

Research Papers/Extended Abstracts

**Upper extremity impairments in higher education: Types of assessment accommodations provided and student perspectives**

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**Abstract**

Assessment accommodations in tertiary education levels the proverbial playing field for students with disabilities by removing disabling barriers related to assessments that may affect their performance. It is vital that effective assessment accommodations are provided by higher educational institutes in order to assess all students justly, equitably, and fairly. In this context, this research explores the assessment accommodations provided for students with upper extremity impairments in the University of Kelaniya. The research objectives are to identify the types of assessment accommodations provided by the institution for students with upper extremity impairments and to explore their reception by students with disabilities. To achieve these objectives, a qualitative research methodology was adopted. The documents related to assessment accommodations guidelines and data gathered through interviews were treated as primary data. The documents were subjected to manifest content analysis. Semi-structured interviews with two students with disabilities were conducted. Snowball sampling was used to identify research participants and their anonymity is ensured. A thematic analysis was conducted to analyze the interview data and the theoretical underpinning of this research relates to the socio-political understanding of disability. It was found that three types of assessment accommodations are provided by the institution: assessment accommodations related to the medium of presentation, medium of response, and the physical environment. Displaying varying opinions, students responded positively to accommodations related to the medium of presentation and response and held somewhat negative attitudes towards accommodations related to the physical setting due to the exclusion they may lead to. It is recommended that the institution revises assessment accommodations to improve the effectiveness of accommodations provided and involves stakeholders in the guideline formation/revision process.

**Keywords:** *Assessment accommodations, Higher education, Students with disabilities, Upper extremity impairments,*

## **Introduction**

Assessment accommodations (AAs) allow Students with Disabilities (SWDs) to demonstrate their knowledge or ability fully without the validity of assessments being affected and further level the “playing field by providing SWDs the opportunity to take state assessments without their disability or disabilities hindering their ability to succeed on the tests” (Cox et al., 2006). Many higher educational institutions mandate the provision of AAs. The University of Kelaniya (UoK), in particular, has guidelines pertaining to reasonable accommodations at examinations. It is vital that adequate research is conducted on AAs in higher education as they directly relate to how assessments can be conducted in a manner that evaluates all students justly and equitably (Abayasekara, 2020). Such assessments provide “a fair chance for achievement and an accurate measurement of achievement”, without which “students could feel disregarded, demotivated and even incompetent” (Abayasekara as cited in Abayasekara, 2021). However, despite the aforementioned importance, it seems that extensive research has not been done on AAs in the local context. Among the research done, Abayasekera (2021) discusses universal assessments with reference to hearing impairments and Yatigamma et al. (2021) note the types of accommodations provided in class and academics’ willingness to provide accommodations in four universities in Sri Lanka, excluding UoK. It seems that there is a significant lacuna in the literature regarding the AAs provided for students with upper extremity impairments in higher education and the present research addresses this gap by exploring the AAs provided for students with upper extremity impairments in UoK.

## **Methodology**

The objectives of this research are to

- I. Identify the types of AAs provided by UoK for students with upper extremity impairments.
- II. To explore the reception of AAs by students with upper extremity impairments.

The research adopted a qualitative methodology. Documents related to AAs and the data collected through interviews were treated as primary data. Reasonable Accommodations at Examinations for Students (RAES) and Reasonable Accommodations Guidelines (RAG) are the two main documents analyzed. Semi-structured interviews with two students with disabilities who are affiliated with the UoK were conducted. Snowball sampling was used to identify research participants. Both participants are persons with upper extremity impairments and one has had a temporary impairment that lasted for more than 5 months. The participants were provided with relevant information via email and/or phone and their consent was acquired through a consent form. Participants' anonymity is ensured.

To achieve the first objective, which is to identify the types of AAs provided, the said documents were analyzed using the method of manifest content analysis. In terms of the second objective, thematic analysis was conducted to analyze the interview data. The theoretical underpinning of this research draws from the socio-political models of disability, maintaining that disability arises through the students' interaction with society.

### ***Limitations***

It should be noted that the interviewee sample can be a limitation. However, situated in the non-positivist social-constructivist paradigm, the researcher believes that reality is constructed by individuals, and the experiences of individuals provide valuable insights for research.

### **Results**

#### ***Types of assessment accommodations***

In terms of the first objective, the analysis of the documents shows that three types of assessment accommodations related to upper extremity impairments are provided by UoK: accommodations related to the medium of presentation, accommodations related to the medium of response, and accommodations related to the physical environment.

#### ***Accommodations related to the medium of presentation***

UoK provides AAs that enable the medium in which the examination is presented to be modified and altered. Specific guidelines mentioned in the RAG include AAs that relate to students with upper extremity impairments such as the “provision of a reader to read aloud the questions” and the provision of the questions “via a computer or mechanical aid” (University of Kelaniya, n.d.). The former accommodates students who encounter difficulties when physically engaging with the exam paper (turning the pages, etc.) by assigning a reader to read out the questions on the paper, thereby minimizing the need for the student to physically handle the paper during the examination. The latter, too, serves the same purpose by presenting the exam paper on a screen that can be easily navigated by a mouse or a similar device.

#### ***Accommodations related to the medium of response***

UoK provides several AAs that concern the medium of response. For example, Specific guidelines and the REAS propose “recording of the student’s verbal responses by a scribe,” the use of assistive or adapted writing equipment, and recording answers on a voice-recorder, a word processor, or other computer-assisted technologies as AAs that concern the medium of response. They are further complemented by alterations made to the time allocated for the examination. For example, students

who are provided with technical devices and scribes to record their answers are given 15 extra minutes per hour (ibid).

### ***Accommodations related to the physical environment***

UoK provides reasonable accommodations that allow the modification of the environment in which the student sits the exam. The *Specific guidelines* indicate that alternative examination hall arrangements can be made to ensure that neither students with disabilities nor students without disabilities are at a disadvantage. For example, alternative hall arrangements are to be considered when scribes, mechanical aids, etc are used so that the students without disabilities are not inconvenienced. The same applies to the allocation of extra time and alternate hall arrangements are made to ensure that students leaving the examination premises would not be distracting to students who are given extra time. Further, the REAS states that necessary arrangements to place the wheelchairs, writing desks, etc in the examination premises would be made (University of Kelaniya, 2017; University of Kelaniya, n.d.)

### ***Reception of AAs by SWDs.***

In terms of the second objective, it seems that the reception of the AAs identified varies. The thematic analysis of the interview data led to two contrasting themes: while SWDs' reception of accommodations related to the medium of presentation and response was positive, the same cannot be said about the accommodations related to the physical environment. The reception of the three types of AAs by SWDs is explored in detail below.

### ***The reception of AAs related to the medium of presentation***

Accommodations related to the medium of presentation are well received by SWDs, who suggest that they respond to disabling barriers faced by SWDs in examinations. As stated by participant 2, she finds it difficult to “fiddle with the exam paper” and handling the paper constitutes a somewhat difficult task, provided that environmental conditions (such as gusts of wind) come into play. Such disabling barriers are minimized through the provision of AAs related to the medium of presentation.

### ***The reception of AAs related to the medium of response***

AAs related to the medium of response were positively received by SWDs, thereby validating their effectiveness. For example, participant 1 has been provided with additional time at examinations and she holds rather positive views of this particular accommodation. According to her, this provision of additional time levelled the playing field for all students. However, it seems that the AAs thus provided by the institution are not transferred into continuous assessments. As highlighted by participant 1, additional time is not provided for “assignments.”

### ***The reception of AAs related to the physical environment***

While the participants agreed that AAs related to the physical environment are useful, they simultaneously expressed the view that they may undermine the inclusion of SWDs. For instance, participant 2 expressed the view that alternative hall arrangements may result in the exclusion of the SWD. Though she has not been a receiver of this accommodation, she stated that “sitting the exam in some other place makes you miss out on a lot. After the exam students usually talk about the paper and discuss the answers and if you have to write the paper in a different location, you wouldn’t be able to take part in after-the-paper discussions.” Thus, while she believes that alternative hall arrangements are important, she notes that segregated hall arrangements may lead to exclusion from societal activities.

### **Discussion**

The three types of AAs found resemble the types of testing accommodations identified by Thurlow *et al.*: “presentation format, response format, setting of test and timing of test” (Thurlow et al., 1993). Even though the types of accommodations identified by them do not specifically relate to upper extremity impairments, they reinforce and validate the findings of the current research. For example, “presentation format” and related AAs identified by Thurlow et al. (1993) involve “the materials used to administer the assessment being changed to a format most appropriate for the student” (Case, Zucker & Jeffries, 2005) and accommodations related to the medium of presentation provided by UoK essentially alter the presentation format of the paper as an AA.

Accommodations related to the medium of response can be understood in relation to the second type of testing accommodations identified by Thurlow et al. response accommodations that involve providing the opportunity to “respond to assessment items in the way in which he or she is best able (to)” (Case, Zucker & Jeffries, 2005). The findings show that most of the AAs provided by the institution relates to the medium of response. The provision of these accommodations would rectify the disabling circumstances that may arise had the student sat the exam with pen-and-paper as the only mode of responding. Thus, UoK, aligning with the socio-political models of disability, situates disability not in the body but in the interaction with unaccommodating environments and attempts to eliminate disabling environmental barriers through the provision of AAs as evidenced in the documents studied (University of Kelaniya, 2015)

The findings further show that the response accommodations provided by UoK are accompanied by time-related alterations that resemble another type of testing accommodations identified by Thurlow et al. time accommodations. While the time accommodations provided by UoK align with the shared goal of AAs which is to level the playing field for all students, it seems that there are discrepancies in the

provision of time accommodations at examinations and assignments. As stated by participant 1, she has not received extra time for assignments (continuous assessment) and this may be due to the fact that the AAs provided by UoK only apply to examinations technically. The documents pertaining to AAs are titled as Reasonable Accommodations at Examinations for Students and Reasonable Accommodations and neither specifically concerns continuous assessments. Therefore, it seems that the institution is not obliged to provide accommodations related to continuous assessments, even though the term ‘assignments’ is used in certain instances. However, this gives rise to questions regarding the extent to which SWDs are truly accommodated. It can be conceived that, as argued by socio-political models of disability, negative attitudes towards people with disabilities may have caused this non-decision made (McCalla-Chen, 2000). It is clear that, to level the playing field for all students, AAs should be extended to encompass continuous assessments as well.

The third type of AAs identified in this research is accommodations aimed at modifying the physical environment and they can be understood in terms of setting accommodations identified by Thurlow et al. (1993). Setting accommodations involve “changes (being) made to the environment or location of the administration (Case, et al., 2005). Contrasting opinions are held by participants regarding the provision of alternate examination halls as an AA. Participant 2 indicated that facing the exam at an alternative location leads to the exclusion from certain activities. Facing the examination at an alternate location resembles segregated education to a certain extent. Research shows that “while probably not intended, segregation practices effectively limit or even prevent children with physical disabilities from engaging in a wider social setting (Finnvold, 2018),” which seems to be the case related to UoK’s provision of alternative hall arrangements. However, alternative hall arrangements are a vital AA and it would be impractical to advocate its elimination. Rather, one way of navigating this context is to provide alternate settings within or close to the main examination premises itself, when and if possible, as suggested by the participants.

In addition, the present research highlights the importance of including stakeholders, mainly SWDs, in policy/ guidelines formulation/ revision. Their insights and lived experiences provide invaluable input and the involvement of SWDs will result in enriched and effective AAs.

## **Conclusion**

Responding to the first objective of this research, it can be stated that three types of AAs are provided by UoK and they reinforce the existing research findings on AAs. In terms of the second objective, SWDs hold varying opinions regarding the AAs provided. While the reception of AAs related to the medium of presentation and response is positive, SWDs are skeptical of AAs regarding the physical environment. Based on the findings, it is recommended that the institution revises relevant documents

to increase the effectiveness of AAs. Further, the research suggests that UoK can benefit from involving stakeholders in the guideline formation/ revision process.

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