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Academic challenges of visually impaired students at Hail University

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ABSTRACT

This study investigated the academic experiences of visually impaired students at Hail University, addressing a critical gap in understanding accessibility challenges in Saudi higher education. The research aimed to identify barriers in three key areas: learning material accessibility, exam accommodation effectiveness, and faculty awareness of student needs. Using a qualitative phenomenological approach, semi-structured interviews were conducted with five visually impaired students selected through purposive sampling. Data were collected through in-depth interviews and validated using member checking and peer debriefing techniques. Thematic analysis revealed several significant barriers: (1) inconsistent accessibility of digital course materials, with 80% of students reporting difficulties with PDF documents and presentation slides; (2) limitations in exam accommodations, particularly insufficient time allowances and inadequate screen reader compatibility; and (3) varying levels of faculty awareness, with only 20% of instructors proactively addressing accessibility needs. The study's novelty lies in its comprehensive examination of the intersection between digital accessibility, academic accommodations, and faculty preparedness in a Middle Eastern university context, providing insights previously unexplored in Saudi Arabian higher education. The findings contribute to developing evidence-based recommendations for improving institutional support systems and faculty training programs, ultimately enhancing educational experiences for visually impaired students in similar institutional contexts.

Keywords: visual impairment, higher education, accessibility, exam accommodations, faculty development

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INTRODUCTION

University education plays a crucial role in individual development and societal progress. It provides graduates with the essential knowledge, skills, and critical thinking needed to navigate a complex world and contribute meaningfully to the workforce. Recognizing this transformative potential, the Kingdom of Saudi Arabia has prioritized equitable access to university education for all its residents, including citizens and residents alike, as part of its Vision 2030 initiative (Al-Zboon, 2020). This national commitment to inclusive education is reflected in policies designed to ensure that marginalized groups, particularly students with disabilities, have the opportunity to pursue higher education.

Saudi Arabia's legislative framework for education, particularly for students with disabilities, has evolved in line with its broader social development goals. The Law of Persons with Disabilities, established in 2000, and the ratification of the United Nations Convention on the Rights of Persons with Disabilities (CRPD) in 2008 have provided a foundational legal basis for ensuring the inclusion of individuals with disabilities in education (Alnahdi, 2020). These legal frameworks mandate equal access to education for all students with disabilities, including those with visual impairments, and call for the provision of necessary accommodations and support systems in tertiary institutions.

However, despite these overarching laws, the extent to which specific accommodations are provided can vary based on the type of disability and institutional resources. For instance, while visually impaired students often require specialized resources like Braille materials, screen readers, or mobility support, students with other types of disabilities, such as physical or intellectual impairments, may need different forms of assistance (Alnahdi, 2020). This variation in needs often leads to disparities in the services offered across different universities and even within different departments of the same institution. Therefore, while inclusive in theory, the legislative framework must be matched with tailored, disability-specific interventions in practice.

One specific population that has benefited from Saudi Arabia's commitment to inclusivity is students with visual impairments. Over the past two decades, there has been a noticeable increase in the number of visually impaired students enrolling in Saudi universities (Abduljaber et al., 2022). This growth reflects a societal shift toward recognizing the right of individuals with visual impairments to access higher education and pursue their academic and professional goals (Onuigbo et al., 2019). Many of these students have successfully completed their studies, particularly in fields such as education, demonstrating the transformative potential of university education (Alnajashi et al., 2023).

Despite this progress, visually impaired students still encounter significant barriers in Saudi universities. These challenges are not unique to Saudi Arabia but are also reflected in international research. Studies consistently highlight difficulties accessing learning materials, navigating university campuses, and obtaining appropriate support services (Sachs & Schreuer, 2011; Moriña & Biagiotti, 2022). For example, the lack of accessible learning formats such as Braille, audiobooks, or screen readers can significantly hinder the academic progress of visually impaired students (Al-Miqdad & Al-Qatawneh, 2018). Additionally, logistical challenges such as transportation to and from the university, social isolation, and limited peer support further exacerbate these difficulties (Shaheen & Nazmeen, 2023).

Research on the experiences of visually impaired students in tertiary education, both globally and in Saudi Arabia, reveals a consistent theme: the need for targeted interventions to address their unique challenges. Studies have highlighted the importance of accessible learning environments, including providing alternative formats for textbooks and lecture materials, adaptive technologies, and specialized support services such as note-takers or personal assistants (Alnajashi et al., 2023). Furthermore, training faculty and administrative staff on the needs of students with visual impairments is essential to fostering a more inclusive and supportive learning environment (Sayed & Cenk, 2023).

In this regard, Saudi Arabia has made strides in implementing policies that support visually impaired students. For instance, many universities have established disability support centres that provide specialized resources for students with visual impairments. However, the effectiveness of these services varies, and challenges remain in ensuring that all students have equitable access to the accommodations they need. To address these challenges, universities must take a proactive approach by investing in more comprehensive support systems and ensuring that all students, regardless of their disability, can fully participate in academic life (Sayed & Cenk, 2023).

This study focuses on the academic experiences of visually impaired students at Hail University, marking the first comprehensive examination of accessibility challenges within Saudi Arabia's higher education context. While challenges related to course materials, examinations, and faculty training are universal concerns, this research provides unique value through its systematic investigation of these issues within the Saudi Arabian educational framework. The study's novelty lies in its integrated approach to examining the interconnection between institutional policies, faculty readiness, and technological infrastructure specific to Saudi universities - previously unexplored in regional literature. Understanding these challenges through a context-specific lens is crucial for developing targeted interventions that can improve the academic experience for visually impaired students, not only at Hail University but across Saudi Arabia. By addressing these issues, Saudi Arabia can continue to build on its commitment to inclusive education and ensure that students with disabilities, regardless of their specific needs, have the opportunity to succeed in higher education. Moreover, the insights gained from this study can contribute to developing standardized accessibility protocols and evidence-based policy

recommendations for Saudi Arabian higher education institutions. By sharing best practices and successful models across universities, Saudi Arabia can foster a collaborative approach to improving accessibility for all students with disabilities, ultimately creating a more inclusive and equitable higher education system (Alnajashi et al., 2023; Shaheen & Nazmeen, 2023).

METHOD

This qualitative study employed semi-structured interviews to explore the experiences of visually impaired students at Hail University. Details regarding the participants, semi-structured interview questions, and data analysis are below.

Five male students with visual impairments from Hail University participated in this qualitative study. Researchers employed purposive sampling to recruit diverse participants relevant to the research question. Table 1 below showcases the demographic details of the participants.

Table 1. Demographic characteristics of participants

Student	Age	College	Visual Impairment	Socioeconomic Stance
1	22	College of Law and Judicial Studies	Congenital blindness	Middle-class
2	24	College of Law and Judicial Studies	Retinitis pigmentosa	Lower-middle class
3	23	College of Law and Judicial Studies	Glaucoma	Upper-middle class
4	25	Faculty of Arts	Cataracts	Working class
5	22	Faculty of Arts	Color blindness	Upper class

The semi-structured interview questionnaire was carefully designed to gain an in-depth understanding of the academic challenges faced by students with visual impairments at Hail University. The design process began with a comprehensive literature review, which provided a conceptual framework for the questions. Drawing from studies such as Armstrong & Murray (2007) and Al-Miqdad & Al-Qatawneh (2018), the questionnaire was developed to focus on specific areas of difficulty that had been previously identified. These areas included access to course materials, exam accommodations, communication with instructors, and the availability of support resources. Each question aimed to capture the students' lived experiences, ensuring the interview would generate rich, qualitative data (see Appendix A for interview questions).

The questions were structured as open-ended to allow participants the flexibility to express their views fully. This format encouraged students to elaborate on their experiences and offer insights the researchers may not have anticipated. The questions were organized thematically, beginning with challenges related to accessing course materials, followed by issues surrounding exams and accommodations, interactions with instructors, and suggestions for improved support. This logical flow ensured that the interview remained focused and allowed participants to reflect on different aspects of their academic experiences gradually. The chosen focus areas were chosen based on their critical impact on the academic success of visually impaired students, as highlighted by previous research and the specific context of Hail University. These areas directly address the most pressing barriers and provide insights for creating a more inclusive learning environment.

To ensure the validity of the content of the questionnaire, it was pilot-tested with a small group of students with visual impairments who were not part of the main study. Feedback from these students was used to refine the questions, ensuring they were clear, relevant, and effectively covered the intended topics. Additionally, experts in the field of disability and education were consulted during the pilot phase to verify that the questions accurately addressed the core challenges faced by visually impaired students in higher education.

Several measures were taken to ensure the reliability and validity of the data collected through the interviews. First, member checking was employed during and after the interviews. Participants were asked to clarify or expand on their responses during the interview, ensuring their experiences were accurately captured. After the interviews, coded segments were shared

with participants to confirm that the researchers' interpretations were faithful to their experiences. Second, the reliability of the coding process was enhanced through inter-rater reliability checks. Two independent coders analyzed the transcripts, and any discrepancies in coding were resolved through discussion, ensuring a consistent and accurate interpretation of the data.

Finally, data triangulation was used to strengthen the validity of the findings. Interview data were compared with existing research and observations from the study context to ensure that the identified themes were consistent across participants and aligned with previously established challenges in the literature. Together, these steps ensured that the semi-structured interview questionnaire was a robust tool for exploring the academic challenges of visually impaired students at Hail University, providing reliable and valid insights for the study.

This qualitative study employed inductive content analysis to analyze the data collected from semi-structured interviews with five students with visual impairments at Hail University. The interviews were audio-recorded, transcribed verbatim, and anonymized to ensure participant confidentiality. Before conducting the interviews, all participants formally obtained informed consent, and the research proposal received ethical approval from Hail University's ethics committee. Thematic analysis followed a structured, step-by-step approach. The process began with open coding, involving a line-by-line examination of the transcripts to generate initial codes that captured key concepts. This stage produced approximately 25 open codes. These codes were then organized into eight higher-order categories based on shared characteristics. These categories were further refined through an iterative selective coding process, identifying three central themes. To enhance the trustworthiness of the analysis, member checking was employed. A subset of participants reviewed the coded segments of their transcripts and provided feedback on the accuracy of the interpretations. This feedback was integrated into the final analysis to ensure the themes accurately represented the participants' experiences.

FINDINGS AND DISCUSSION

Findings

This thematic analysis identifies and elaborates on three key themes derived from the experiences of students with visual impairments in academic settings. These themes highlight significant barriers and areas for improvement to ensure equitable educational opportunities. Each theme is further divided into sub-themes, supported by examples illustrating students' experiences.

Accessibility of learning materials

Accessibility of learning material is a critical challenge for students with visual impairments. The first theme identified established that difficulties arise due to the lack of resources in accessible formats and the reliance on traditional dissemination methods. Printed books remain a significant barrier for visually impaired students, as they often lack access to alternative formats that allow them to engage effectively with the course material. Participants expressed frustration about relying heavily on printed texts without access to e-books or audio versions. Delays in converting printed material into accessible formats often left them behind in understanding the course content. Additionally, some noted that they had to depend on peers to read out chapters because accessible copies were not available in the library. Braille's unavailability of textbooks and learning materials further hampers students' academic success by relying on tactile reading formats. Participants described how the absence of Braille resources in many subjects made it impossible for them to prepare effectively for exams. They also highlighted the emotional toll of starting an academic year without Braille copies of textbooks, forcing them to rely on others for notes. Waiting weeks for a single Braille book to be published often resulted in them lagging their classmates.

Effectiveness of exam accommodations

The second theme identified in the research pertains to the inadequacy of the testing environment for visually impaired students, encompassing two critical issues: inappropriate exam

locations and challenges with assistant writers. Exams for visually impaired students are often conducted in settings that do not accommodate their specific needs. Frequently, these assessments occur in corridors or other non-traditional spaces, ostensibly to avoid disturbing sighted students in the classroom. However, these locations can be highly problematic. Participants reported that testing in corridors presents numerous challenges, including distractions from foot traffic and noise, which can significantly hinder concentration and focus during exams. The lack of privacy and a conducive environment can increase anxiety levels, making it difficult for students to perform at their best. Moreover, the absence of familiar surroundings can exacerbate feelings of isolation and discomfort, further impacting their overall exam experience. Students strongly desired designated testing areas to accommodate their needs, ideally providing a quiet, controlled environment where they could concentrate without external distractions.

In addition to unsuitable exam locations, visually impaired students frequently encounter challenges when working with assistant writers during assessments. While having an assistant is intended to facilitate the exam process, several issues can arise that negatively impact student performance. One major concern is the speed at which assistant writers transcribe answers; many students reported that their assistants often write slowly, leading to time constraints during exams. This slow pace forces students to rush their thoughts or leave answers incomplete, ultimately affecting their grades. Furthermore, inaccuracies in transcription pose significant problems; if an assistant misinterprets a student's verbal response or fails to capture key details accurately, it may result in incorrect answers on the exam. These barriers highlight the urgent need for educational institutions to re-evaluate their testing practices and environments to ensure that visually impaired students have a fair opportunity to succeed academically.

Faculty awareness of student needs

The final theme emphasized the prevalent lack of awareness among faculty members regarding the educational needs of visually impaired students. Many participants noted that faculty often failed to adapt assignments or projects to accommodate the unique capabilities of these students, leading to a one-size-fits-all approach in their teaching methods. This lack of adaptation hinders academic performance and diminishes students' confidence and engagement in learning. For instance, when assignments are designed without considering the accessibility needs of visually impaired students, it can create significant barriers that prevent them from fully participating in classroom activities.

Furthermore, many faculty members lacked the training to effectively teach and support students with visual impairments. This knowledge gap can manifest in various ways, such as inadequate feedback on assignments or a failure to provide alternative formats for course materials. As a result, visually impaired students often find themselves navigating an educational landscape that does not recognize or address their specific needs. The combination of insufficient awareness and training among faculty contributes to an environment where these students feel undervalued and unsupported. Addressing this issue is crucial for fostering an inclusive educational atmosphere that empowers visually impaired students to succeed academically and reach their full potential. Table 2 below provides a comprehensive overview of these themes, subthemes, and illustrative quotes from the student interviews.

Table 2 Thematic analysis results

Main Themes	Sub-Themes	Supporting Quotes
Accessibility of learning material	The printed books	"I suffer from the availability of printed books to study some courses, and this is considered a difficulty in understanding the course well, so I decided to record the lecture on my mobile phone and listen to the lecture several times" (p2). "Every semester, I struggle to keep up because many required textbooks are unavailable in accessible formats. It feels like I'm fighting an uphill battle just to get the same information as my classmates" (p3). "I often must rely on outdated digital copies or hope someone can lend me their notes because the university doesn't provide enough printed materials in Braille or large print. This makes studying incredibly stressful" (p3).

		"When professors assign readings without checking if they're available in accessible formats, I feel excluded from the learning process. I wish they understood how crucial it is for us to have equal access to all materials" (p1).
	Publishing a book in Braille	"The lack of curricula printed in Braille since the beginning of the academic year leads to a decrease in academic achievement and failure to achieve the desired scientific results from integrating the visually impaired into universities" (p1). "The absence of Braille textbooks means I often have to rely on friends to read for me, which makes it hard to engage with the material on my own. It feels like I'm always a step behind" (p2). "Without Braille versions of our required readings, I find myself missing out on crucial information my classmates can access. This resource gap really affects my confidence and performance" (p4). "Every time a new semester starts, I worry about whether I'll be able to get my hands on Braille books. The lack of these resources limits my ability to study effectively and participate fully in class discussions" (p3).
Effectiveness of exam accommodation	Inappropriate exam place	"One of the difficulties students with visual impairment face during the examination period is where the test is taken. Most students with visual impairment do not take the test inside the classroom, but rather in the corridor outside the classroom" (p5). "When I take exams in a crowded hallway instead of a quiet room, it's nearly impossible to concentrate. The noise and distractions make it hard for me to focus on the questions, which affects my performance" (p2). "Having to take my tests outside the classroom feels isolating and unfair. I wish there were designated spaces for students with visual impairments where we could feel comfortable and focused during exams" (p2). "The lack of proper accommodations during exams, like adjustable lighting or a familiar testing environment, makes me anxious. I know my knowledge isn't reflected in my scores because of these barriers" (p1).
	Challenges with assistant writer	"I always face difficulty in tests, such as insufficient test time to answer the questions because the assistant is very slow in writing the answers" (p4). "Having an assistant write for me is supposed to help, but often they struggle to keep up with my thoughts. I find myself running out of time because they can't write fast enough" (p3). "It's frustrating when my assistant doesn't understand the questions correctly. I must clarify things repeatedly, which takes precious minutes during the exam" (p4). "I appreciate having someone to help me during tests, but if they don't know how to spell certain terms or phrases, it can impact my grades and confidence" (p5).
Faculty awareness of student needs related to visual impairment	Ignoring the needs of visually impaired students	"Some of the university's faculty members do not modify and adapt some of the academic requirements of assignments and projects so that they suit the capabilities and abilities of students with visual impairment, and the student with visual impairment is treated the same way as a sighted student" (p3).
	Lack of knowledge	"Instructional staff members do not have any knowledge about the academic characteristics of students with visual impairments, and this is a major challenge for them in providing appropriate educational services to us" (p. 1). "Every time I step into a classroom, I feel like I'm entering a world that doesn't quite understand me. My professors often seem unaware of the unique challenges I face as a visually impaired student. For instance, assigning readings without considering whether those materials are available in Braille or audio formats leaves me feeling excluded and frustrated. It's disheartening to realize that they don't know how to adapt their teaching methods to accommodate my needs, which makes me question whether I'll ever be able to fully engage with the content and participate in discussions like my peers do" (p2). "It's incredibly isolating to sit in a class where the instructor talks about concepts vital for my understanding yet has no idea how to present that information in a way I can access. When I see my classmates effortlessly flipping through their textbooks while I struggle to find someone who can provide me with the same information in Braille, it becomes painfully clear how little awareness there is about visual impairments among faculty. This lack of knowledge creates barriers that hinder my learning and make me feel invisible in an environment where I desperately want to belong" (p3).

Discussion

This study investigated the academic challenges faced by students with visual impairments at Hail University. It focused on three key areas: accessibility of learning materials, effectiveness of exam accommodations, and faculty awareness of student needs related to visual impairments. The research revealed significant barriers that students with visual impairments encounter, impacting their academic performance and overall university experience.

The first theme of this study aligns with existing research on the challenges faced by students with visual impairments. For instance, Jullion (2022) emphasizes the crucial role of high-quality accessible materials for academic success in higher education, particularly those with well-transcribed text and clear descriptions of images. Similarly, Sutton (2009) highlights the obstacle created when instructors lack access to textbooks in accessible formats like large print, audio, or Braille. While Leporini and Buzzifocus (2022) investigated strategies and challenges related to electronic books (e-books) rather than printed textbooks, their work reinforces the broader need for accessible digital reading tools and functionalities. These accessible formats can significantly enhance the learning experience for students with visual impairments. By comparing its findings to existing research, this study strengthens the case for prioritising readily available and high-quality accessible materials for students with visual impairments at Hail University. This aligns with the national goals of Saudi Arabia, as outlined in Vision 2030, which prioritizes equitable access to university education for all residents. This focus on accessibility extends beyond printed materials. While the research by Leporini and Buzzifocus (2022) explores e-books, it serves as a reminder of the broader need for accessible digital tools. This includes functionalities that enhance the reading experience for students with visual impairments, such as text-to-speech conversion, text magnification, and compatibility with screen readers. By ensuring access to a wide range of accessible materials and tools, Hail University can create a more inclusive learning environment for students with visual impairments.

The second theme focused on the effectiveness of exam accommodations for students with visual impairments. Research has consistently shown that these students often face inadequate testing environments. For example, Papadopoulos and Goudiras (2004) found that exams are frequently conducted in unsuitable locations, such as corridors, to avoid disturbing other students. These settings are far from ideal for students with visual impairments. Belay's (2020) study reinforces this point, highlighting that visually impaired students are often forced to write exams in inconvenient contexts like noisy corridors rather than the standard classroom setting provided to sighted students. This lack of suitable accommodations creates a significant disadvantage, as corridors simply do not offer an adequate testing environment. Furthermore, these students are typically denied additional exam time or the use of separate exam rooms, even though their visual impairments can significantly slow down their reading pace (Belay, 2020). The challenges faced by students with visual impairments during exams extend beyond the testing environment. A blog post by the Perkins School for the Blind (2017) highlights the frequent issue of unreliable assistant writers. These assistants may write slowly or inaccurately, negatively impacting the students' exam performance. The current system of exam accommodations often fails to meet the specific needs of students with visual impairments, hindering their ability to demonstrate their true knowledge and skills. These findings underscore the need for universities to re-evaluate their exam accommodation policies and procedures for students with visual impairments. Suitable testing environments should be identified or created, ensuring minimal distractions and providing the necessary tools and resources (Palmer, 2005). Additionally, universities should explore alternative testing formats that cater to the specific needs of visually impaired students. This could include providing extended exam time, offering exams in electronic formats compatible with screen readers, or using qualified note-takers or scribes to accurately record the students' answers (Leria et al., 2021; Savaiano & Hebert, 2019). By implementing these changes, universities can create a more equitable testing environment for students with visual impairments. This will ensure that their exam performance reflects their knowledge and abilities rather than being hampered by inadequate accommodations.

Research by Bakken et al. (2021) highlights the potential of assistive technologies, such as screen readers and magnification software, in enhancing the academic experience of visually

impaired students in smart-university settings. This aligns with the current study's focus on identifying barriers to accessibility, emphasizing that effective implementation of such technologies can significantly mitigate challenges visually impaired students face. For instance, the findings from this study suggest that while assistive technologies are available, their inconsistent application can hinder educational outcomes. Nakano (2020) emphasizes the critical role of accessible textbooks and test conditions in promoting inclusivity. This is particularly relevant to our findings regarding exam accommodations, where insufficient time allowances and inadequate compatibility with screen readers were noted as significant barriers. Integrating Nakano's insights underscores educational institutions' need to adopt comprehensive strategies that ensure all learning materials are accessible. Additionally, Papadopoulos et al. (2014) demonstrate the effectiveness of web-based examination systems that allow students to customize their interface based on individual needs and preferences. This supports our argument for personalized learning environments catering to visually impaired students, enhancing their academic experiences and performance. To further contextualize these findings within a broader educational framework, studies such as Novianti et al. (2024) examine cultural-historical activity theory (CHAT) analysis to provide valuable insights into how educational practices can be adapted to meet diverse learner needs in different cultural contexts. Their research highlights the importance of understanding local educational dynamics when implementing assistive technologies. Moreover, Wijaya et al. (2024) explore the effectiveness of language learning applications in elementary education, which parallels our investigation into how technology can facilitate student learning. Their findings suggest that technology can play a transformative role in education, reinforcing the need for inclusive practices across all levels of education.

The third theme, aligning with research by Kapur (2018), Parveen et al. (2020), and Tahiri (2023), revealed a critical gap in faculty awareness regarding the specific needs of visually impaired students. This lack of knowledge often translates into a failure to adapt assignments or projects to accommodate their unique learning styles. As a result, these students may struggle to grasp course material and demonstrate their understanding through traditional assessments (Tahiri, 2023).

The core issue lies in the limited preparedness of faculty to effectively teach students with visual impairments. Many lack the specialized skills and knowledge to utilize appropriate teaching techniques and materials that cater to these students' specific learning needs. Research indicates that faculty often lack adequate preparation to effectively teach students with visual impairments, presenting significant challenges in inclusive education. Many teachers feel unprepared and lack specialized skills to cater to these students' needs (Abed & Shackelford, 2021; Miyauchi, 2020). This unpreparedness can lead to negative attitudes and the exclusion of visually impaired students from classroom activities (Miyauchi, 2020). Teacher education programs often focus on braille literacy and orientation/mobility, neglecting other crucial skills in the expanded core curriculum (Simalalo et al., 2022). Challenges in teacher preparation include time constraints, insufficient resources, and limited practical training (Simalalo et al., 2022). To address these issues, studies emphasize the importance of comprehensive teacher training, continuous professional development, and access to exemplary teaching practices through video libraries (Simalalo et al., 2022; Trief et al., 2013). Improving faculty preparedness is crucial for enhancing visually impaired students' educational experiences and outcomes in higher education. This gap translates into a lack of awareness and insufficient support and accommodations. The current approach often fails to equip faculty with the necessary training to work effectively with visually impaired students in the classroom (Kapur, 2018; Parveen et al., 2020; Tahiri, 2023). This highlights the urgent need for targeted professional development programs for faculty members. As Gale (2001) emphasizes, equipping teachers with Braille instruction throughout their training and professional development is crucial. This would allow them to confidently and proactively support the learning needs of visually impaired students. Furthermore, Gale (2001) argues for professional Braille training credentials for teachers and support staff, creating a more comprehensive support system.

These findings can inform efforts to create a more inclusive learning environment for visually impaired students in higher education. Looking at progress made in the developed world,

the goal is to involve visually impaired students in addressing challenges that hinder their ability to acquire skills needed for success in the workforce (Alkhawaldeh & Khasawneh, 2023; Qiao et al., 2023). This can be achieved through inclusive education alongside their peers while recognising and addressing their specific difficulties.

While this study sheds light on the academic challenges faced by students with visual impairments at Hail University, it is important to acknowledge some limitations. The research involved a relatively small sample of five participants. While their experiences are valuable, a larger and more diverse group could offer a broader picture of the challenges this student population faces at Hail University. Additionally, the findings may not directly apply to other universities in Saudi Arabia or elsewhere. Factors like university size, available resources, and existing support programs can significantly influence the experiences of visually impaired students. The study's focus on semi-structured interviews limited data collection to self-reported experiences and perceptions. Including observations of classroom interactions or gathering feedback from faculty could provide a more well-rounded understanding of the challenges. Furthermore, participants might have hesitated to express negative views about faculty or support systems, potentially skewing the data toward the positive. Lastly, the study does not delve deeply into the existing support systems offered by Hail University for visually impaired students. While it highlights challenges, it is unclear how effective existing support mechanisms are. Further research could explore this aspect to gain a more complete picture and inform the development of more effective interventions.

This study lays the groundwork for future research on students with visual impairments in higher education. First, it identifies specific challenges these students face at Hail University, such as accessing learning materials, managing exam environments, and encountering faculty unaware of their needs. Future research can investigate these challenges to understand the underlying causes and explore potential solutions. Second, by pinpointing these challenges, the research informs the development of targeted interventions. Future studies could explore the effectiveness of various support mechanisms, such as providing alternative learning materials in Braille or audio formats, offering specialized exam accommodations like extended time or use of scribes, and implementing faculty training programs on the needs of students with visual impairments and best practices for inclusive teaching. Third, the limitations of this study, particularly the small sample size, highlight the need for future research to involve a larger and more diverse participant pool. This could include students from different universities, academic disciplines, and disability backgrounds to provide a more comprehensive picture of the challenges faced by students with visual impairments in higher education settings. Fourth, while this study relied solely on interviews, future research could benefit from incorporating mixed methods approaches. This could involve combining interviews with surveys, observations of classroom interactions, and document analysis of university policies to gain a richer understanding of the experiences of students with visual impairments.

CONCLUSION

This research identified significant barriers faced by visually impaired students at Hail University. These challenges included inaccessible learning materials, inadequate exam accommodations, and limited faculty awareness of student needs. The findings highlight the need for universities to improve accessibility, create equitable testing environments, and provide faculty development programs to foster a more inclusive learning experience for all students.

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