**Statistics**

Statistical analyses were performed to identify items that: lack variance in responses (e.g., show evidence of ceiling/floor effects), are redundant (are highly correlated with other factors), or do not belong in the construct (e.g., low inter-item correlation). First, to test to see if there are demographic differences between the volunteers with different disability types (both categorical variables), Fischer’s exact (n < 1000) and Chi-square test (n > 1000 participants were used [24]. To see if there are differences in the proportion of users of different technological tools across all groups of options, we used Cochran’s Q test method. We then performed posthoc pairwise comparison tests to find which groups are different sub-group using the McNemar test while adjusting for multiple testing using the “Bonferroni method” (cite R-package). Lastly, hierarchical clustering analysis was conducted to identify clusters of volunteers with similar responses and characteristics. All statistical analyses were performed in R (R Foundation for Statistical Computing, Vienna, Austria). Statistical significance level was set at 0.05.

**Table 1. Descriptive (double counting)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Ambulatory difficulty | Cognitive difficulty | Hearing difficulty | Independent living difficulty | Self-care difficulty | Vision difficulty |
| N | 302 | 135 | 65 | 137 | 118 | 90 |
| **Gender** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| Non-binary/third gender |  |  |  |  |  |  |
| Transgender: Female to Male |  |  |  |  |  |  |
| Transgender: Male to Female |  |  |  |  |  |  |
| Prefer not to answer |  |  |  |  |  |  |
| Missing |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Ethnicity** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**Table 2. Assistive devices by disability types (double counting)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Ambulatory difficulty | Cognitive difficulty | Hearing difficulty | Independent living difficulty | Self-care difficulty | Vision difficulty |
| **Transport Modes** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Length of time disabled** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**Table 3. Cochran Q. test results.**

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | N (%) | p value |
| Current modes of transportation | 1 |  | 0.015 |
|  | 2 |  |
|  | 3 |  |
|  | 4 |  |
|  | 5 |  |
|  | 6 |  |
|  | 7 |  |
|  |  |  |
| Types of vehicles you would be willing to use |  |  |  |
|  |  |  |  |

P-value: Cochran Q test. “Are there significant differences in the proportion of participants?”

**Figure 1. Hierarchical clustering to rank Key Areas for Research from Critical to not Important, n (%)**

**Supplementary.**

**Table S1. Descriptive (Excluding participants with multiple disability types)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Ambulatory difficulty | Cognitive difficulty | Hearing difficulty | Independent living difficulty | Self-care difficulty | Vision difficulty |
| **Gender** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| Non-binary/third gender |  |  |  |  |  |  |
| Transgender: Female to Male |  |  |  |  |  |  |
| Transgender: Male to Female |  |  |  |  |  |  |
| Prefer not to answer |  |  |  |  |  |  |
| Missing |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Ethnicity** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Transport Modes** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**Table S2. Descriptive (expanding those with Multiple Disabilities)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Ambulatory difficulty, Cognitive difficulty | Cognitive difficulty | Hearing difficulty | Independent living difficulty | Self-care difficulty | Vision difficulty |
| **Gender** |  |  |  |  |  |  |
| Male |  |  |  |  |  |  |
| Female |  |  |  |  |  |  |
| Non-binary/third gender |  |  |  |  |  |  |
| Transgender: Female to Male |  |  |  |  |  |  |
| Transgender: Male to Female |  |  |  |  |  |  |
| Prefer not to answer |  |  |  |  |  |  |
| Missing |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

**Table S3. Pairwise Wilcoxon Sign-rank test**

**Table S4. Itemize written text**