



NEEDS ASSESSMENT OF ASSITIVE DEVICES AMONG PERSONS WITH PHYSICAL DISABILITIES

ANALYSIS REPORT OF THE DATASET

- **GENDER DISTRIBUTION OF RESPONDENTS**

The data provides an overview of the gender distribution among the 56 respondents:

- ❖ 42 individuals (75%) identified as Male, making up the majority of the respondents.
- ❖ 14 individuals (25%) identified as Female, representing a quarter of the surveyed group.

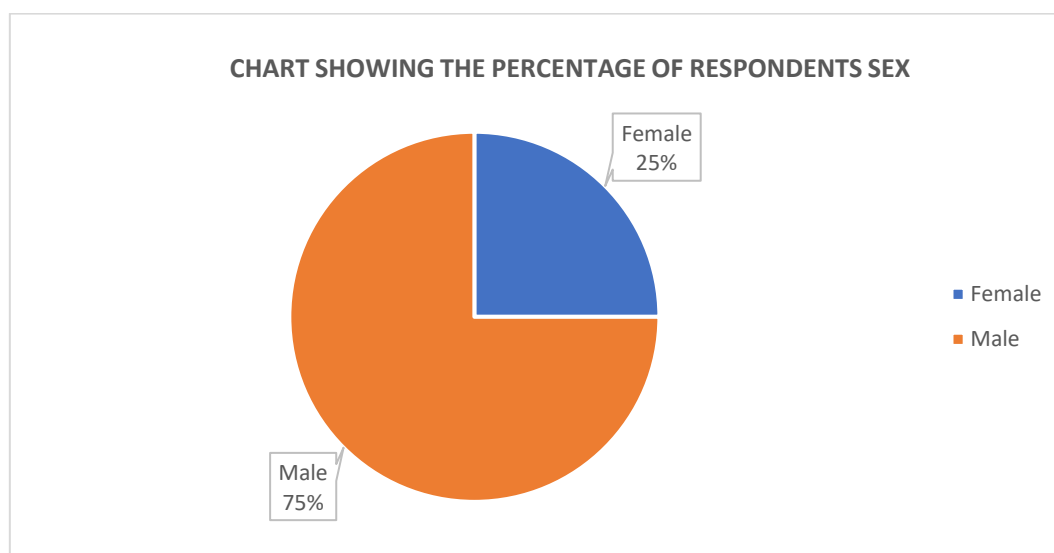
This significant difference in gender representation highlights a notable male majority within the respondent pool. The skewed distribution could reflect gender-related factors in access to or participation in the survey.

Understanding the gender composition will be essential in tailoring interventions and ensuring inclusivity, especially in areas where gender disparities might impact access to resources, education, or assistive technologies.

The table showing the count and percentages as well as the chart is shown below;

SEX	COUNT	PERCENTAGE (%)
MALE	42	75
FEMALE	14	25
GRAND TOTAL	56	100

- **GENDER CHART**



- **AGE DISTRIBUTION OF RESPONDENTS**

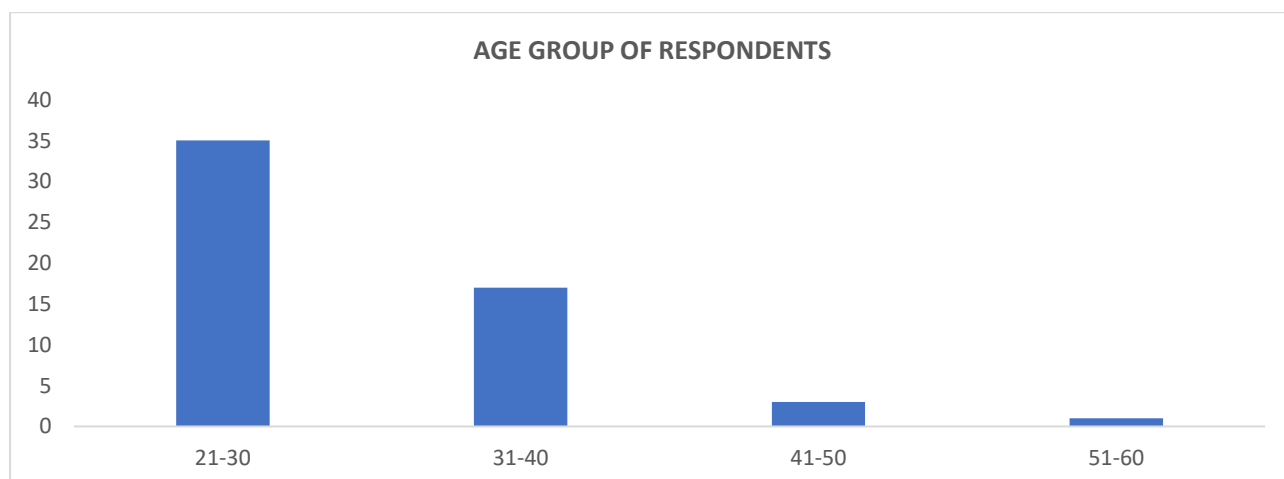
The data highlights the age distribution among the 56 respondents, divided into distinct age groups:

- ❖ The majority of respondents, 35 individuals (62.5%), fall within the 21-30 years age group, indicating that most participants are in their early adulthood.
- ❖ 17 respondents (30.35%) are within the 31-40 years age group, representing a significant proportion of individuals in their middle adulthood.
- ❖ Smaller age groups include:
 - 3 respondents (5.35%) aged 41-50 years, and
 - 1 respondent (1.78%) aged 51-60 years.

This age distribution shows that the surveyed population is predominantly young adults, with over 90% aged 40 or below. The smaller representation in older age groups may reflect a targeted demographic for the survey or lower participation from older individuals.

Understanding this age profile of the respondents will be crucial for designing interventions, policies, or programs tailored to the specific needs of this predominantly young population. The table and chart are thus below:

AGE GROUP	COUNT	PERCENTAGE (%)
21-30	35	62.5
31-40	17	30.35
41-50	3	5.35
51-60	1	1.78
GRAND TOTAL	56	100



- **STATE OF ORIGIN DISTRIBUTION OF RESPONDENTS**

The data showcases the diverse geographic representation of respondents based on their states of origin. A total of 17 states contributed to the survey, with the following key insights:

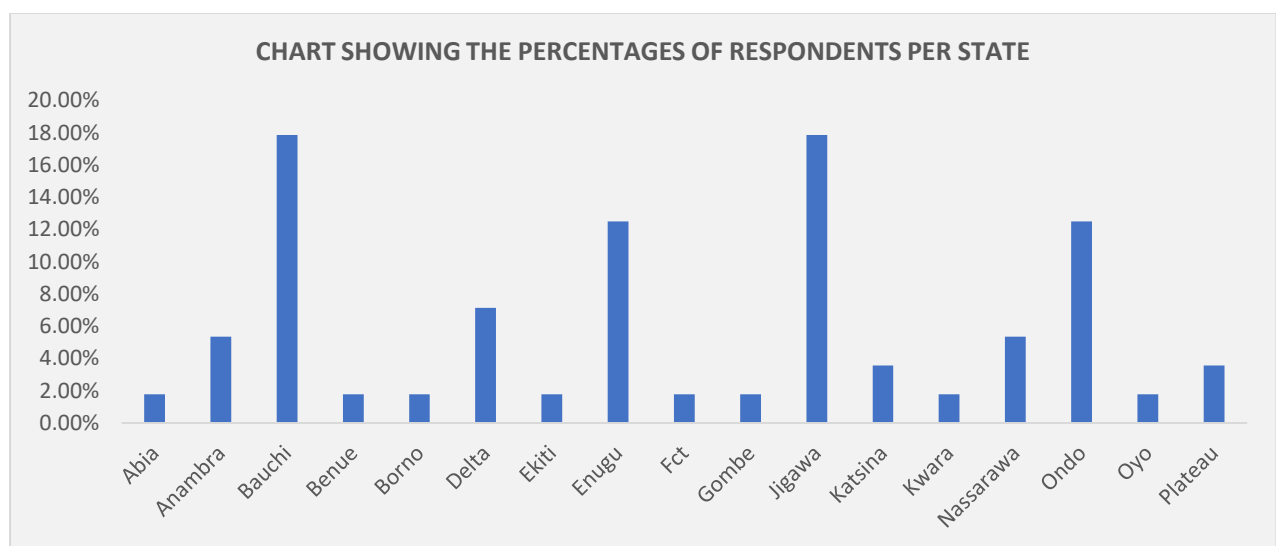
- ❖ Bauchi and Jigawa lead with the highest representation, each contributing 17.86% of the respondents, highlighting significant participation from these northern states.
- ❖ Enugu and Ondo follow, each accounting for 12.50% of the respondents, showcasing notable involvement from these southern regions.
- ❖ Other notable states include:
 - Delta, with 7.14%, and
 - Anambra and Nasarawa, each with 5.36%.
 - Smaller contributions came from states like Abia, Benue, Borno, Ekiti, FCT, Gombe, Kwara, Oyo, and Plateau, each making up 1.79% of the total respondents.

This distribution reflects the diverse origins of participants but also highlights concentration in a few key states, such as Bauchi and Jigawa. The significant variation in state representation could indicate regional differences in awareness, accessibility to the survey, or the demographic focus of the study.

These insights emphasize the importance of addressing regional disparities and ensuring equitable participation across all states for future studies.

STATES OF ORIGIN OF RESPONDENTS	PERCENTAGE of STATE OF ORIGIN FOR RESPONDENTS (%)
Abia	1.79
Anambra	5.36
Bauchi	17.86
Benue	1.79
Borno	1.79
Delta	7.14
Ekiti	1.79
Enugu	12.50
Fct	1.79
Gombe	1.79

Jigawa	17.86
Katsina	3.57
Kwara	1.79
Nasarawa	5.36
Ondo	12.50
Oyo	1.79
Plateau	3.57
GRAND TOTAL	100.00



• DURATION OF RESPONDENTS IN THEIR INSTITUTIONS

The data provides insights into how long the respondents have been in their respective institutions. The distribution reveals varying lengths of stay, with the majority concentrated within a few key ranges:

- ❖ The highest proportion of respondents, 38.46%, reported being in their institution for 4 years, indicating that many participants are likely nearing the completion of their programs.
- ❖ 30.77% have spent 3 years in their institution, representing a significant segment in the mid-stage of their academic journey.
- ❖ 12.82% reported 2 years, while 7.69% indicated just 1 year, suggesting a smaller number of newer entrants.

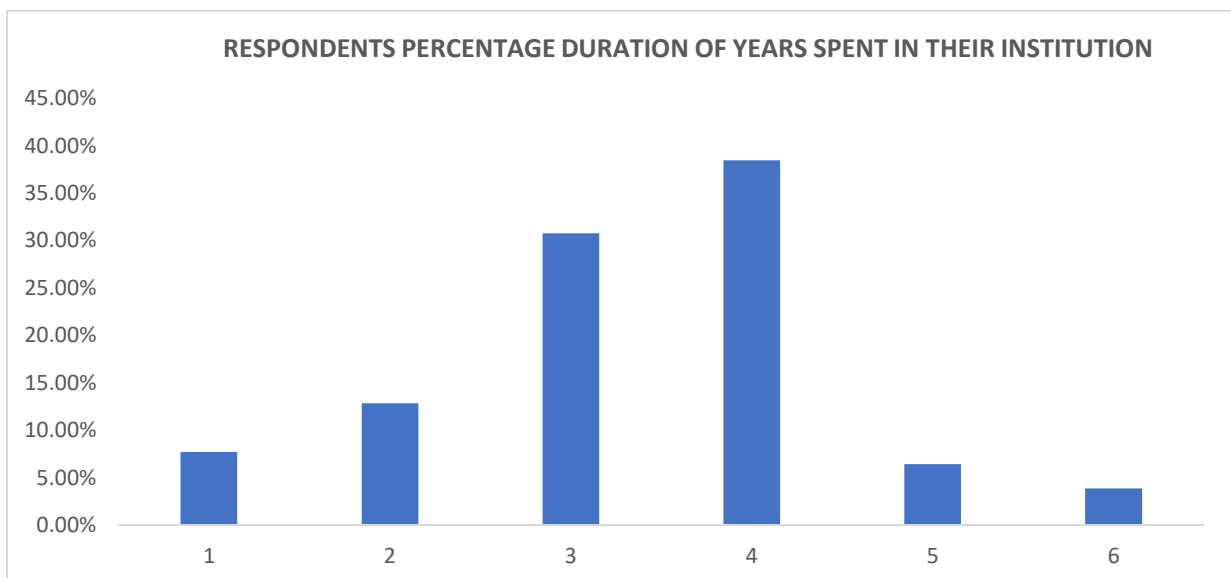
❖ Respondents with longer durations in their institutions included:

- 6.41% who have spent 5 years, and
- 3.85% who reported 6 years, possibly due to extended programs or interruptions.

This distribution highlights that the majority of respondents (nearly 70%) are at mid-to-late stages of their time in the institution (3-4 years). The smaller percentages at the extremes (1 year or 6 years) provide insights into newer entrants and those who may have faced prolonged academic experiences.

Understanding the distribution of years spent in institutions will help to contextualize the respondents' academic experiences and their potential exposure to accessibility challenges over time.

YEAR(S) IN INSTITUTION(How Long Have You Been in the Institution)	PERCENTAGE OF RESPONDENTS (%)
1	7.69
2	12.82
3	30.77
4	38.46
5	6.41
6	3.85
GRAND TOTAL	100.00



• TYPES OF DISABILITIES AMONG RESPONDENTS

The analysis of disability types among the 56 respondents reveals a wide range of physical challenges, with some categories being more prominent than others. Key observations include:

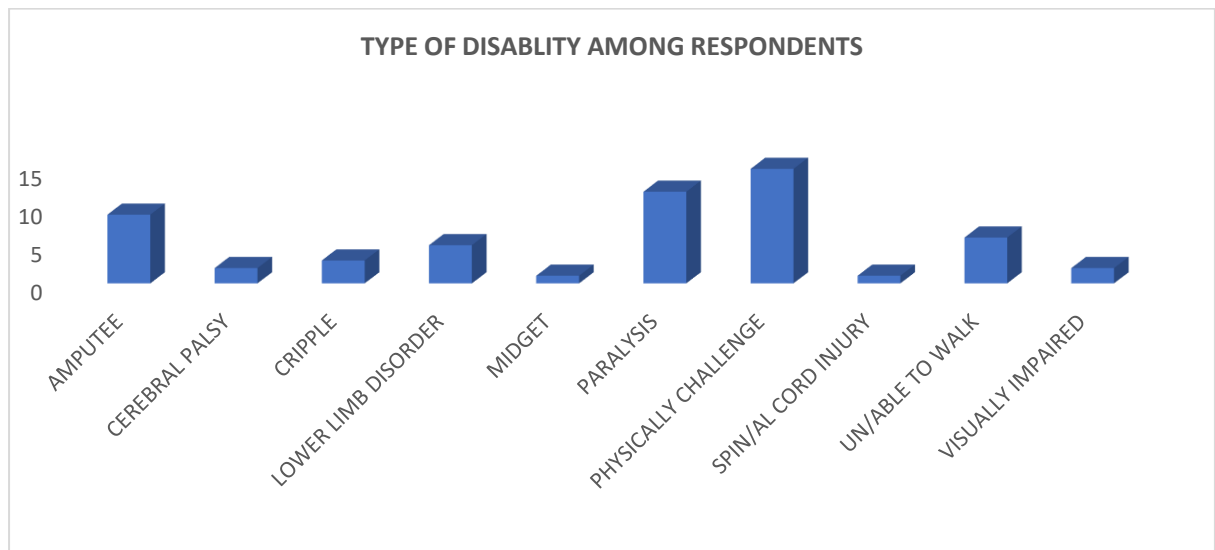
- ❖ The largest group, 15 respondents (26.79%), identified as Physically Challenged, making this the most reported category.
- ❖ Paralysis was the second most common, reported by 12 respondents (21.42%), highlighting its significant representation in the surveyed group.
- ❖ Other notable categories include:
 - Amputees, with 9 respondents (16.07%), and
 - Those Unable to Walk, accounting for 6 respondents (10.71%).
 - Disabilities such as Lower Limb Disorder (5 respondents, 8.93%) and Cripple (3 respondents, 5.36%) are also evident within the population.
 - Less common disabilities include Cerebral Palsy and Visual Impairment, each reported by 2 respondents (3.57%), as well as Spinal Cord Injury and Midget, each reported by 1 respondent (1.79%).

This diversity in disability types underscores the varied needs of the respondents. The prevalence of conditions like physical challenges and paralysis highlights areas where targeted support and resources could have the greatest impact.

Understanding these distributions is critical for developing inclusive policies and interventions that address the specific challenges faced by individuals across these categories. The table is shown below;

DISABILITY TYPE	COUNT	PERCENTAGE (%)
AMPUTEE	9	16.07
CEREBRAL PALSY	2	3.57
CRIPPLE	3	5.36
LOWER LIMB DISORDER	5	8.93
MIDGET	1	1.79
PARALYSIS	12	21.42
PHYSICALLY CHALLENGE	15	26.79
SPINAL CORD INJURY	1	1.79
UNABLE TO WALK	6	10.71
VISUALLY IMPAIRED	2	3.57
GRAND TOTAL	56	100

- **CHART SHOWING TYPE OF DISABILITY OF RESPONDENT**



- **ACCESSIBILTY OF INSTITUTIONS FOR PERSONS WITH DISABLITIS (PWDs)**

The data highlights a critical challenge in the accessibility of institutions for persons with disabilities (PWDs). Among the 56 respondents:

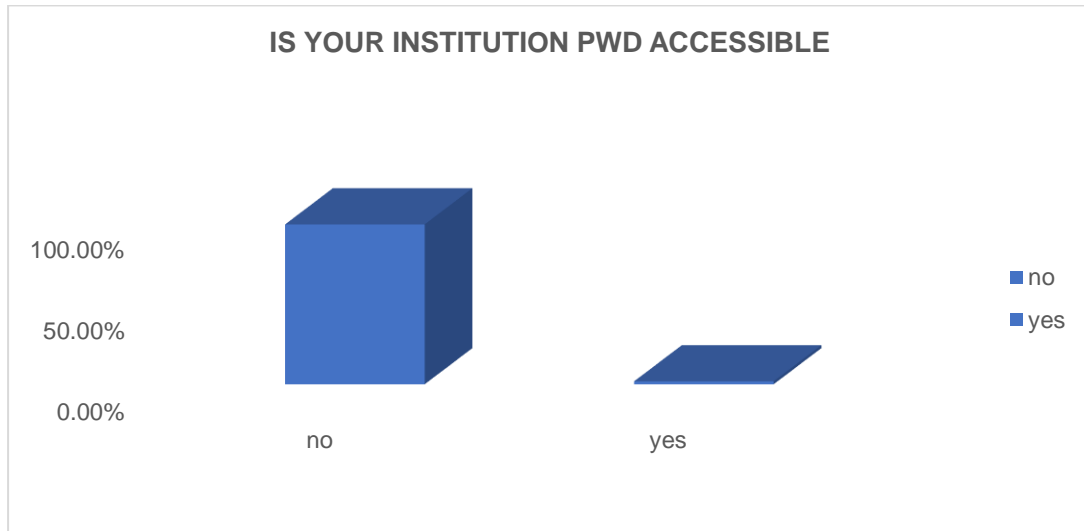
- ❖ A vast majority, 55 respondents (98.21%), reported that their institutions are not accessible to persons with disabilities.
- ❖ Only 1 respondent (1.79%) indicated that their institution is accessible.

This overwhelming disparity underscores a serious gap in infrastructure, facilities, and support systems designed to accommodate PWDs. The near-universal inaccessibility suggests systemic issues that limit the inclusion and participation of individuals with disabilities in higher education and other institutional settings.

Addressing these challenges requires urgent attention to policies, funding, and design standards to create inclusive environments where all individuals, regardless of ability, can thrive.

The table showing the distribution can be seen below;

IS YOUR INSTITUTION PWD ACCESSIBLE	COUNT	PERCENTAGE (%)
NO	55	98.21
YES	1	1.79
GRAND TOTAL	56	100



• USAGE OF ASSITIVE DEVICES AMONG RESPONDENTS

The analysis of responses to the question, "Do you use any assistive device(s)", provides valuable insights into the accessibility tools utilized by individuals within the surveyed group. Out of a total of 56 respondents:

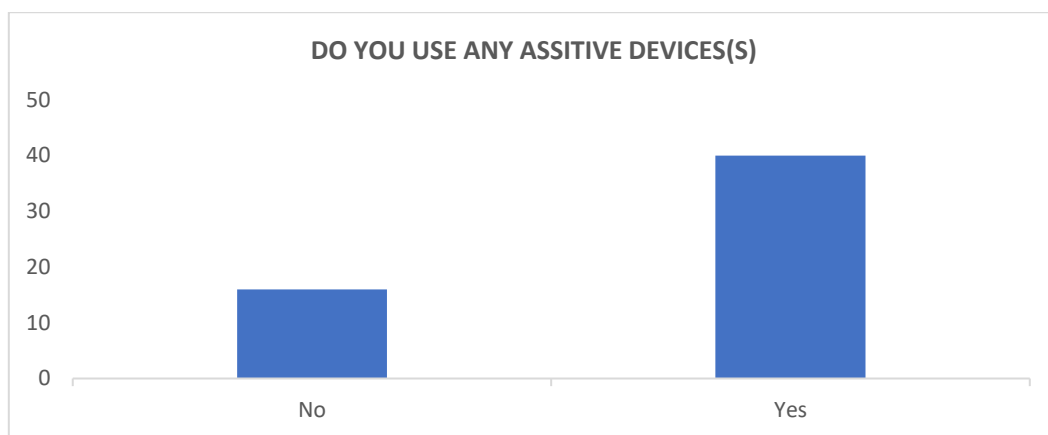
- ❖ 16 individuals (28.57%) reported that they do not use any assistive devices.
- ❖ 40 individuals (71.43%) confirmed they use one or more assistive devices.

This finding highlights a significant reliance on assistive devices among respondents, with nearly three-quarters of the group benefiting from such tools to enhance their daily activities, education, or overall accessibility.

The data underscores the importance of assistive technologies in promoting inclusivity and support for individuals with disabilities. However, the 28.57% of respondents who do not use any devices raise important questions about possible barriers, such as lack of access, affordability, or personal preference.

This analysis forms a foundation for understanding the current state of assistive device usage and emphasizes the need to address challenges faced by those without access to these essential tools.

DO YOU USE ANY ASSISTIVE DEVICE(S)	COUNT	PERCENTAGE (%)
No	16	28.57
Yes	40	71.43
GRAND TOTAL	56	100.00



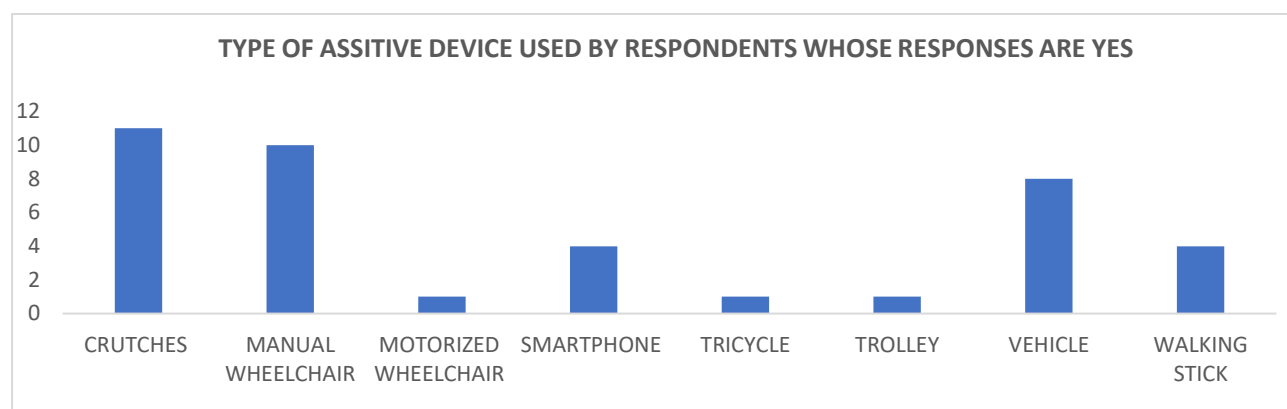
• TYPE OF ASSISTIVE DEVICES USED BY RESPONDENTS

The analysis of assistive device usage reveals a diverse range of tools employed by respondents who rely on such devices for mobility, communication, or enhanced functionality. Out of the 40 individuals who reported using assistive devices, the breakdown is as follows:

- ❖ Crutches and Manual Wheelchairs are the most commonly used, with 11 users (26.83%) and 10 users (26.83%), respectively, indicating a significant reliance on these mobility aids.
- ❖ Vehicles, used by 8 respondents (19.51%), are another prominent category, likely reflecting adaptations for increased independence and mobility.
- ❖ Smartphones and Walking Sticks are each used by 4 individuals (9.76%), highlighting their role as essential tools for support and accessibility.
- ❖ Less frequently mentioned devices include Motorized Wheelchairs, Tricycles, Trolleys, and other aids, each utilized by 1 respondent (2.44%).

This diversity in assistive device usage underscores the varied needs and preferences of respondents. It also highlights the importance of providing tailored solutions to ensure that assistive technology meets the unique requirements of PWDs.

IF YES, WHAT TYPE OF ASSITIVE DEVICE DO YOU USE?	COUNT	PERCENTAGE (%)
CRUTCHES	11	26.83
MANUAL WHEELCHAIR	10	26.83
MOTORIZED WHEELCHAIR	1	2.44
SMARTPHONE	4	9.76
TRICYCLE	1	2.44
TROLLEY	1	2.44
VEHICLE	8	19.51
WALKING STICK	4	9.76
GRAND TOTAL	40	100.00



• TYPES OF ASSITIVES NEEDED BY NON-USERS

For the 16 respondents who reported not using assistive devices, their responses reveal diverse needs and preferences for potential tools that could enhance their accessibility or independence. The breakdown is as follows:

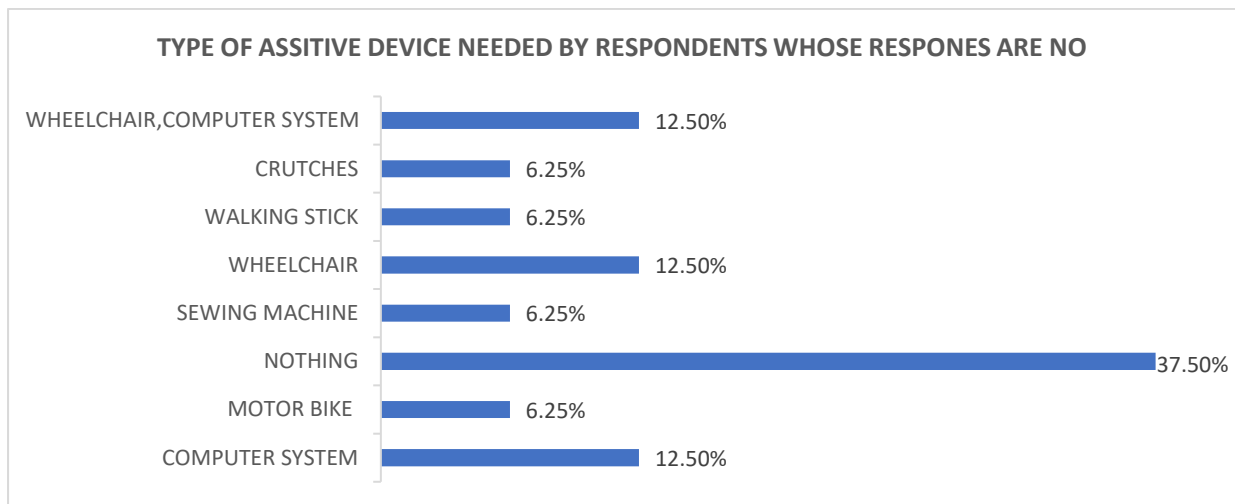
- ❖ A significant proportion, 6 respondents (37.50%), stated they do not need any assistive devices, indicating either a lack of perceived necessity or other factors influencing their decision.
- ❖ Wheelchairs and Computer Systems emerged as the most requested devices, each cited by 2 respondents (12.50%). Notably, 2 respondents (12.50%) also indicated a combined need for both a Wheelchair and a Computer System.

❖ Other needs included:

- Walking Sticks (1 respondent, 6.25%), Crutches (1 respondent, 6.25%), Motor Bikes (1 respondent, 6.25%), and Sewing Machines (1 respondent, 6.25%).

This data highlights the variety of tools that could potentially support individuals who currently do not use assistive devices. While a portion of respondents expressed no need for assistive devices, the demand for wheelchairs, computer systems, and other tools reflects unmet accessibility needs in certain areas.

IF NO, WHAT TYPE WOULD YOU NEED?	COUNT	PERCENTAGE (%)
COMPUTER SYSTEM	2	12.50
MOTOR BIKE	1	6.25
NOTHING	6	37.50
SEWING MACHINE	1	6.25
WHEELCHAIR	2	12.50
WALKING STICK	1	6.25
CRUTCHES	1	6.25
WHEELCHAIR, COMPUTER SYSTEM	2	12.50
GRAND TOTAL	16	100.00



- **COMFORT LEVELS WITH ASSITIVE DEVICES**

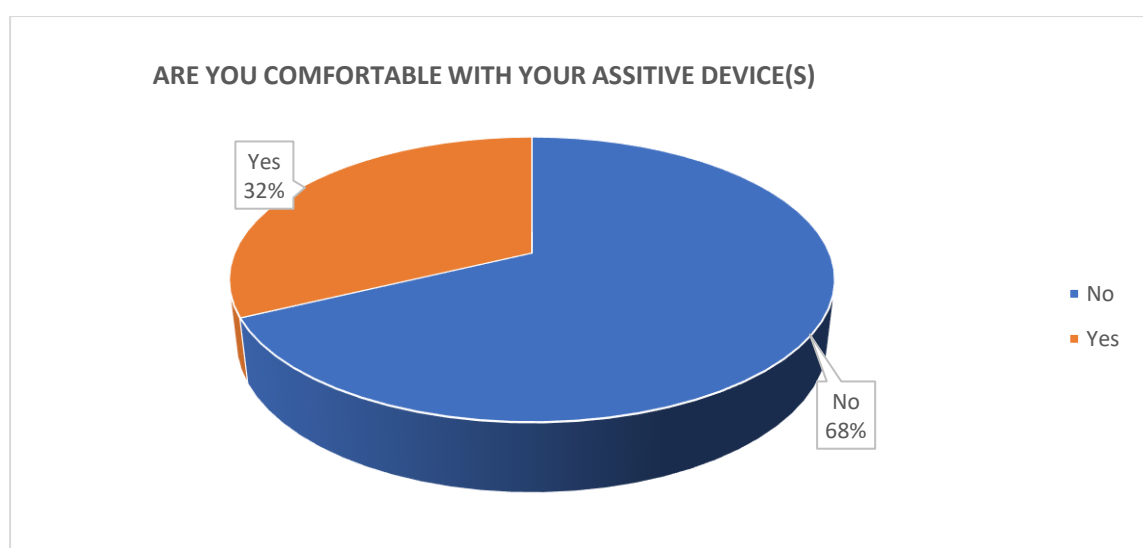
The survey explores how comfortable respondents are with their assistive devices, revealing mixed experiences among the 56 individuals:

- ❖ A significant majority, 38 respondents (67.86%), reported that they are not comfortable with their assistive devices.
- ❖ Conversely, 18 respondents (32.14%) indicated that they are comfortable using their devices.

This data highlights a critical issue in the usability and suitability of assistive devices. The high percentage of respondents who are uncomfortable suggests potential challenges such as improper fit, limited functionality, outdated technology, or inadequate training on device use.

Understanding the reasons behind this discomfort is essential for improving the design, accessibility, and effectiveness of assistive technologies. Addressing these concerns can enhance user satisfaction, mobility, and overall quality of life for individuals relying on these devices.

ARE YOU COMFORTABLE WITH YOUR ASSISTIVE DEVICE(S)?	Count	PERCENTAGE (%)
No	38	67.86
Yes	18	32.14
GRAND TOTAL	56	100.00



- **ASSISTIVE DEVICES DESIRED BY RESPONDENTS WHO ARE NOT COMFORTABLE WITH THEIR CURRENT DEVICES**

Among the 38 respondents who expressed discomfort with their current assistive devices, a variety of alternative or additional tools were identified as desired improvements:

- ❖ The most commonly requested device was an Electric Wheelchair, cited by 9 respondents (23.68%), reflecting a strong demand for enhanced mobility solutions.
- ❖ Wheelchairs were also widely requested, with 7 respondents (18.42%) specifying a need for this device, while Motorized Wheelchairs were desired by 4 respondents (10.53%).
- ❖ Crutches, used by 4 respondents (10.53%), were another significant request.
- ❖ Other notable needs include:
 - Motor Bikes, Tablets, and Nothing were each mentioned by 2 respondents (5.26%), while individual mentions included Bicycles, Motorcycles, and various combinations of devices (e.g., Wheelchair, Computer System, and Smartphone) at 2.63% each.
 - Requests for business-enabling tools such as Computer Systems (alone or in combination with capital for business) also appeared, showing an interest in tools that support productivity and independence.

This data underscores the importance of tailoring assistive devices to user needs. The strong preference for electric and motorized wheelchairs indicates a desire for greater convenience and mobility. Meanwhile, mentions of tablets, computer systems, and business capital highlight the broader aspirations of respondents to integrate assistive technologies into their personal and professional lives.

Addressing these specific needs can significantly enhance the functionality and comfort of assistive devices, ultimately improving the quality of life for individuals who depend on them.

Below is the distribution based on the respondents;

IF NO, WHAT TYPE WOULD YOU NEED?	COUNT	PERCENTAGE (%)
COMPUTER SYSTEM	1	2.63
COMPUTER SYSTEM, BUSINESS CAPITAL	1	2.63
CRUTCHES	4	10.53
ELECTRIC WHEELCHAIR	9	23.68
MOTOR BIKE	2	5.26
MOTORIZED WHEELCHAIR	4	10.53
NOTHING	2	5.26
TABLET	2	5.26
WHEELCHAIR	7	18.42
WHEELCHAIR, COMPUTER AND CAPITAL FOR BUSINESS	1	2.63
WHEELCHAIR, COMPUTER SYSTEM, SMARTPHONE	1	2.63
AUTOMATIC WHEELCHAIR	1	2.63
STRONG WHEELCHAIR	1	2.63
BICYCLE	1	2.63
MOTORCYCLE	1	2.63
GRAND TOTAL	38	100

