

MEDIA PREFERENCES AND INFORMATION ACCESS: A SOCIOECONOMIC STUDY OF VISUALLY IMPAIRED INDIVIDUALS

Sukchand Hazra

Librarian

Ramakrishna Mission Residential College (Autonomous), Narendrapur
Kolkata, West Bengal

Email: sukchand.hazra@rkmrc.in

Abstract: In this study, we assess the media preferences of persons with visual impairments and highlight the relationship between individuals with visual impairment and different socioeconomic factors. The study employed a survey technique to achieve its objectives and interviewed with the help of a structured questionnaire. Data were collected from 100 respondents with visual impairments, and the responses were received and analyzed. The result of the study sheds light that media preferences varied accordingly to the different socioeconomic factors. Irrespective of all important socioeconomic parameter, respondents preferred mostly braille, audio materials, and verbal media. The findings of this study contribute to deeper understanding of the media preferences of a group of people with visual impairments that can shape an inclusive information system and services, and offer insights that can inform policy, technology, and accessibility initiatives to better support this population and foster inclusive information ecosystems.

Keywords: Persons with visual impairments, Media preferences, Socioeconomic factors

1.0 Introduction

Visual impairments, also known as visual disabilities or blindness, refer to a condition where an individual has a significant loss of vision that cannot be fully corrected by glasses or contact lenses. Visual impairments exist along a spectrum, ranging from mild to severe visual disability and total blindness. It can be caused by various factors, including congenital conditions, diseases, injuries, or age-related degeneration. Visual impairment can impact various aspects of life, including education, employment, mobility, and social participation. Individuals with visual impairments often use alternative methods to access information, such as Braille, screen readers, or assistive technologies. Particularly in this study, it is made to establish a relationship between socioeconomic factors and the current status of their media preferences. The objectives of the study are to find out the media choices of persons with visual impairments by different socioeconomic parameters. For this purpose, individuals with visual impairments, divided into age, gender, income, habitation, occupation, and education, were asked to provide their first preference of their media preferences.

2.0 Objectives of the study

The purpose of the study is to show the relationship between socioeconomic status and media preferences for information searching and accessing among persons with visual impairments. This study aims to accomplish the following objectives.

- i. To assess the media choice pattern of persons with visual impairments by age.
- ii. To evaluate the media preferences of persons with visual impairments by gender.
- iii. To analyse the different channels of communication of persons with visual impairments by different income groups.
- iv. To assess the media choice pattern of persons with visual impairments by different habitation groups.
- v. To evaluate the media preferences of persons with visual impairments by occupational groups.

- vi. To highlight the media preferences according to their different education levels.

3.0 Review of Literature

A comprehensive literature search was undertaken at the preliminary stage to identify and locate relevant information about the problem of the study. This information was scattered across various sources, including journal articles, conference papers, theses and dissertations, research reports, books, and electronic and internet resources. A review of existing literature related to the problem of this study is furnished below:

Media choice refers to the selection of a communication channel or medium (e.g., face-to-face, phone, email, text message, social media) through which information or content is delivered (Trevino et al., 1990). According to Reiser and Gagne, the main characteristics present in media selection models were identified, and their learning efficacy was assessed. In contrast to some earlier assessments, the 10 various models used as examples were not each individually discussed. The article instead focused on the traits noticed in various models. The models' physical manifestations, their categorization of media, and their selection criteria for media were all covered features. Media preferences were influenced by selection criteria embodied in models. The aspects that should be given priority attention in media selection are learner characteristics, the environment, and the task (Reiser and Gagne, 1982). Brunsmann-Johnson et al. (2011) described in his study the website information seeking strategies used by users who are blind and compares those with sighted users. Also they outlined how assistive technologies and website design can aid users who are blind while information seeking (Brunsmann-Johnson et al., 2011). Williamson et al. focused on related issues concerned with online access for people with disabilities in the context of information and library provision. The first project concerns the potentialities of online services for people who are blind and sight impaired and has a particular emphasis on information seeking behaviour. The second project concerns online services for people with disabilities in Australian public libraries and focuses on evaluation of adaptive equipment, associated training and strategies for improving access (Williamson et al., 2001). Chandrashekar (2012) explored in his research, how Web users who are blind or visually impaired perceive the credibility of online information and how the screen reader used by them to interact with the Web mediates the process. Credibility perception was studied in the context of the screen reader users' everyday information practices, examining in depth the effect of Web accessibility on their online information interactions, information practices and credibility perception (Chandrashekar, 2012). Beverley, Bath & Barber (2007) tried to determine by their study the extent to which two existing models of information behaviour could explain the information behaviour of visually impaired people seeking health and social care information (Beverley et al., 2007).

4.0 Methodology

The present study adopted a survey method to achieve the stated objectives. The target population for this study comprised all persons with visual impairments across the world. But it is not convenient to cover such a large and heterogeneous population. So a sample was chosen by referring to the Central Government Report, i.e., 'Census of India 2011'. As per the report, one of the major portions of visual impaired people, i.e., 18.8% were selected for this purpose. A stratified random sampling technique was employed to ensure adequate representation across different socioeconomic strata. The total sample is confined to 100 respondents. The geographic scope of the study encompassed Kolkata and its adjoining districts, namely South 24 Parganas, North 24 Parganas, Howrah, and East Midnapore, covering rural, urban, and semi-urban areas.

A structured questionnaire was developed as the primary instrument for data collection. The questionnaire was designed to capture comprehensive information regarding the preferred media channels of persons with visual impairments. To accommodate the diverse abilities and communication preferences of respondents, a combination of questionnaires and interviews was employed. This dual approach ensured inclusivity and maximized response accuracy across all the impaired individuals.

The collected data were systematically analyzed and interpreted in alignment with the objectives of the study. The data were examined across all six socioeconomic parameters to identify patterns, variations, and correlations in the media preferences of persons with visual impairments.

5.0 Analysis and discussions

The findings obtained from the analysis of collected data distributed in the Table 5 are as follows:

Table 1: Distribution of Sample Media Preferences of Persons with Visual Impairments by different factors

Media Choice by Age					
Category	Up to 15 Years	16-30 Years	31-45 Years	46-60 Years	Above 60 Years
Printed text	3	1	0	3	0
Audio	5	13	11	4	0
Visual	0	0	0	0	0
Audio visual	0	0	0	0	0
Verbal	3	15	17	9	16
Non verbal	0	0	0	0	0
Total	11	29	28	16	16
Media Choice by Gender					
Category	Male			Female	
Printed text	7			0	
Audio	25			8	
Visual	0			0	
Audio visual	0			0	
Verbal	35			25	
Non verbal	0			0	
Total	67			33	
Media Choice by Income					
Category	Low	Medium	High		
Printed text	3	3	1		
Audio	17	7	9		
Visual	0	0	0		
Audio visual	0	0	0		
Verbal	56	4	0		
Non verbal	0	0	0		
Total	76	14	10		
Media Choice by Habitation					
Category	Rural	Semi-Urban	Urban		
Printed text	3	3	1		
Audio	15	11	7		
Visual	0	0	0		
Audio visual	0	0	0		
Verbal	41	12	7		
Non verbal	0	0	0		
Total	59	26	15		
Media Choice by Occupation					
Category	Employed	Self-employed	Unemployed		
Printed text	4	0	3		
Audio	6	11	16		
Visual	0	0	0		
Audio visual	0	0	0		
Verbal	0	7	53		
Non verbal	0	0	0		
Total	10	18	72		
Media Choice by Education					
Category	Illiterate	Primary	Secondary	Higher Secondary	Graduate
Printed text	0	3	3	1	0

Audio	4	5	8	6	10
Visual	0	0	0	0	0
Audio visual	0	0	0	0	0
Verbal	27	25	4	4	0
Non verbal	0	0	0	0	0
Total	31	33	15	11	10

Results obtained from the analysis and interpretation of data, supplied in Table 5, are as follows.

5.1 Media Choice of Persons with Visual Impairments by Age: Figure 5.1 tries to show the media choice of persons with visual impairments by age.

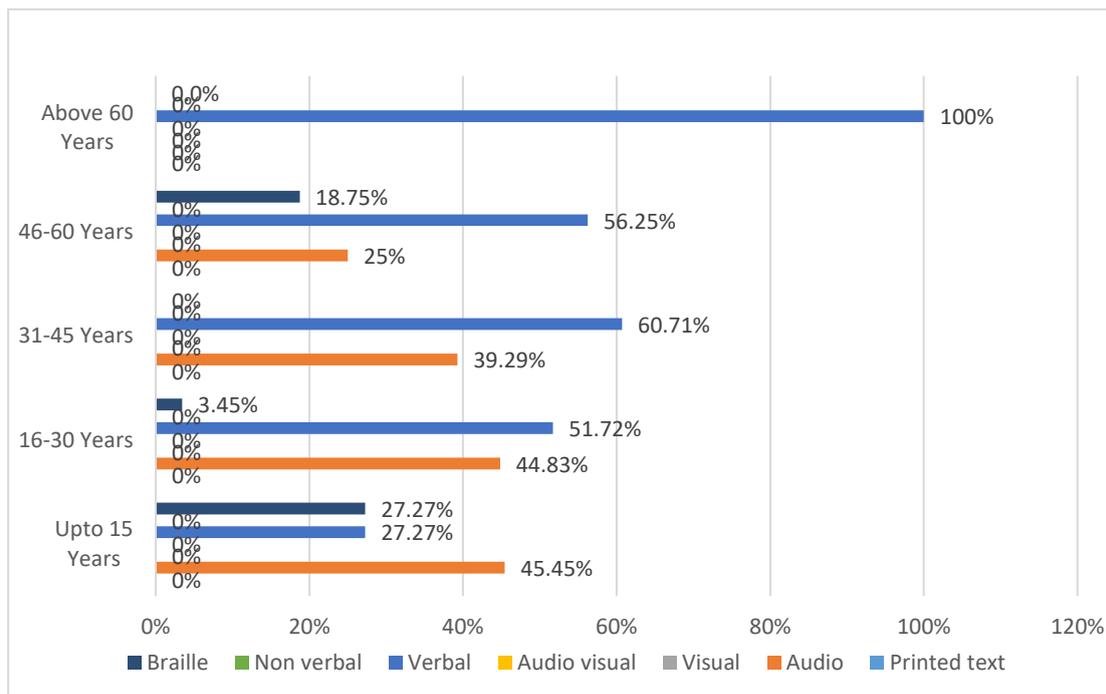


Figure 5.1: Media Choice of Persons with Visual Impairments by Age

From Table 5 and Figure 5.1, it is found that out of the total 11 respondents belonging to the age group of up to 15 years, the majority of 5 respondents (45.45%) preferred to choose audio media. It is found that people also used other media like braille material and verbal media to obtain information, and here, 3 respondents each (27.27%) are seen who equally needed both braille material and verbal media. It also shows here that among all the 29 respondents in the age group of 16-30 years, the majority of 15 respondents (51.72%) showed their highest interest in obtaining information through verbal communication, followed by 13 respondents (44.83%) who preferred audio materials. Whereas, only 1 respondent (3.45%) expressed their lowest interest in obtaining information through braille material. Here, in the case of the age group of 31 to 45 years, out of the total 28 respondents, the majority, i.e., 17 respondents (60.71%), depended on verbal media for their required information, followed by the rest, 11 respondents (39.29%), who preferred audio media. Further, it is found here that out of the total 16 respondents belonging to the age group of 46 to 60 years, the highest 9 respondents (56.25%) showed their interest in verbal media, followed by 4 respondents (25%) who preferred audio media. Only the lowest 3 respondents (18.75%) preferred to choose braille material for their required information needs. Also, it is found here that all respondents, i.e., 16 respondents in the age group of above 60 years (100%) depended on verbal media.

5.2 Media Choice of Persons with Visual Impairments by Gender: Figure 5.2 makes an attempt to

show the media choices of persons with visual impairments by gender.

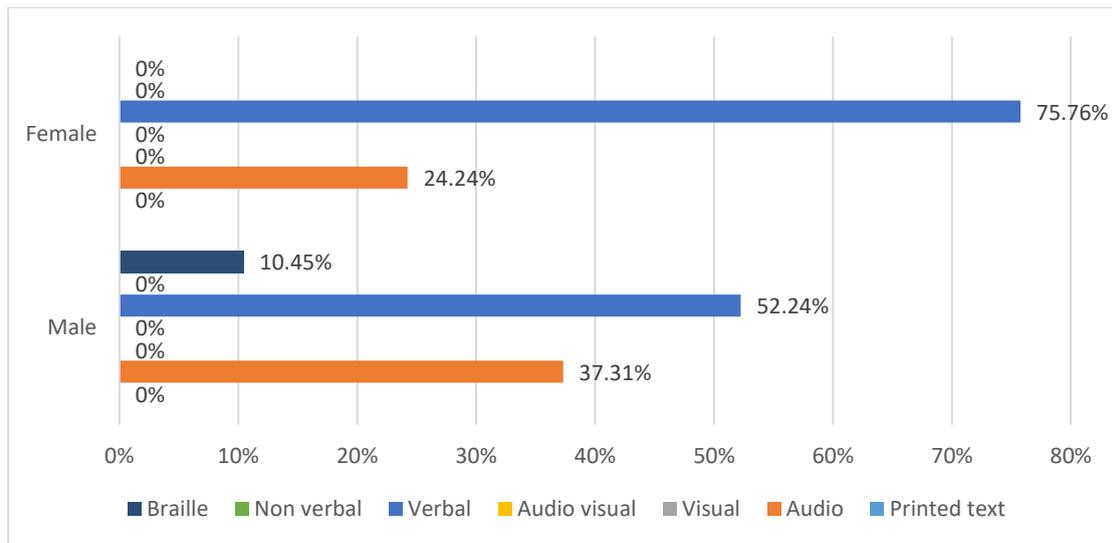


Figure 5.2: Media Choice of Persons with Visual Impairments by Gender

Out of the total 67 male respondents showed in the following Table 5 and Figure 5.2, the highest 35 respondents (52.24%) preferred to choose verbal media followed by 25 respondents (37.31%) which is the second most popular choice preferred to use the audio media. It is also revealed here that the remaining 7 male respondents (10.45%) had their lowest preference for the braille material for their required information. And other responses are negligible. Whereas, it is shown here that out of the total 33 female respondents, the majority of 25 respondents (75.76%) expressed their highest preference to choose verbal media, followed by the rest, 8 respondents (24.24%) who preferred audio media.

5.3 Media Choice of Persons with Visual Impairments by Income: Figure 5.3 tries to show the media choices of persons with visual impairments by income

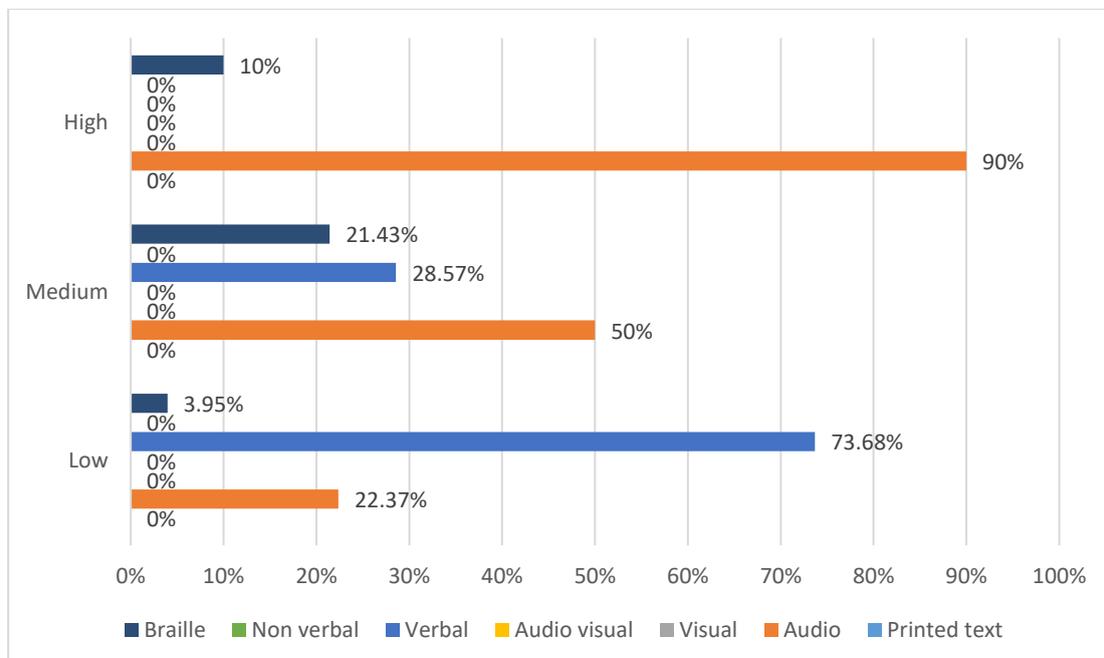


Figure 5.3: Media Choice of Persons with Visual Impairments by Income

Table 5 and Figure 5.3 reveal that out of the total 76 respondents with lower economic conditions, the majority of 56 respondents (73.68%) were acquainted with verbal media, followed by 17 respondents (22.37%) who preferred audio media for fulfilling their required needs. Only 3 respondents (3.95%) showed their lowest preference to obtain information through braille material. In the case of respondents with medium economic conditions, out of the total 14 respondents, the highest 7 respondents (50%) preferred to choose audio media. While 3 respondents (21.43%) preferred to obtain information through braille material. In the same way, out of all the 9 respondents belonging to higher economic conditions, the highest 9 respondents (90%) showed their highest preference to obtain information through audio media. Also, the remaining 1 respondent (10%) followed the braille material.

5.4 Media Choice of Persons with Visual Impairments by Habitation: Figure 5.4 tries to show the media choice of persons with visual impairments by habitation

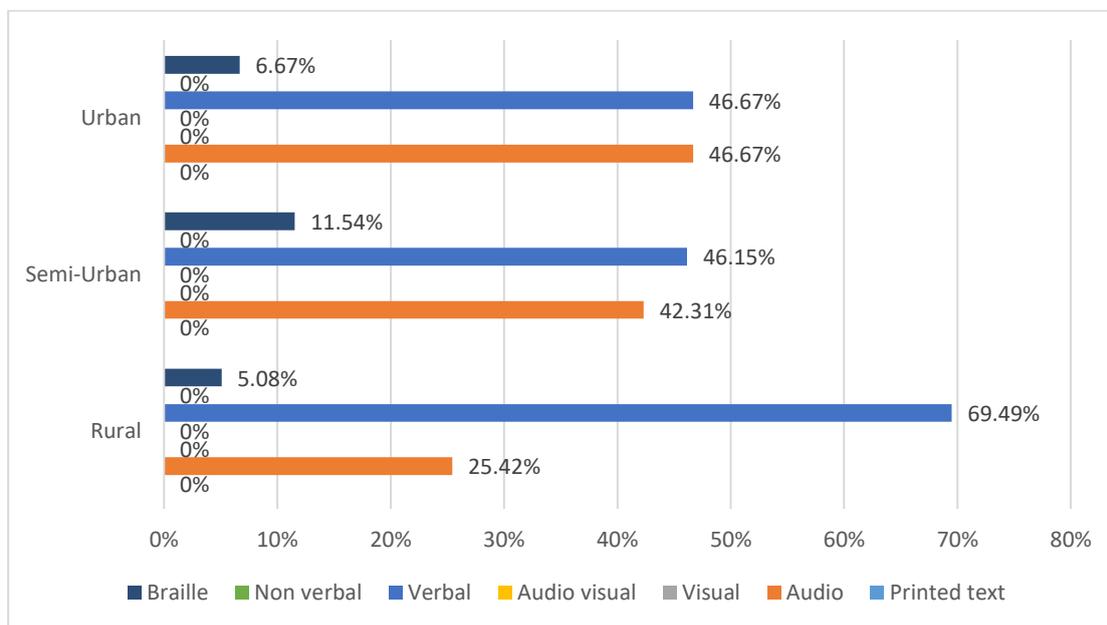


Figure 5.4: Media Choice of Persons with Visual Impairments by Habitation

Table 5 and Figure 5.4 reveal that out of the total 59 respondents living in rural areas, the maximum 41 number of respondents (69.49%) preferred to choose verbal media, followed by 15 respondents who preferred audio media (25.42%). While the lowest number of 3 respondents (5.08%) preferred their interest to obtain information through braille material. Whereas, out of those respondents belonging to semi-urban areas is 26, as shown in the following table and figure, the majority of 12 respondents (46.15%) preferred to obtain information through verbal media, followed by 11 respondents (42.31%) who liked to use audio media. Also, a significant number of 3 respondents (11.54%) preferred their lowest interest in braille material. In contrast, it is also found here that among the total 15 respondents belonging to urban areas, the highest 7 respondents each (46.67%) preferred their highest choice to verbal media and audio media equally. Only 1 respondent (6.67%) showed their lowest preference to obtain information through braille material.

5.5 Media Choice of Persons with Visual Impairments by Occupation: Figure 5.5 tries to show the media choice of persons with visual impairments by occupation.

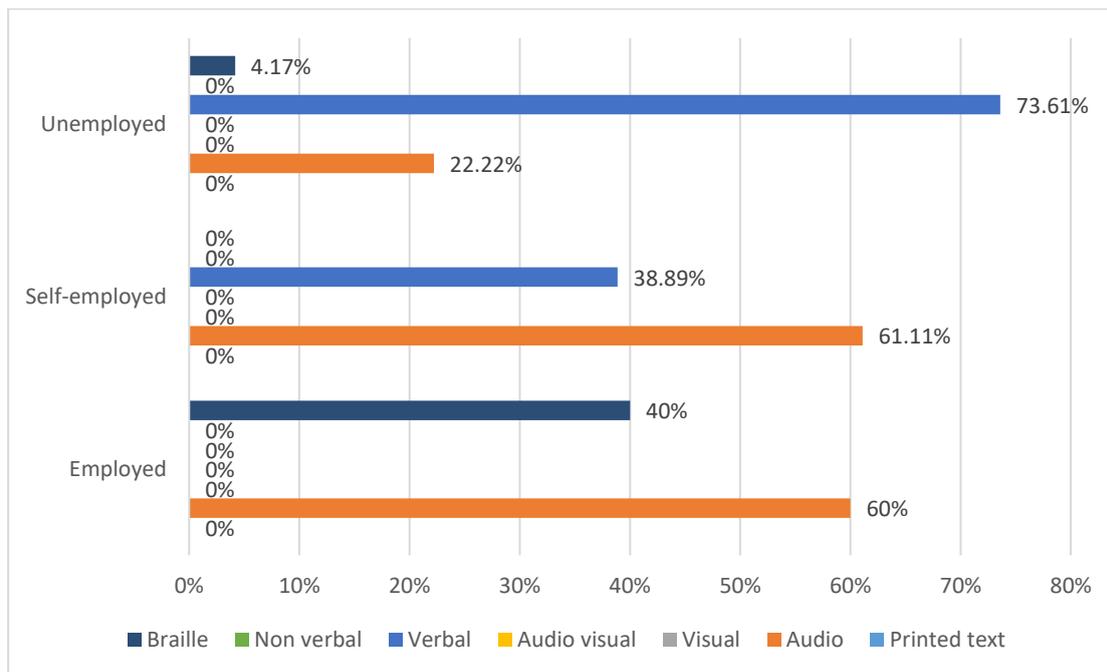


Figure 5.5: Media Choice of Persons with Visual Impairments by Occupation

From Table 5 and Figure 5.5, it is revealed that among all the 10 employed respondents, the highest 6 respondents (60%) had their preference to audio media, followed by 4 respondents (40%) who demanded braille material. Regarding the self-employed people, the total number of respondents is 18, of which a maximum of 11 respondents (61.11%) had their preference to audio media, followed by 7 respondents (38.89%) who used to obtain information through verbal media. Further, it is found here that out of the total 72 unemployed respondents, the majority of 53 respondents (73.61%) preferred to choose verbal media, followed by 16 respondents (22.22%) who preferred audio media. In contrast, 3 respondents (4.17%) had their lowest preference for braille material.

5.6 Media Choice of Persons with Visual Impairments by Educational Status: Figure 5.6 tries to show the media choice of persons with visual impairments by educational status.

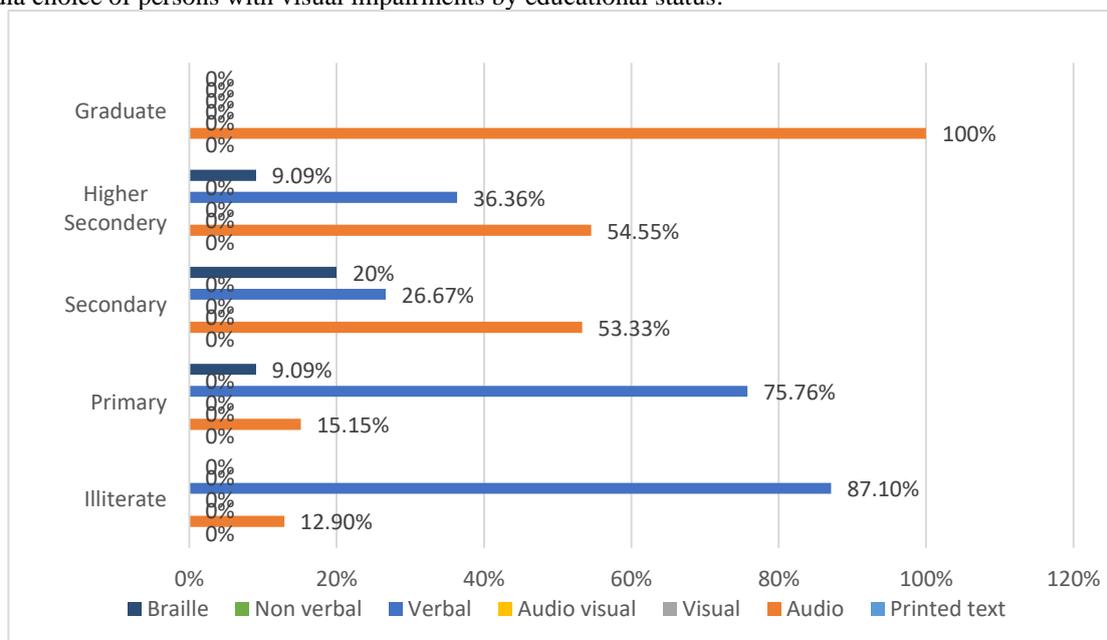


Figure 5.6: Media Choice of Persons with Visual Impairments by Educational Status

Out of the total number of illiterate respondents shown in Table 5 and Figure 5.6 is 31, out of which the highest 27 respondents (87.10%) favoured verbal media for information acquisition, followed by the rest, 4 respondents (12.90%) who expressed their lowest preference to audio media. Additionally, it is discovered here that out of the total 33 respondents with a primary level of education, 25 respondents (75.76%) showed their highest preference to verbal media. Only the lowest 3 respondents (9.09%) indicated that they were interested in braille material. It is also stated here that out of the total 15 respondents with secondary level of education, the highest number of 8 respondents (53.33%) chose audio media, followed by 4 respondents (26.67%) who required information through verbal media. And the rest, 3 respondents (20%) had their lowest preference for braille material in order to get the knowledge they needed. Further, out of the total 11 respondents with higher secondary level of education, the highest number of 6 respondents (54.55%) favored audio media, followed by 4 respondents (36.36%) who preferred verbal media. It is also discovered that only the rest, 1 respondent (9.09%) did their lowest information searching through braille material. Furthermore, it is found here that out of the total 10 respondents with a graduation-level education, in general, audio media was preferred by them (100%).

6.0 Findings

The following findings have been found from the above analysis:

Age significantly influences media choices among persons with visual impairments. Media preferences shift from audio media in younger groups (up to 15 years) to verbal communication in older age groups, with 45.45% of the up to 15 years' age group preferring audio media and 100% of more than 60-year-olds preferring verbal media. (vide Table 5; Figure 5.1).

Gender disparities are evident in media choice patterns. Both genders prefer verbal communication as their primary media choice (52.24% males, 75.76% females), followed by audio media (37.31% males, 24.24% females). While no female respondents sought braille materials. (vide Table 5; Figure 5.2).

Income levels create distinct media preferences. The audio media preferences shift from lower to higher-income groups, with 90% of higher-income groups preferring audio media. Verbal media dominates among lower-income individuals (73.68%), though the demand for interpersonal communications shifts from higher to lower-income groups. (vide Table 5; Figure 5.3).

Geographical location influences media preferences significantly. All the habitation groups rely heavily on verbal communication; particularly 69.49% of rural populations show the strongest preferences for verbal media, while preferences of audio media shift from rural to urban residents, with 46.67% of urban populations preferring audio media. (vide Table 5; Figure 5.4).

Occupational status creates distinct media choice patterns. Verbal communication dominates among unemployed (73.61%) individuals, followed by self-employed (38.89%) individuals. Also, employed and self-employed respondents prefer audio media most (60% and 61.11% respectively). Besides, 40% of employed groups show interest in printed media. (vide Table 5; Figure 5.5).

Educational attainment strongly correlates with media preferences. Media choices shift dramatically with education: illiterate individuals almost show preferences on verbal communication (87.10%), while graduates rely exclusively on audio media (100%). (vide Table 5; Figure 5.6).

7.0 Conclusion

The present study adopted a descriptive survey study, design to investigate the media choice patterns of persons with visual impairments across different socioeconomic contexts. A systematic approach was employed to achieve the objectives of the study. The target population for this study comprised of 100 individuals with visual impairments. They depend heavily on audio media and verbal communication due to their inability to access printed materials. Only younger individuals rely on braille media due to insufficient production of braille materials in higher education. Educational attainment emerge as a powerful determinant of media choice

patterns. Illiterate individuals depend almost exclusively on verbal communication. In contrast, educated individuals, particularly graduates, demonstrate proficiency in using formal information channels. The findings of this study carry significant implications for library and information services. Libraries serving persons with visual impairment must develop accessible collections in multiple formats including braille, audio materials, large print, and digital resources compatible with assistive technologies. Information professionals need to adopt proactive outreach strategies to reach persons with visual impairments in their communities, particularly those from rural areas and lower socioeconomic backgrounds who may not have access to institutional information services. Further research could specifically formulate tailored library services for blind students leveraging existing ICTs in degree colleges, investigating their media preferences, institutional accommodations for information access, and challenges faced in accessing education related information.

8.0 References

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