

Global Media Journal, Indian Edition

January 2018

Manipal Academy of Higher Education, Manipal

**Media usage by differently-abled people and their inclusion:
A study on the Deaf and Hard of Hearing**

Binitha Anna Jacob

School of Communication, Manipal University

Email id: bini.aj38@gmail.com

Abstract

The media has always assumed that people with physical impairments and challenges are incapable of fully experiencing the world around them, when the fact of the matter is that they just experience the world differently. The long held belief that differently abled people, such as the visually challenged and the hearing impaired, are incompetent and less responsive has shaped society's perception of them, and this has extended to the media's outlook and indifference towards them.

According to the 2011 census of India, the 'disabled population' comes up to 2,68,14,994; out of which 50,72,914 individuals have hearing impairments and are grossly neglected by both the media and society.

This research aims at identifying media inclusion and exclusion of the deaf and hard of hearing (HoH), analyzing media channels that are most frequently accessed by them and recognizing limitations faced by them upon media usage.

1. Introduction

The concept of diversity does not end with culture, race or gender, but also with abilities. The horizon of diversity also extends to those who are visibly or invisibly challenged.

This research aims at identifying the level of inclusion of deaf and hard of hearing (HoH) individuals in mainstream media. The use of technology and digital media has opened avenues for the inclusion of deaf and HoH people into online communities.

A world without sound does exist, and millions of deaf or hearing-impaired people live in it. Hearing impairment can affect one's character, disposition, the field of expertise, behaviour and even his/her social functioning.

The Census 2011 defined Disability in Hearing as:

1. unable to hear at all, or
2. faces difficulty when it comes to hearing day to day conversational speech (which would be considered as HoH);
3. if the individual employs a hearing aid.
4. If the individual faces a hearing problem in only one ear, then he or she must not be deemed as having a hearing disability.

(Disabled Persons in India - A statistical profile 2016)

The Rights of Persons with Disabilities Act, 2016 in India lays down the following:

Hearing impairment—

- a) "Deaf" means persons having 70 DB hearing loss in speech frequencies in both ears;
- b) "Hard of hearing" means a person having 60 DB to 70 DB hearing loss in speech frequencies in both ears.

Media and the deaf

When disability makes an appearance in the vast diversity of contemporary media, it adds to the shaping of how disability is comprehended in society. (Ellis and Goggin 2015)

It is said that out of every five people on the planet, one of them is differently-abled, and they are shamefully misrepresented in the glamorous, pop-culture driven system of mass media. Owing to the effects of mediators who control what is published or produced, these individuals are confined to a narrow spectrum. The physically challenged population has experienced a change in their private circumstances in the aftermath of medical and political progress, but they have not been able to see such transformation in their public image. (Riley 2005)

Mass media has been described by several researchers as having an indifferent attitude towards communities with impairment. Through certain representations and images, the disabled community has become the “last minority” that is lagging by

decades by other groups. According to Charles A. Riley II, minority groups such as gays, blacks, Jews, women and senior citizens have used their economic and political clout to demand changes, which have helped in changed the offensive portrayals of them on screen and in print. These changes ultimately led to the empowerment of these groups.

CENSUS OF INDIA 2011 DATA ON DISABILITY, provides the following statistics:

Total	26,810,557	14,986,202	11,824,355
		(Males)	(Females)
In Hearing	5,071,007	2,677,544	2,393,463

2. Review of Literature

It is believed that people who are disabled need to develop a more comprehensive repertoire of communication abilities in a world where many people will misunderstand them, feel uncomfortable around them, and not know how to talk with them (Braithwaite, 1996).

Media inclusion of deaf

The social model of disability argues that physical impairments are not the cause of disability, but a society and a media representation that cannot accommodate physical difference produces disability as an experience of oppression. (Elcessor 2016)

The media business runs on demographics. Quantitative measures of who's watching, listening, reading, clicking, and, most importantly, buying are sliced and diced by marketing experts according to every conceivable category. This systematic analysis of data has advanced way beyond the old herding by race, gender, age, education and income. That makes the current state of affairs regarding readers and viewers with disabilities all the more dismal. (Riley 2005)

Over the years, the popular media have increased their accuracy in portrayals of deafness. However, this sensitivity is quite recent, and its long-term impact on stereotypes held by deaf people is as yet unknown. Gains made by other minorities (e.g., African-Americans are now depicted on television in a variety of roles) have promoted sensitivity to human diversity, but as yet, deafness enjoys neither the attention nor the role models granted to other minorities in popular media. (Braden 1994)

3. Methodology

Through this research, the aim is to analyse different mediums through which this side-lined community accesses different types of content and satisfies their right to information, and additionally identify critical areas of the media that contribute towards uplifting the deaf.

3.1. Objectives

- To identify the inclusion and participation of deaf and hard of hearing people in media
- To analyze existing media channels that are currently used by deaf communities
- To examine whether digital media has helped in reducing barriers to communication by deaf and hard of hearing people.

3.2. Sample

- Deaf
- Hard of Hearing (HoH)

3.3. Sampling procedure

- Random Sampling: This technique of sampling was based on the researcher's access to the desired subjects.

3.4. Tools for data collection

Interviews:

The researcher has approached people who are in close contact with these communities to draw out information on media usage and behaviour, and consequently extract inferences and insights from what is observed.

Surveys

To collect data directly from the concerned population, deaf and HoH individuals were approached.

4. Analysis

It is of utmost importance to note that due to the varying levels of education that deaf/HoH individuals are exposed to, some of them might not be able to decode the questionnaire as successfully as others. As a result of this, few questions might be left unanswered by those who might not be able to understand the question entirely. Such responses have not been eliminated as they too are important, and they have been indicated as 'unanswered' so that readers can draw their conclusions.

4.1. Data Analysis

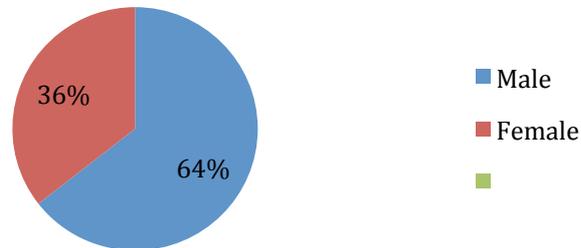
Figure 4.1: Classification of respondents



As depicted, 78% of the respondents are Deaf, which comprises of 35 individuals who participated in the study; 11% of the respondents stated their condition as Hard of Hearing (HOH), reflected by 5 of the respondents; and the remaining 11% have left the question answered.

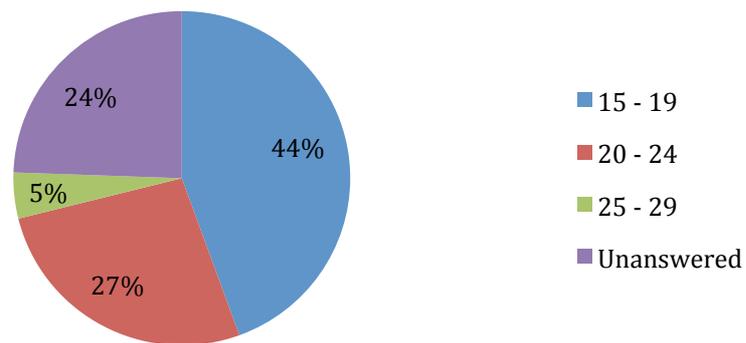
4.1.1 Profile of the respondents:

Figure 4.2: Gender classification



Majority of the respondents are male, owing to 64% of the total number of samples, whereas 34% of the respondents were female.

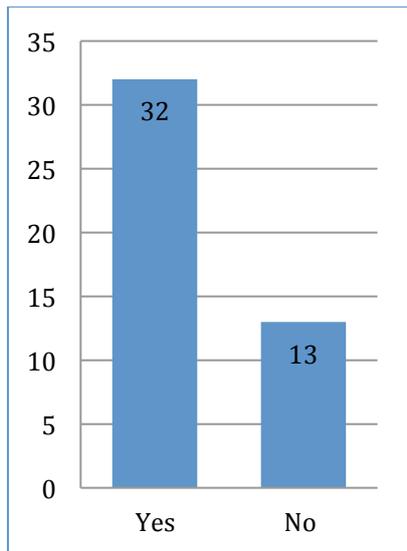
Figure 4.3: Age classification



The individuals are spread across the ages of 15 to 29. Majority of them (20 respondents) fall in the age group of 15 to 19, forming 44%. The next majority (12 samples) falls in the age group of 20 – 24, making 27%. And 5% (2 samples) fall in the age group of 25 – 29. The remaining respondents (11 samples) left the question unanswered, forming 24% of the total respondents.

4.1.2 Access to media devices and Usage

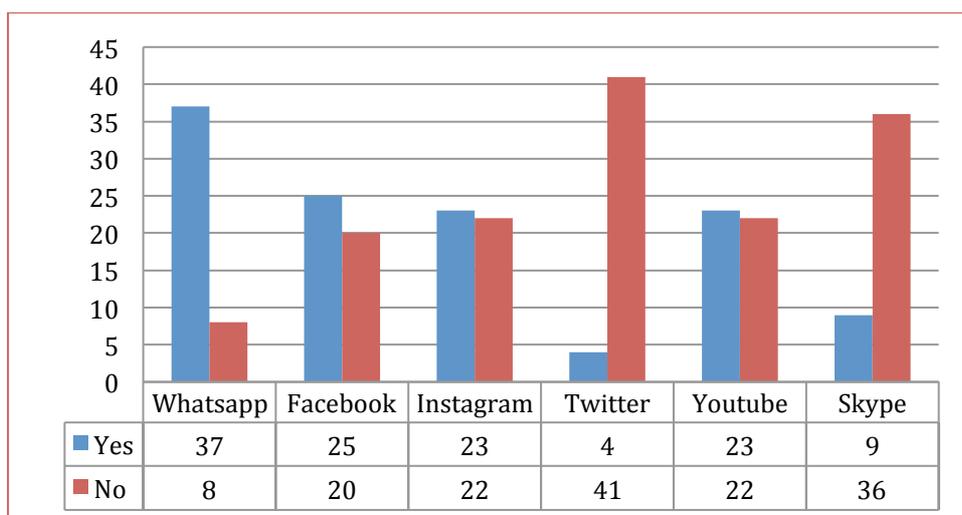
Figure 4.4: Number of deaf/HoH individuals who have access to a smartphone



The data indicates that about 71.1% of the samples have access to a smartphone, whereas 28.9% of them do not have access to a smartphone.

Smartphones have become one of the dominating mediums that enable the consumption of media content, and they have penetrated the deaf and HoH community in India as well. Consequently, smartphones are gradually equalising the ground for hearing and deaf individuals by enabling secure communication, and also provides quick access to information.

Figure 4.5: Usage of Social Media by the deaf/HoH respondents



The collected data shows that Whatsapp enjoys the highest number of deaf users. 82.2% of the total respondents claimed to use Whatsapp whereas 17.8% claimed they

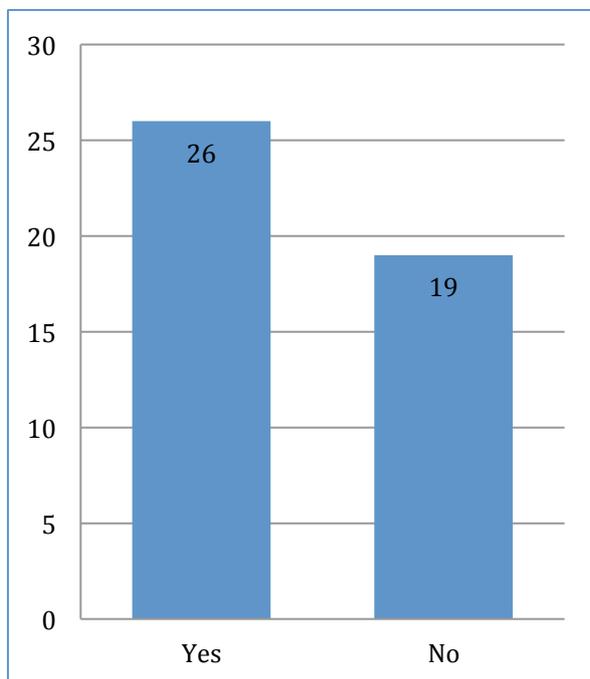
do not use it. Following this is Facebook, where 55.6% responded to using this social media, and 44.4% responded to not using it. Instagram and Youtube tie up next, where 51% use them while 49% do not. Behind these networks is Skype, where 20% of the respondents claimed to use it while 80% claimed they do not. Concerning Twitter, 8.9% responded that they use Twitter while 91.1% responded that they do not.

- The most extensively used social media application is Whatsapp. The success of Whatsapp as a tool for communication has extended to the deaf and HoH community as well. From the researcher's observation, this medium is mostly used to share content, music, videos, photographs, and so on. Additionally, the Whatsapp feature of video calling is also extensively used. The ability of the deaf or HoH individual to type out messages in the chat and have a full conversation with someone in entirety depends on the individual's level of education.
- The social media platform of Facebook follows Whatsapp. Facebook allows these individuals to engage with one another on an interactive platform, gain access to various types of content that syncs with their geography, demographics and psychographics, thus getting content that is relevant to their likes and dislikes. Moreover, Facebook helps in connecting them with different deaf communities online and lets them be a part of them too, thus creating a sense of belongingness to a group.
- Instagram and Youtube share the same usage by the respondents. Instagram allows people to share photographs with others primarily, and additionally visually appealing content gains significant attention from the deaf and HoH; therefore, Instagram naturally has the potential to be popular among them. Youtube is also regularly accessed by the deaf and HoH respondents for entertainment, films, news and even content that is created in sign language. Youtube is a highly utilized platform where individuals can create, produce and upload content that is in sign language, and this is accessed and viewed by different people.
- Skype, which is one of the more popular networks for video calling is only used by 20% of the respondents. This might be because Skype was mostly popularized as a computer application during its inception. The lack of its

usage by the deaf and HoH respondents could be because its mobile app version is not widely popular.

- The social network least utilised by the deaf and HoH respondents is Twitter. Twitter is a text-based application where users mainly tweet information in a 140-character limit. This may be a complicated method of communication for most deaf and HoH individuals at present due to different levels of education. Hence, Twitter gains limited usage from the respondents.

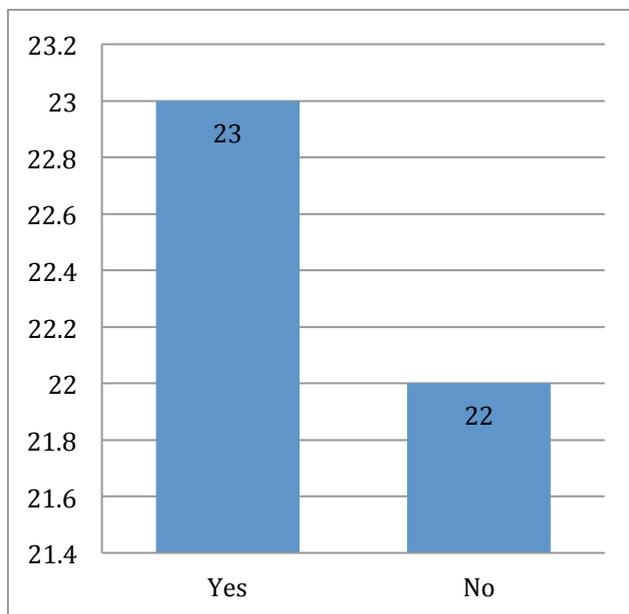
Figure 4.6: Participation in online groups for deaf/HoH communities



57.8% of the respondents claimed that they are members of online deaf communities, whereas 42.2% of the respondents claimed that they are not. Numerous groups for the

deaf and HoH are mushrooming on online platforms. The leading platforms for such groups are Whatsapp and Facebook. The internet has carved a space for the existence of intimate peer groups, official units (including online groups created in deaf schools or colleges) and large, reputable communities that are driven by specific values and missions. Many deaf and HoH individuals have joined them through invitation, recommendation and even the snowballing effect. These groups render a certain unity among the individuals, thus adding to their sense of belonging and rendering a bonded community effect.

Figure 4.7: Readership of deaf blogs



51.1% of the respondents stated that they read deaf blogs, and 48.9% of the respondents stated that they do not. Although there are numerous deaf blogs on the

internet, their readership directly depends on the level of education of the deaf and HoH individual.

Owing to varying levels of education, the readership of deaf blogs depends on not only the interest but also the appeal as well. Deaf people tend to access content that is more visually appealing to them, and consequently would opt for videos rather than content that requires them to read. Those deaf individuals who are unable to read with full comprehension will naturally not form an audience for deaf blogs. Therefore, deaf blogs in India are less likely to be accessed by deaf and HoH individuals at present. Based on observation, the 51.1% of the deaf and HoH individuals, who stated that they read deaf blogs, do not regularly read them. However, with improving levels of education, the readership of deaf blogs in India can gain more traction in the future.

apps
deaf

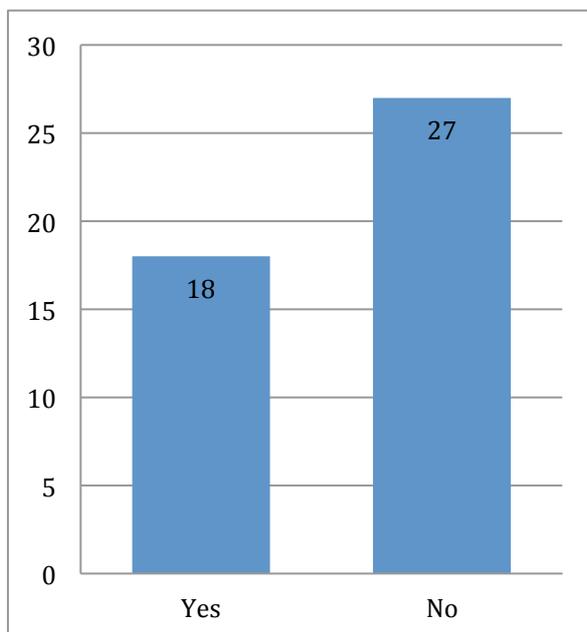
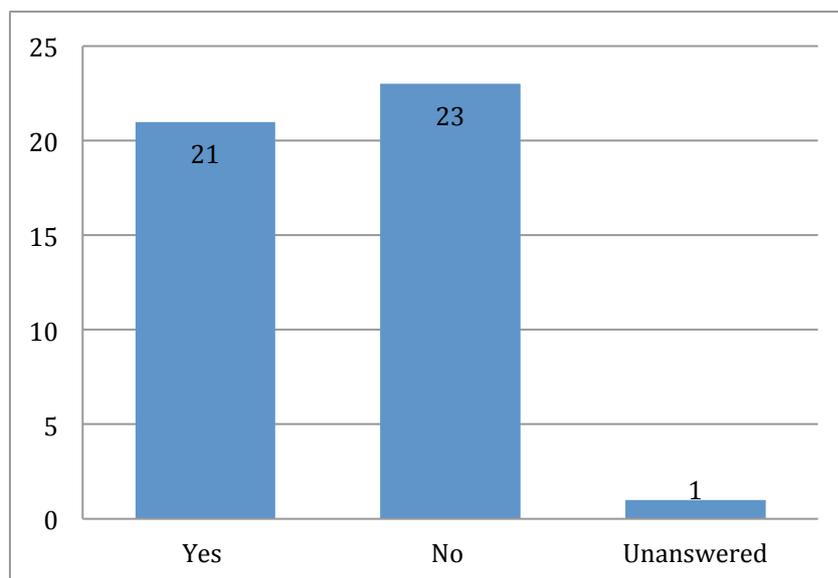


Figure 4.8 Usage of mobile apps created specifically for the deaf and HoH

As per the data collected, 18 samples responded saying they use mobile applications specially created for the deaf and HoH, which makes 40% of the respondents. 27

samples responded saying that they do not use such mobile applications making 60% of the respondents. The world of mobile applications offers deaf and HoH individuals a pool of applications that they can download and use on their mobile phones. These applications include Indian Sign Language dictionaries, Sign Language translators, News apps that are created in sign language, portals for deaf communities that act as a space for their cultural representation, and even religious texts that are communicated in sign language. However, only 40% of the respondents use mobile applications specially created for the deaf audience. This could be due to the lack of the respondents' awareness about these apps. These mobile applications are not popularised enough among the respective audiences.

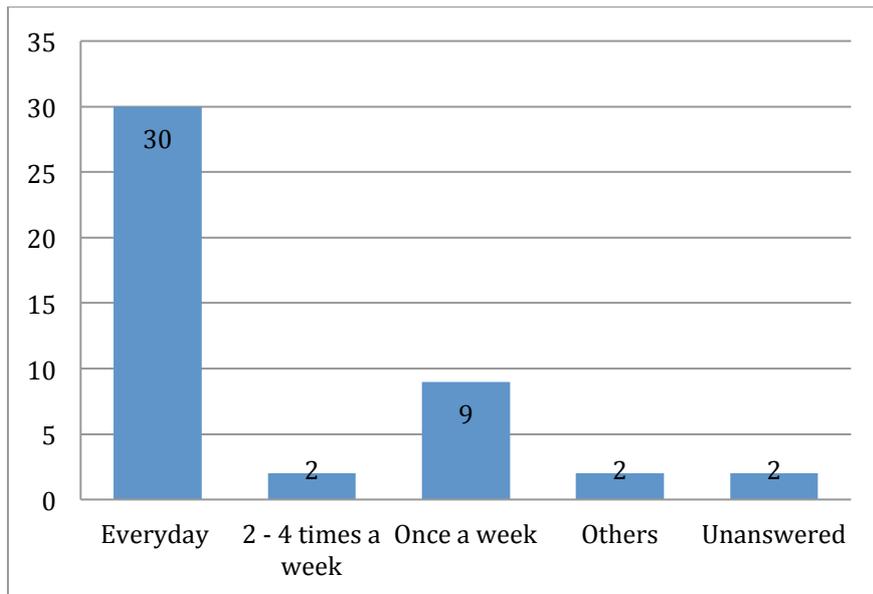
Figure 4.9 Number of samples that have met other deaf and HoH individuals online



The individuals who participated in the study were asked whether they have met other deaf and HoH individuals online. Out of the 45 samples which were asked this question, one of them left the question unanswered. With regards to this, 21 samples (out of 44) responded 'Yes', which means the internet has paved the way for 47.7% of the respondents to meet other deaf and HoH individuals online. Alternatively, 23 samples (out of 44) responded 'No', which means 52.3% of the respondents have not met other deaf and HoH individuals online. Among all the channels of the media, the internet is one with a particular feature, which is enabling people to meet new individuals online. Consequently, this medium paves the way for them to meet like-minded people. The internet allows deaf individuals, who share similar opinions, to come together on one interactive platform and exchange their thoughts. While they can also communicate with the hearing population online, deaf individuals can also unite with people who share a similar field of experience, thus drawing inspiration from each other.

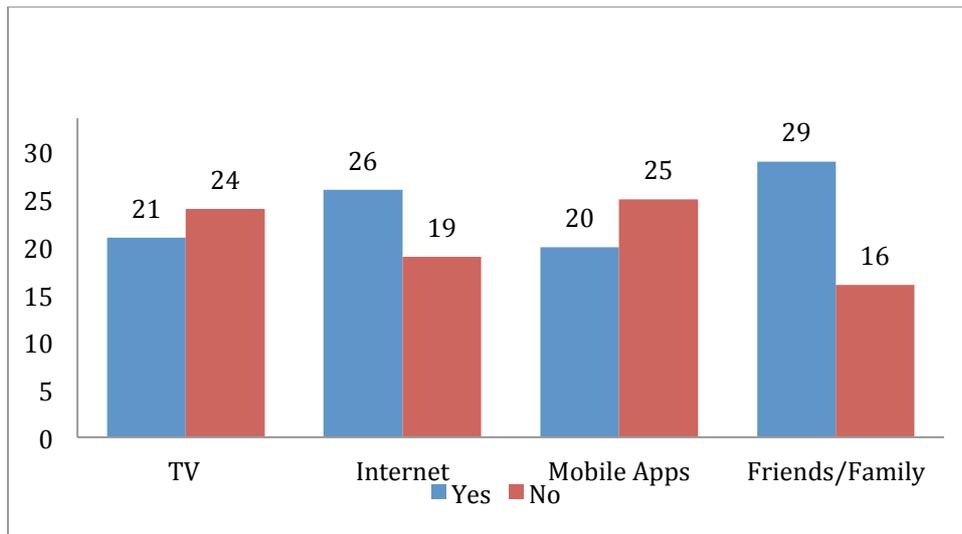
However, majority of the respondents stated that they have not met deaf and HoH individuals online. It is understood that the reading skills of most of the deaf and HoH respondents are poor. Therefore, even though there are several chat networks, online deaf societies and communities networking through the internet, it may be difficult for them to navigate through these online web pages. Another possible reason for this could be the lack of interest that deaf and HoH individuals might have concerning meeting new people – both hearing and deaf. In real-life situations, when a deaf individual meets a hearing individual whom he/she has never communicated with before (and the latter does not know sign language), it is common for both to feel awkward and uncomfortable because they are unable to communicate with each other effectively. Due to such prior experiences, deaf people may fear meeting new people even through online platforms. They may feel that meeting hearing people even through online platforms might pose similar issues and for that reason, they might be reluctant in exploring the platforms that allow them to meet new people.

Figure 4.10: Frequency in which video calls are made



The 45 deaf and HoH respondents were asked about the frequency with which they make video calls, out of which 2 of them left the question unanswered. Out of the 43 samples who responded to the question, 69.8% of the respondents frequently make video calls daily, 4.6% make video calls 2 – 4 times a week, 21% make video calls once a week, and 4.6% make calls less frequently. Video calling applications play an essential role in the communication of deaf and HoH individuals. Majority of them rely solely on these applications to communicate on a regular basis with family, friends, peers and others. Upon observation, it was noted that these individuals communicate through signs while video calling with other deaf and HoH individuals, or with hearing individuals who could communicate in sign language. As a result of this, more deaf and HoH individuals can satisfy their daily communication needs.

Figure 4.11: News sources



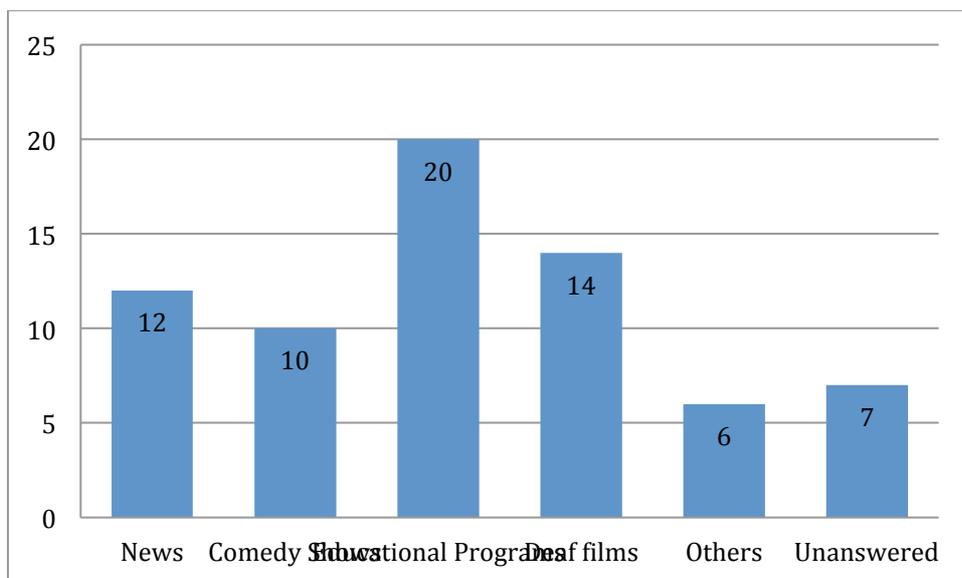
It is natural for an individual to gain news from multiple channels, and as a result, majority of the deaf and HoH samples who participated in the study chose multiple options. 21 of them acquire news through Television (46.7%); 26 of them acquire news through the internet (57.8%); 20 of them acquire news through mobile apps (44.4%), and 29 of them acquire news from their Friends and Family (64.4%).

- The data indicated that their primary source for news was their Friends and Family. The advantage of this is that the deaf and HoH individual will be able to fully understand the entire content that is being communicated to them in this manner, because they are accustomed to communicating with their family members and peers, and therefore will have effective methods of communicating with each other. On the other hand, the disadvantage of this is that the friend or the family member who is communicating the news might portray the information with some bias or personal prejudice, which may transfer to the deaf individual.
- The second most accessed source for news by the deaf and HoH respondents is the Internet. From the behavioural patterns observed, the news is mainly viewed through video format on Youtube or other sites. The Internet currently hosts websites where the news is conducted solely in sign language.
- This is followed by Television channels from which deaf and HoH respondents acquire news. The individual's comprehension of the information may be based on his/her reading of the subtitles or captions. However, most

channels still do not strictly adhere to the usage of subtitles or captions, the absence of which will limit the number of deaf and HoH individuals who are accessing Television channels for news. Another way through which the individual may acquire news from Television channels is through lip-reading, as most of them are good lip-readers. However, the main disadvantage of lip-reading is that different types of sounds may have similar lip formations. Therefore, the deaf individual may form contorted meanings of the information due to this drawback of lip-reading.

- Finally, the least accessed medium for news by the deaf and HoH individuals out of the four sources is Mobile Applications. This could be because most of the news applications (designed for smartphones) that are popular amongst the general public are content-heavy. Deaf and HoH individuals in India today are less likely to opt for something that requires them to read a lot, due to varying levels of education. Thus, they will most likely choose a medium that is not text-heavy, but more visual. In the current ecosystem of Mobile Applications, there exist specific applications that portray the news in sign language which are utilised by some of the individuals, but they are not widely popularized.

Figure 4.12: Programs the respondents would like to see in sign language:



The concept of television programs produced solely in sign language has been remarkably ignored or restricted. For this question, several of the respondents chose more options than one. It must be noted that 7 out of the total respondents have left the question unanswered. Consequently, the number of responses that are available for analysis is 38. The option that was chosen the most by the deaf and HoH respondents was Educational Programs, where 52.63% (that is 20 out of 38) of the samples have opted for this option. This is followed by Deaf films, which was chosen by 14 (out of 38) samples, which makes 36.84%. 12 respondents chose the option of News. Thus, 31.57% of the respondents would like to see more programs of the news in sign language. 10 respondents, i.e., 26.31% chose the option of Comedy Shows. From the responses recorded by the 38 samples who answered the question, 6 respondents (15.78%) opted for the choice of Others.

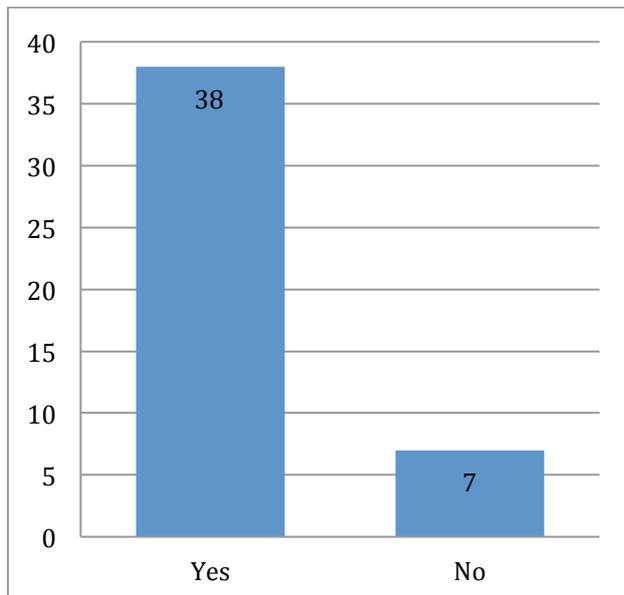
- The hearing population has widespread access to different types of content that is educational in nature. However, deaf individuals might not be able to enjoy all this abundance of information because most of them have underdeveloped reading skills. When it comes to educational television programs (such as documentaries on nature, culture, science, technology and history), even though there may be subtitles, the language used might be too technical, and deaf viewers might find the subtitles too complicated to read. Therefore, educational programs that appear on television in sign language could be a great way for deaf and HoH individuals to learn about a variety of subjects.
- Sign language films can prove to be a powerful tool to normalise sign language in the society, as this visual language is still not given the same status and respect as other languages in the country. From the data collected, the second most preferred option was Deaf Films, and this could be because apart from regular commercial films that are directed towards the general public, deaf individuals would probably also like to see specific issues and social contexts that are relevant to them portrayed on screen in a dramatized manner.
- The third preference was News in sign language, which indicates that there are deaf and HoH individuals who feel the void of credible news sources that are produced in sign language. News programs in sign language can bring to

television those subjects that require the attention of the deaf population, along with other regional and national news.

- A portion of the respondents chose Comedy Shows when asked about which program they would like to see in sign language on television. Comedy shows in sign language, produced in other countries, are slowly gaining attention on the internet, and currently, they are few in number. These international shows will generally focus on concepts and social contexts that are specific to the area it is being created in. Therefore, the deaf population in India may access it to some extent, but they would probably also prefer to see comedy shows those project topics that are native to India or particular regions.
- A portion of the respondents chose the option of Others, which indicates that there is a demand for programs in sign language.

4.1.3 Perception about media usage:

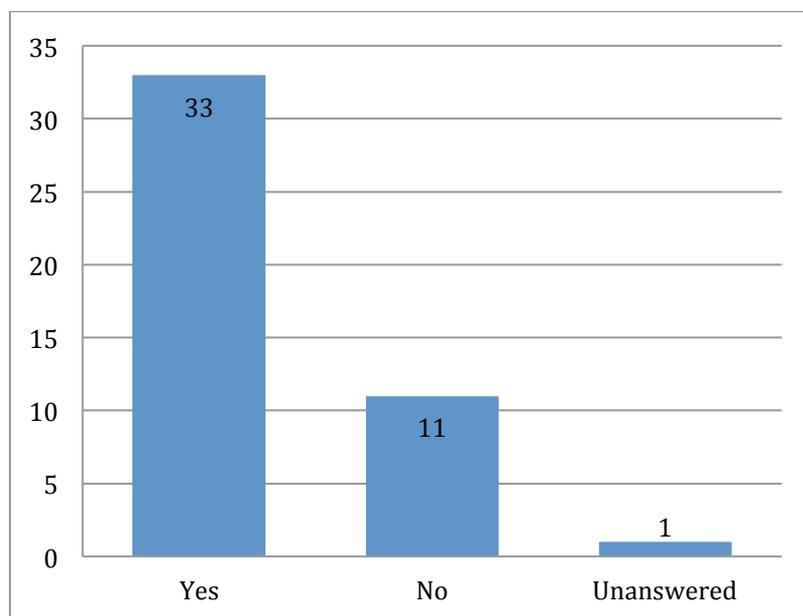
Figure 4.13: Perception about internet helping deaf/HoH individuals interact with others



When the respondents were asked about whether they believe the internet helps deaf and HoH individuals interact with others, 38 individuals (84.4%) responded 'Yes' while 7 individuals (15.6%) responded 'No'. The internet has established itself as a

platform where people can efficiently interact with others with ease. This encompasses deaf and HoH individuals as well. Majority of the respondents perceive the internet as a medium that helps them interact with others. Therefore, as it is typical of this medium, the internet certainly supports the communication between the deaf individuals and others, and majority of them also share this belief.

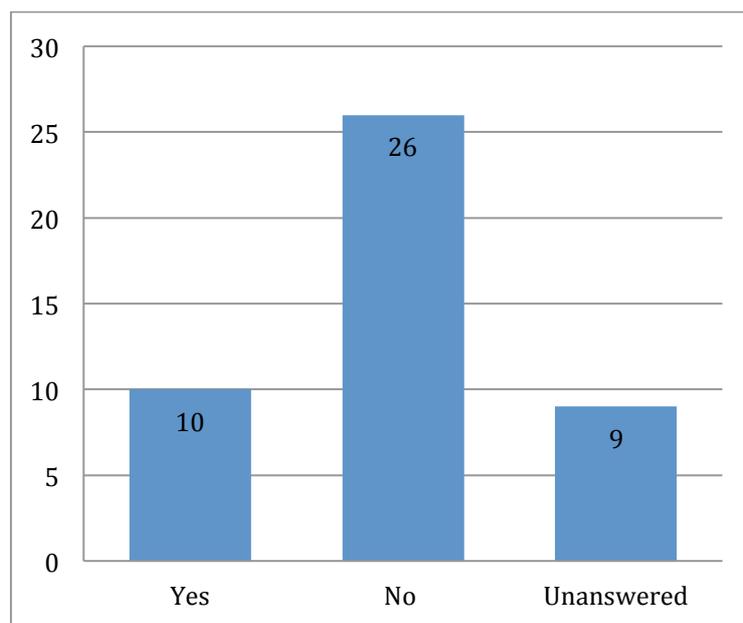
Figure 4.14: Respondents who have experienced happiness and satisfaction while using internet/mobile phones



To analyse the perception of deaf and HoH individuals about mobile phones and the internet, the respondents were asked whether they have experienced happiness and satisfaction when they talk to people through mobile phones or the internet. One out of the 45 samples left the question unanswered. Therefore, 33 (out of 44 samples) responded 'Yes', and 11 (out of 44 samples) responded 'No'. This means 75% of the total respondents have experienced happiness and satisfaction while communicating with others through mobile phones and internet, whereas 25% of the respondents have not experienced happiness and satisfaction while communicating through mobile phones and internet. Interacting with others is intrinsic to human nature, and it is natural for us to sort after those mediums which allows us to communicate with

people as easily, quickly and efficiently as possible. Deaf individuals to crave for interaction with others, and mobile phones and the internet create a platform for this. Mobile phones and the internet have the potential to fulfil a deaf individual's need to communicate and connect with others.

Figure 4.15: Respondents who have faced limitations while communicating through internet/mobile apps



Following the question of accessibility comes the question of usability concerning media and its relationship with the deaf and HoH. When the 45 respondents were asked about whether they have faced any limitations while talking online or through mobile phones, 9 of them left the question unanswered. Consequently, ten respondents (out of 36 samples) claimed that they had faced limitations, making 27.8%, while 26 (out of 36 samples) have claimed that they have not faced limitations, making 72.2%. It is certainly an encouraging sign to see that majority of the deaf and HoH individuals have not faced limitations, and it indicates the growing number of deaf individuals who have knowledge and understanding about how the concerned digital channels work. More and more deaf individuals are joining internet-based communication platforms.

On the flipside, there is still a portion of the population that continues to face limitations while communicating online and through mobile phones. This can be

attributed to various reasons, starting with the lack of awareness about how these mediums can be appropriately used. These individuals may not face difficulty while signing through video calling applications with people they usually communicate with. However, challenges may arise when they are using instant messaging applications, which are primarily text-based. The meaning, or a part of it, may be lost when they try to put down their thoughts in spoken languages, majorly because most of them are still unable to read and write in English or their regional language proficiently. Therefore, the receiver which reads their message might not obtain the complete information that the deaf individual is trying to put across in words. The use of emoticons, smileys and visuals are common in chats that take place on instant messaging apps, but most of the time they fail at offering the receiver the entire meaning that the deaf or HoH individual implied.

4.1.4. Open-Ended Questions

The final two questions were open-ended questions, where the respondents were free to put down any answer as they wished. Before conducting the study, several professionals who work in the field of educating deaf and HoH individuals in schools and institutes pointed out that most of these individuals will not be able to respond precisely to such questions because they might not be able to encode their thoughts and opinions and put them down accurately in English.

From the data collected, 14 of the respondents left the question unanswered. The common responses that the deaf and HoH individuals put down when asked about which media they access for entertainment were 'TV' and 'Mobile apps'. Some of the responses included specific media products like movies and comedy shows. Interestingly only one of the respondent mentioned 'Sports' under entertainment, and 'News' was also mentioned only once. Moreover, Newspaper and Books was mentioned by only one respondent. Other common responses of specific internet-based applications included Whatsapp, Skype and IMO. The observation made was that they are more inclined to content that is presented through visual media, accessed mostly through television or mobile phones. Movies, comedy shows and other visual content is frequently viewed by this population. The readership gained by

newspapers, books, magazines and other print media from the deaf and HoH population is very limited, due to their underdeveloped reading skills.

The final question of the study was also an open-ended one, where the deaf and HoH individuals were asked to give their opinion about how the media can be improved to help the deaf and HoH individuals. Out of the total number of responses collected, 24 of the samples left the question unanswered.

- Majority of the respondents believe that the media should devote some of its focus to creating and producing content in sign language. There indeed is a demand for sign language content, both in the arenas of information and entertainment. Although it will take a long time for sign language programs to have a significant presence on mainstream television, such content can be promoted online as well.
- Several responses also mentioned the requirement for subtitles to be attached to media content. This is primarily because lip-reading cannot grasp the entire information.
- A handful of responses were focused on visual media and multimedia, which are extremely appealing to the deaf population. When the information depicted is visually strong, the deaf or HoH individual can unify the decoded concept along with other sense like emotions.
- One of the responses pointed out the aspect of smartphones. Mobile applications that specifically cater to the deaf population (such as sign language translators and deaf social portals) can also be promoted extensively so that more and more deaf users can benefit from the same.

4.2 Interviews

The media has supported the upliftment of many different minority groups. It can help in sensitising the general public to Deaf culture, and it can fortify the progressive light in which deaf people need to be portrayed.

"There is a requirement of media pitching in this task so that people can be aware of what is happening with this particular group of the population. In the overall

population, only qualified professionals know about this field – these people, what they face, what is happening. Moreover, if the professions of other courses in the medical field itself are taken, they are not aware of these type of things. So many things come in the media, and this also can come in the media.” – Kishan M. M. (Audiology Assistant Professor, School of Allied Health Sciences (SOAHS), Manipal)

"The media can bring such issues what is required for our community, particularly the hearing impaired individuals and this community. What is the current requirement? If that can be highlighted, probably we can look at developing certain things. Alternatively, even the attitude of people in the society will change. As you know, even if people do not have any vision problem they wear spectacles just to look good. So they may not be needing it, but they want to wear goggles. They put it and want to look good. However, what about hearing aid? Many people do not prefer hearing aid. The very first question nowadays (with relation to hearing aids) is ‘How small is it?’, ‘Whether it is seen by others?’. These are the questions we come across. Why that inhibition? This is invisible disability. Hearing impairment is an invisible disability. Other disabilities are quite seen well. Still, when it comes to intervention we have all these problems." – Dr Venkataraja Aithal U. (Professor at Dept. of Speech and Hearing, SOAHS, Manipal)

The relationship between media and the attitude towards deaf people is one where both elements can change and be changed by each other. The media reflects certain perceptions that the society has, while simultaneously contributing towards the image that the general public has about deaf people.

“In a country like India with lots of diversity, people do something for this population just for credit sake. So the target is not completed. If you have taken from the basic education level itself where integrating deaf population into normal society, going parallel with us, definitely everything is possible. Without that, it is not possible... More than attitude, awareness is one important thing. The second one is intention to do something better for this population is not there in our medical system... Unless you have a group or panel who represent and give adequate information, then only it is possible." – Kishan M. M. (Audiology Assistant Professor, SOAHS)

4.2.1. Internet and Mobile Phones

"I would say most of the information currently is on Internet, Youtube. So this particular community very well knows that everything is available on mobile phones. So they depend nowadays on smartphones only. So whatever help we would like to give we can give through this mobile phone, mobile apps so that they will also be able to manage... And he will also be an independent individual in the society." – Dr Venkataraja Aithal U.

"Their basic educational level is on a different way of line. What you and me we do, they do not follow the same type of education. They have simplified versions of studying things, simplified subjects, simplified questions; so they have only basic skills. With these basic skills, we do not get to see many deaf population reading books or magazines. They are not interested in all those things. Also, these people, visually catch more information. They prefer something that's visually more catchy. In that, mobiles will play a role because so many things are visually activating, attractive things they use that. So books and papers, newspapers are not going to attract them. The Higher level of continuous language – reading, they are not going to go for that." – Kishan M. M.

4.2.2. Lip – reading, Captions and Subtitles

"Lip-reading has its advantage and disadvantage. Everything is real-time. You cannot go back and repeat that. Whereas subtitles will stay for some time and it will imprint. As you know, speech is very momentary. In few seconds you move your articulators – your lips and tongue – to produce some words. In a fraction of seconds, you speak some word which may not be captured by hearing-impaired individuals. Lip reading of course happens, but it is limited to the visible sounds, that is, sounds produced by the lips. What about sounds produced at the back, as in "Ka", as in "Ya", "Ra", "La". It is challenging. Lip reading is a very different concept, and lip reading alone will not be a solution. I am telling now with the media we should be able to have subtitles running and if there is a facility for me, I should be able even to re-run that or reply that subtitle." – Dr Venkataraja Aithal U.

Captions and subtitles must not be confused with each other. As written in the book, 'Deaf Culture: Exploring Deaf Communities in the United States', subtitles are directed towards those people who can hear but cannot understand the language in which the film/TV program is made. Suppose an Italian movie is screened in Karnataka, the film would be subtitled in Kannada, but it would not include titles or descriptions for sound effects such as the sound of knocking, footsteps or birds chirping. However, these would be covered in captions. Captions would include audio (dialogues) as well as the music and sound effects.

When a deaf individual watches a news program, a commercial film or an educational documentary in Indian regional languages, English or other spoken languages, if he/she is unable to read the subtitles or captions and decode the meaning, then the deaf individual has no choice but to rely on other cues that are not auditory in nature, such as visuals, symbols, expressions of the character and general mood of the shot.

It is not possible for subtitles to pick up everything, mainly when many deaf individuals rely solely on sign language.

"Suppose they are trained during speech therapy, if they have undergone all this training in reading and writing then they should be able to manage. Otherwise, of course, it is limited to only icons, ideation and symbols." – Dr Venkataraja Aithal U.

For a person who depends solely on the visualisation of the message to draw meaning, the question arises of whether he/she fully understands. On the other hand, the presentation of content in specific media products, especially in films, the filmmakers depend on the combination of visuals with sound, music and dialogue to convey the meaning in its entirety. Therefore, even though a deaf person can read the captions that appear, the question of whether he/she comprehends the message in a holistic manner arises.

5. Conclusion

5.1. Summary

Due to ignorance, misconceptions and intolerant attitudes, the media has not been conscious enough about the needs of these sections of society, thus making them unaware and grossly uninformed.

Despite the deaf and HoH population being severely neglected, they have still built certain relationships with different media platforms. If media creators actively keep in mind the needs of these individuals, then they will not remain as a silent minority in the society,

One of the most important platforms that has facilitated deaf and HoH people's access to information is digital communication. The growth of specific media products (like mobile applications), created solely for those who depend on signing to communicate, have recently increased in number. However, it is essential that these products be publicized more to ensure that they attract and aid the target audience. The internet is also a stage where content is published in sign language, including sign language films and news programs. These gain significant attention from deaf people, as they are receiving content that is in the language that comes most naturally to them.

5.2. Objectives:

- To identify the inclusion and participation of deaf and HoH people in media
- To analyse existing media channels that are currently used by deaf communities
- To examine whether digital media has helped in reducing barriers to communication by deaf and HoH people.

5.3. Major Findings

- Smartphones have penetrated into the deaf/HoH population, consequently facilitating the ease of communication and keeping them informed.
- Numerous online communities thrive on digital platforms, which subsequently instate the feeling of belonging to a social sphere.
- The deaf population has access to both information and entertainment on the internet. They become users of an equalized communication platform and can freely access content online. While they are equivalent to hearing individuals on the internet, it does not necessarily translate to their integration into mainstream society.
- The internet paves the way for deaf individuals to meet new people online, however, their lack of knowledge about how to navigate through text-heavy websites keeps them away from interactive portals.
- Deaf blogs have not gained much acceptance among this audience, primarily because their reading skills are underdeveloped. They tend to shy away from media products that require heavy reading.
- The use of internet and mobile phones help deaf and HoH individuals in meeting their daily communication needs, consequently being a source of happiness as well.
- Due to the lack of standardisation of the Indian Sign Language across the country, different regions and different social groups may use informal patterns of sign language, which may affect the viewership gained by films and television programs produced in sign language.

5.4. Conclusion:

For years, the media has not been conscious of the needs of the deaf and hard of hearing population in India, depriving them of adequate means to be informed and aware. There are certain key behavioural patterns that deaf individuals have attached with different media platforms, and further in-depth studies can reveal how they can be considered as an audience for media content, as they too have demands and needs for information and communication. The media can create products that can erase the

limitations faced by this community while interacting with others, and to aid this process, it is necessary that media professionals become mindful of the deaf and hard of hearing population, and support their holistic integration into society in every sense.

5.5. Scope for future research:

Different researches can be conducted to further analyse the deaf population's access to specific media products. As visually appealing media works exceptionally well with deaf and hard of hearing individuals, an experimental study can be conducted on how a film or television program that is produced in sign language is accepted by the deaf audience.

Another realm that can be explored is the deaf population's usage of online platforms. As web pages today are primarily text-based, studies can be conducted on how to simplify the accessibility and navigation process.

6. Bibliography

Bauman, D., Rose, H., & Nelson, J. (2006). *Signing the Body Poetic: Essays on American Sign Language Literature*.

"Disabled Persons in India - A statistical profile." 2016.

Ellis, Katie, and Gerard Goggin. *Disability and the Media*. 2015.

Riley, II Charles A. "Disability and the Media: Prescriptions for Change." 2005.

Ellcessor, Elizabeth. *Restricted Access: Media, Disability, and the Politics of Participation*. 2016.

Braden, Jeffery P. *Deafness, Deprivation, and IQ*. 1994.

Rideout, Victoria. *Zero to Eight Children's Media Use in America*. Kaiser Family Foundation, 2011.

OfCom. "Children and Parents: Media Use and Attitudes Report." 2014.

Rideout, Victoria. *Common Sense census: Media use by kids age zero to eight*. San Francisco: Common Sense Media, 2017.

Chassiakos, Reid Yolanda (Linda) , Jenny Radesky, Dimitri Christakis, Megan A Moreno, and Corinn Cross. "Children and Adolescents and Digital Media." *Pediatrics* 138, no. 5 (2016).

Braun, Virginia , and Victoria Clarke. "Using thematic analysis in Psychology." *Qualitative Research in Psychology*,, 2006: 77-101.

Radesky, Jenny S., Jayna Schumacher, and Barry Zucke. "Mobile and Interactive Media Use by Young Children: Mobile and Interactive Media Use by Young Children and Unknown." *Pediatrics* (American Academy of Pediatrics) 135, no. 1 (2015).

Blum-Ross, Alicia , and Sonia Livingstone. *Families and screen time: Current advice and emerging research*. London: Media Policy Project, London School of Economics and Political Science., 2016.

Goss, Blaine. "Hearing from the Deaf Culture." 2003.

Zdrodowska, Magdalena. "Social Media and deaf empowerment - The Polish deaf communities' online fight for representation." In *Disability and Social Media: Global Perspectives*, by Katie Ellis and Mike Kent. 2017.

Reports:

The Rights of Persons with Disabilities Act, 2016

Census of India, 2011 Data on Disability