no significant** in the **overall accessibility of the developed module V on "Concept of Marketing"** for the selected deaf respondents from the **Institute of Sign Language Research & Training Centre, New Delhi** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.11 There will be **no significant differences in the overall effectiveness of the developed module on "Basics of Entrepreneurship"** between the pre & post comprehension of the selected deaf respondents from the **Indore Deaf Bilingual Academy, Indore, Madhya Pradesh** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.12 There will be **no significant differences** in the **overall accessibility of the developed module on "Basics of Entrepreneurship"** for the selected deaf respondents from the **Indore Deaf Bilingual Academy, Indore, Madhya Pradesh** in relation to the following **variables**

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.13 There will be **no significant differences in the module-wise overall effectiveness** in terms of the comprehension of the selected deaf respondents from the **Indore Deaf Bilingual Academy, Indore, Madhya Pradesh** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.25.14 There will be **no significant differences in the module-wise accessibility** for the selected deaf respondents from the **Indore Deaf Bilingual Academy, Indore, Madhya Pradesh** in relation to the following **variables**:

- Age
- Gender
- Education
- Exposure to Social Media
- Exposure to Accessible Media

1.26 Assumptions of the study:

1.26.1 It is possible to **develop & design modules in accessible digital media** in video format on **'Basics of Entrepreneurship'** for Deaf.

1.26.2 The modules in **accessible digital media** in video format on **'Basics of Entrepreneurship'** for Deaf will be effective for comprehension of the Deaf.

1.26.3 The respondents for the study will vary with reference to:

- Age
- Gender
- Education level
- Exposure to Social Media
- Exposure to Accessible Video Format

1.26.4 Respondents will take interest in the designed and developed “**Accessible Digital Media in Video format on ‘Basics of Entrepreneurship’ for Deaf.**”

1.27 Delimitations of the study

1.27.1 The study is delimited to the selected deaf of **Kerala, North East, Odisha, Jaipur- Rajasthan, Delhi & Indore-Madhya Pradesh.**

1.27.2 The study is delimited to check the effectiveness of the modules in **accessible digital media** in video format on **Basics of Entrepreneurship** in terms of the comprehension level of the selected deaf respondents.

1.27.3 The study is delimited to **check the accessibility of the modules** in accessible digital media in video format on **Basics of Entrepreneurship** with reference to the following features:

- The Content
- The Sign Language
- The Visuals
- The Captions

1.27.4 The study is delimited to study the following variables:

- Age
- Gender
- Education level
- Exposure to Social Media
- Exposure to Accessible Video Format

1.28 Operational Definition

1.28.1 Accessibility of Modules Developed

In this current study, "Module Accessibility" pertains to the ease of comprehension related to:

- The content presented
- The sign language used
- The captions provided
- The visuals shown in the video format

1.28.2 Digital Media

In the current study, "digital media" specifically pertains to video content only.

1.28.3 Modules

In this study, "modules" pertain to the organized educational units on "Basics of Entrepreneurship" arranged sequentially and tailored to enhance its comprehension for the deaf.

1.28.4 Comprehension of a module for the deaf

Comprehension of a module for the deaf refers to the clear understanding and grasping of the content, concepts, and objectives of a specific instructional unit, adapted or designed to cater to the unique learning needs and communication methods of deaf individuals.

1.28.5 Deaf

In this study, "deaf" describes individuals with significant to profound hearing impairments who primarily communicate through sign language and are of employable age, starting from 16 years old.

1.28.6 Basics of Entrepreneurship

"Basics of Entrepreneurship" refers to the fundamental concepts of starting and managing a business. This includes understanding the:

- Entrepreneurship: Concept & Functions
- Concept of Market
- Business Finance
- Entrepreneurship as Innovation & Problem Solving
- Resource Mobilization