

## Use of digital information resources and digital assistive devices by the undergraduates with visual impairments

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Visual impaired undergraduates (VIUs) mostly rely on digital information resources (DIR) for accomplishing academic tasks with the help of assistive devices and technologies (ADT). Despite the availability of latest technologies and devices, accessing such DIR by the VIUs was affected by many other factors. Technological improvements make digital devices more accessible to the VIUs. Accordingly, the nature of the use of DIR also changed. Therefore, it is important to investigate the use of DIR and ADT under the present circumstances that created new challenges. Previous research studies on this topic focused only on the responses of the VIUs, but finding out the observations of other related parties is equally important. This study aimed to find out the use of DIR and ADT by the VIUs and investigate the challenges faced when accessing DIR and using ADT. The study adopted a qualitative research approach and interviews were conducted to collect data. The study population (n=77) was the VIUs in three state universities in the Western Province of Sri Lanka. Additionally, selected teachers of VIUs, and library and special center staff who support them were interviewed. Descriptive statistics and thematic analysis were used to analyze the data. Qualitative data were visualized using NVivo 10. Google and other search engines (52.7%) were mostly used to get information, followed by social media. Smartphone (83.8%) was the mostly used device. Laptop or desktop with a screen reader was ranked the second highest-use device by VI students. The lack of subject-related audiobooks, followed by poor Internet connectivity and the cost of mobile data were the key issues faced by them. The lack of compatibility of screen readers with some websites and PDF documents, and the inability to employ screen readers to access Sinhala text was the second most prevalent issue encountered by the respondents when using assistive devices. The most challenging factor was the high cost of assistive devices which prevents them from using them unless provided by libraries or disable-units. Devices such as smart phones and laptops were frequently used compared to traditional assistive devices. Access to the Internet and online information resources has increased as devices are more user-friendly to the VI in accessing the Internet although certain challenges need to be addressed. It is recommended to conduct training to enhance IT and language skills, and to develop self-confidence in learning new technologies. Institutions have to provide the required facilities and resources.

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