

Research Article



A systematic literature review on the obstacles to workplace success among visually impaired individuals

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Abstract

Encountering individuals with visual impairments at organisations has become more commonplace than before. As the proportion of visually impaired individuals rises inside companies, the obstacles to achieving workplace success become more apparent. A systematic literature review was conducted to present the obstacles individuals with vision impairment face in achieving workplace success. Three hundred ninety-eight relevant papers were collected from reputable databases, including Mendeley, Web of Science, Scopus, and Springer e-databases. The analysis focused on 12 non-duplicate, original (research), English-language, open-access, and full papers published between 2019 and 2023. These studies were selected and widely covered obstacles to workplace success among visually impaired individuals based on the eligibility criteria. Most focused on visually impaired individuals employed in the United States. These studies primarily used quantitative research methods and were published between 2021 and 2022. The significant obstacles to workplace success among individuals with vision impairment in the 12 selected studies were unfitting to the workplace environment, job insecurity, lack of reasonable accommodation and rehabilitation services, poor psychological conditions, and unsatisfactory wages.

Keywords

A systematic literature review, vision impairment, visually impaired individuals, workplace obstacles, workplace success

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Introduction

Visually impaired individuals are usually neglected (Patvardhan & Santoki, 2019), rejected (Bhaskar et al., 2023), undervalued (Jeon et al., 2022), disadvantaged (Bhaskar et al., 2023; Makkawy & Long, 2021), and unordinary (Gupta et al., 2021) people. Nevertheless, according to Bhaskar et al. (2023), those with visual impairments showed a greater propensity for attaining workplace success than those without. Visually impaired individuals prefer to be acknowledged as 'successful individuals' rather than being categorised as 'successful individuals with visual impairment'.

Bhaskar et al. (2023) found that visually impaired individuals encounter difficulties on the job, including social and occupational obstacles as Zaheer et al. (2024) stressed. One of the obstacles was a need for more wish to comprehend the physical constraints faced by those with visual impairments. Another obstacle was the excessive amount of labour, or, in a word, workload. The next obstacle faced by visually impaired individuals was insufficient time to complete a certain work. Regarding no wish to understand vision limitations by the surroundings, Lourens (2021), a visually impaired university lecturer, recounted her employer's statements in her autoethnographic narrative: 'You need to perform accordingly' and 'We all struggle here'. As a result of the intense job pressure, she had a complete absence of joy or satisfaction and an overwhelming sense of extreme tiredness. Since it required allocating time for tasks such as creating slides, using screen readers, and checking students' work, she needed more time due to her slow vision speed.

Other research has examined the obstacles that hinder workplace success for those with vision impairments. Physical obstacles impede commuting to the office via public transport, office vehicles, or private vehicles. These obstacles also restrict access to the workstation or department from the main entrance, attendance system or notice board, canteen and lavatory facilities, fire exit area, and the equipment, tools, and machinery necessary for job performance. Individuals with vision impairment face various psychological obstacles in the workplace. These include challenges in collaborating with colleagues who do not have disabilities, effectively communicating their specific needs to employers, navigating travel to and from the office or on business trips, participating in office events, maintaining relationships with employers and colleagues, adapting to new roles or jobs, handling work pressure and meeting deadlines, receiving support from colleagues to complete assignments, and maintaining a healthy work-life balance. Furthermore, visually impaired individuals faced obstacles in successfully navigating offline or online job application forms; accessing information shared during training or meetings; communicating effectively in training or meetings; interacting with employers, colleagues, customers, and clients; operating desktops, laptops, and other computer-related equipment; and utilising web-based Internet and intranet applications, as well as video-audio and multimedia products. These obstacles to information, communication, and technology hindered their ability to succeed in the workplace. The absence of workplace accommodation and lack of transparent communication between employers and visually impaired employees are procedural obstacles. Attitudinal obstacles refer to the assumptions, ideas, stigma, and prejudices that exist regarding individuals with disabilities, precisely their capacity and potential to perform a particular job. These barriers are also the reason for social isolation among those with vision impairment, hindering their workplace success (Dong & Guerette, 2013; Dos Santos & De Carvalho, 2012; Gupta et al., 2021; Joshi & Thomas, 2019).

In general, Bhaskar et al. (2023) found that the primary factors contributing to workplace success among visually impaired individuals were their attributes, including perseverance, advocacy for rights, resilience in the face of rejection and cynicism, ability to adapt to the sighted environment, empathy towards sighted perspectives, and strong belief in the power of technology. Hence, workplace success resulted from actively seeking and incorporating input, challenging and

dispelling preconceived notions about disabilities, and maintaining a constructive and optimistic attitude.

This article aims to present a systematic literature review on obstacles to workplace success among visually impaired individuals.

Methodology

Searching strategy

Four e-databases, namely Web of Science, Scopus, Springer, and Mendeley, were chosen from the Universiti Kebangsaan Malaysia's (UKM) e-library website to search for studies that discuss the obstacles faced by visually impaired individuals in achieving workplace success. The Mendeley, Web of Science, Scopus, and Springer e-databases had 322, 13, 16, and 47 articles, respectively. The search terms applied to find relevant research were 'workplace obstacle among visually impaired individuals' and 'workplace success among individuals with visual impairments'.

Eligibility criteria

The following set of qualifying criteria determined the study selection: (1) papers addressing the obstacles faced by visually impaired individuals in achieving workplace success, (2) non-repetitive publications, (3) original (research) publications, (4) publications in the English language, (5) full papers, (6) papers available for free access, and (7) studies published from 2019 to 2023, within the last 5 years. To clarify, the following types of studies were not included: opinion papers, theoretical research articles, scoping reviews, literature reviews, reports, future articles, systematic literature reviews, reviews based on national surveys, and study protocols. Furthermore, presentations, posters, and abstracts in conference materials were also removed.

Results

Study selection procedure

A total of 398 publications were discovered from various e-databases, including Mendeley (n=322 papers), Web of Science (n=13 papers), Scopus (n=16 papers), and Springer (n=47 papers). The option to filter by certain years of publication significantly reduced the number of articles retrieved from the Web of Science and Scopus e-databases. Out of the initial pool of 398 studies, 196 were selected after applying the first filter. The remaining 202 papers were excluded for the following reasons: 40.5% (n=82) were focused on individuals with disabilities other than visual impairments, 20.7% (n=42) were about individuals with vision impairments who were not employees (they were students, tourists, and children), and 38.6% (n=78) of cases pertained to employees without impairments but experienced health problems.

Out of the 196 articles, 167 were selected in the second filter. 14.7% (n=29) of the papers were omitted because they needed to address hurdles to workplace performance. However, these rejected papers did tackle other concerns, such as transportation, health services, and off-time for visually impaired individuals. Out of the initial 167 studies, only 12 met the specific criteria for inclusion. The remaining 155 papers were excluded for various reasons: 27 were duplicates (17.4%), 25 were not original papers (16.1%), 13 were not in English (8.3%), 38 were restricted publications (24.5%), and 52 were articles in Mendeley and Springer e-databases published before 2019 (33.5%). No posters or abstracts were discovered in relevant electronic databases throughout the study selection process (Figure 1).

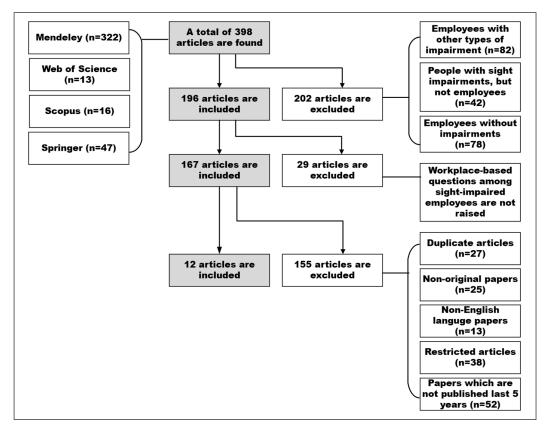


Figure 1. PRISMA flowchart.

General description of the selected studies

Regarding the publication year, 8.3% (n=1) of the original articles were published in 2019 (Patvardhan & Santoki, 2019), another 8.3% (n=1) in 2020 (McDonnall & Lund, 2020), 33.3% (n=4) in 2021 (Gupta et al., 2021; Lourens, 2021; Makkawy & Long, 2021; Tagoe et al., 2021), another 33.3% (n=4) in 2022 (Bhaskar et al., 2023; Garcia et al., 2022; Jeon et al., 2022; Zaheer et al., 2024), and the remaining 16.6% (n=2) in 2023 (Connors et al., 2023; Kim & Park, 2023).

Regarding geographical distribution, 23.0% (n=3) of the studies were conducted in the United States (Connors et al., 2023; Makkawy & Long, 2021; McDonnall & Lund, 2020). Canada accounted for 15.3% (n=2) of the studies (Connors et al., 2023; Gupta et al., 2021), South Korea -15.3% (n=2) (Jeon et al., 2022; Kim & Park, 2023), and India -15.3% (n=2) (Bhaskar et al., 2023; Patvardhan & Santoki, 2019). The Philippines (Garcia et al., 2022), Pakistan (Zaheer et al., 2024), South Africa (Lourens, 2021), and Ghana (Tagoe et al., 2021) each had a share of 7.6% (n=1) in the studies.

The studies referenced the Theory of Planned Behaviour (McDonnall & Lund, 2020), Co-cultural Theory (Makkawy & Long, 2021), Career Ecosystem Theory (Bhaskar et al., 2023), and Career Sustainability Theory (Bhaskar et al., 2023). The remaining nine selected papers did not specify the theories that were utilised.

All the studies (n=12) employed a cross-sectional technique. Out of all the studies, 66.6% (n=8) were quantitative, using an online survey as the research method (Connors et al., 2023; Garcia et al., 2022; Gupta et al., 2021; Jeon et al., 2022; Kim & Park, 2023; McDonnall & Lund, 2020; Tagoe et al., 2021; Zaheer et al., 2024). 25.0% (n=3) of the studies were qualitative, using in-depth online questionnaires and semi-structured interviews (Bhaskar et al., 2023; Lourens, 2021; Makkawy & Long, 2021). The remaining 8.3% (n=1) of the studies used a mixed-method approach conducted by Patvardhan and Santoki (2019). Qualitative inquiry-based studies utilised autoethnography (Lourens, 2021), phenomenology (Makkawy & Long, 2021; Patvardhan & Santoki, 2019), and Grounded theory (Bhaskar et al., 2023). Software programmes such as SPSS (Connors et al., 2023; Gupta et al., 2021; Kim & Park, 2023; Tagoe et al., 2021; Zaheer et al., 2024), Stata (Garcia et al., 2022), Qualtrics (Connors et al., 2023), NVivo (Bhaskar et al., 2023), and Idiogrid (Patvardhan & Santoki, 2019) were employed for data analysis.

The samples used in the selected studies consisted of 7.6% (n=1) of employers (McDonnall & Lund, 2020), 7.6% (n=1) of certified vision rehabilitation professionals (Connors et al., 2023), 76.9% (n=10) of visually impaired individuals who were currently working (Bhaskar et al., 2023; Garcia et al., 2022; Gupta et al., 2021; Jeon et al., 2022; Kim & Park, 2023; Lourens, 2021; Makkawy & Long, 2021; Patvardhan & Santoki, 2019; Tagoe et al., 2021; Zaheer et al., 2024), and the remaining 7.6% (n=1) were retired employees with vision impairment (Garcia et al., 2022). Six studies mentioned the use of purposive sampling (Bhaskar et al., 2023; Patvardhan & Santoki, 2019; Zaheer et al., 2024), snowball sampling (Connors et al., 2023; Zaheer et al., 2024), a two-phase stratified sampling (Gupta et al., 2021), and stratified random sampling (Garcia et al., 2022) techniques – the sample procedures used in the remaining six selected studies were not specified.

Findings and discussion

This research systematically analysed the literature regarding visually impaired individuals' obstacles to achieving workplace success. This study presented various workplace obstacles-related factors such as unfitting to the workplace environment (Bhaskar et al., 2023; Lourens, 2021; Patvardhan & Santoki, 2019), job insecurity (Jeon et al., 2022), lack of reasonable accommodation (Bhaskar et al., 2023; Gupta et al., 2021; Jeon et al., 2022; Makkawy & Long, 2021; McDonnall & Lund, 2020), and rehabilitation services (Connors et al., 2023; Gupta et al., 2021), poor psychological conditions (Bhaskar et al., 2023; Garcia et al., 2022; Jeon et al., 2022; Kim & Park, 2023; Tagoe et al., 2021; Zaheer et al., 2024), and unsatisfactory wages (Jeon et al., 2022; Zaheer et al., 2024). The perspectives of working and retired individuals with vision impairment, as well as employers and certified vision rehabilitation professionals (assistive technology institutional specialists, vision rehabilitation therapists, low vision therapists, and orientation and mobility specialists), were considered in the discussion.

Unfit the workplace environment

An unfitted workplace environment is a significant factor that can hinder the success of those with vision impairment. Consequently, individuals with visual impairments must acquire and adjust appropriate skills to integrate into the work environment (Bhaskar et al., 2023). They experience a sense of inclusion, value, respect, and belonging among their non-disabled colleagues only when certain conditions are met (Lourens, 2021). Visually impaired individuals are more likely to integrate well into their work if employers address their specific accessibility needs and create a disability-inclusive workplace environment (Patvardhan & Santoki, 2019).

Job insecurity

Job insecurity is also a significant obstacle to workplace success for visually impaired individuals. In South Korea, visually impaired individuals had a higher rate of non-regular work compared to physically disabled due to insecure job. The rates were 64.7% and 53.2%, respectively, indicating the increased job insecurity experienced by visually impaired and physically disabled individuals. Furthermore, the study conducted by Jeon et al. (2022) revealed that visually impaired individuals between the ages of 20 and 49 had much more secure jobs compared to those aged 50–64.

A lack of reasonable accommodation

The absence of reasonable accommodation poses a substantial obstacle to the workplace success of individuals with visual impairments. According to Makkawy and Long (2021), providing reasonable accommodation can yield optimal results for them. Therefore, 26.0% of visually impaired individuals in Canada made a request, but their employers did not support their request (Gupta et al., 2021).

Assistive technology plays a significant role in enhancing the performance of visually impaired individuals in many work-related tasks (McDonnall & Lund, 2020). It is considered a crucial factor in achieving success, enabling visually impaired individuals to be highly productive and on par with their sighted counterparts (Bhaskar et al., 2023). Canadian employees with vision impairments required and had access to several accommodations, including adjusted working hours, the option to work from home, and a modified workstation. The percentages of employees who utilised the abovementioned accommodations were 45.0%, 38.5%, and 37.0%, respectively. Conversely, a computer equipped with specialised software, communication tools, and technical aids was required, but they were not as readily accessible, with percentages of 27.0%, 22.0%, and 14.0%, respectively (Gupta et al., 2021). It is crucial to provide appropriate vocational training for visually impaired personnel to enhance their productivity and enable them to be on par with their non-disabled colleagues (Bhaskar et al., 2023; Makkawy & Long, 2021). As previously stated, job training enhances the employability of visually impaired individuals (Jeon et al., 2022).

The primary cause for increased work hours and effort is the absence of reasonable accommodation, particularly regarding workplace computer technology and printed materials (Bhaskar et al., 2023). Consequently, this might result in stress and exhaustion (Makkawy & Long, 2021).

A lack of rehabilitation services

In addition to the absence of reasonable accommodation, a lack of rehabilitation services is a substantial obstacle to the workplace success of individuals with visual impairments. Thus, vocational rehabilitation primarily aims to equip visually impaired individuals with skills such as job application and interview skills, networking skills, independent travelling, dialogue and negotiation for disability disclosure, and adaptive Internet skills. These skills can enhance their life satisfaction, self-efficacy, and job search success, among other opportunities (Gupta et al., 2021).

According to Connors et al. (2023), 97.2% of American and Canadian participants identified the main drawback of vision rehabilitation therapy as the insufficient recognition of therapists' responsibilities in vision, medicine, and the community. The ensuing drawback of vision rehabilitation therapy was a deficiency in understanding vision rehabilitation services. 96.9% of participants believe that the collaboration of all vision rehabilitation specialists has the potential to enhance public awareness and understanding of rehabilitation-related services and jobs. Furthermore, most participants, precisely 85.9%, believed that vision rehabilitation therapists are the intermediary connecting rehabilitation services with the health care system.

Poor psychological conditions

Poor psychological conditions significantly hinder the workplace success of those with visual impairments. Hence, according to Zaheer et al. (2024), job satisfaction is assumed to be positively influenced by organisational virtuousness, which in turn is influenced by psychological capital, including good personality attributes. In addition, job satisfaction among Pakistani individuals with vision impairment increased due to their monthly salary rise. Furthermore, visually impaired Korean individuals aged 20–49 with a disability onset of 25 years or more had higher levels of job satisfaction (Jeon et al., 2022).

Moreover, visually impaired individuals in Ghana had a decline in their quality of life after 40 years old (Tagoe et al., 2021). According to the study by Garcia et al. (2022), 80.0% of visually impaired Filipino individuals aged 55–83 reported a satisfactory quality of life. Among those with diabetes, the percentage was slightly lower at 61.7%. The main factor contributing to the psychological well-being of visually impaired individuals in India was the approval and acceptance of their sighted colleagues (Bhaskar et al., 2023).

Nevertheless, because of the educational disruptions, Korean individuals with childhood-onset disabilities experienced lower vocational well-being compared to those with adult-onset disabilities (Jeon et al., 2022). Visually impaired individuals had a greater degree of depressive mood compared to the general population. Depressive mood can arise not only from the stress of daily life and prejudice based on disability but also from the stress specifically related to the disability itself. The level of depression decreased when visually impaired employees had satisfaction in their interactions with their family and friends (Kim & Park, 2023).

Unsatisfactory wages

Unsatisfactory wages can also serve as an obstacle to workplace success among visually impaired individuals. Consequently, female individuals in Korea who are visually impaired receive lower wages compared to their male counterparts. Individuals between the ages of 50 and 64, who do not need professional skills, had a higher wage than individuals between the ages of 20 and 49. The average salary for the former group was US\$1438, while for the latter group, it was US\$1162. Individuals with vision impairment who acquired their disability at the age of 16 or later had a significantly lower average income. Regarding the age of disability onset, individuals with disabilities for more than 25 years had a higher monthly wage. Specifically, females with more than 25 years of vision impairment working in permanent positions had a more extensive monthly salary than those with 0–5 years of visual impairment (Jeon et al., 2022). Furthermore, the primary factor contributing to job satisfaction among visually impaired individuals in Pakistan was the augmentation of their monthly (Zaheer et al., 2024).

Table 1 provides information on the location, objective, research questions, theory, method, approach, sample/sample size, mean age, and sex of research participants expressed as percentages. It also details the sampling techniques, instruments used, results drawn, and limitations of the identified 12 studies.

Conclusion

Individuals with a variety of health disorders and disabilities face more significant obstacles in the workplace compared to individuals without such issues (Gulyamova et al., 2023). According to the World Health Organization (WHO, 2020), individuals with disabilities face many obstacles related to attitudes, physical access, and communication. Regarding individuals' attitudes, they face stigma

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References	Country	Objective of the study	Research question(s)	Method/approach/ theory	Sample/sample size	Mean age and sex/sampling technique/ software	Instruments	Conclusions	Limitations of the study
Patvardhan and Santoki (2019)	India	To suggest ways in which the government and the companies can reach out to sight-impaired individuals to assist them in equipping the facilities.	NA (not available)	A cross-sectional study. Mixed method. NA	A total of 60 sight- impaired full-time employees in the service sector (NGO, call centres, school staff, IT, hospitals, banks)	NA NA Purposive sampling Idiogrid, version 2.4	'What are the various problems they are confronted with while accessing a specific infrastructure unit such as shopping malls, government buildings, and working organizations?' 'How accessibility can be improvised further in line with the government's accessibility andit accessibility andit accessibility andit accessibility andit accessibility andit accessibility andit accessibility accessibility andit accessibility accessibility accessibility accessibility accessibility accessibility accessibility accessibility accession accessio	Companies should introduce their policy to their sight-impaired employees including it in their induction programme	Only 60 people with sight impairments were involved in the study
McDonnall and Lund (2020)	States States	To examine the goodness of fit of the Theory of Planned Behaviour model to employer hiring intentions for blind applicants using structural equation modelling (SEM)	₹ Z	A cross- sectional study. Quantitative (an online survey) Theory of Planned Behaviour	A total of 388 hiring managers (human resource personnel, directors, company owners, chief executives, supervisors) from different-sized companies (with 15-2500 employees)	45–64 years old - 62.4% 59.8% – male NA NA	'l am ready (intend to, am planning, have decided, will) to hire an individual who is legally blind' 'Legally blind can perform the same quantity/quality of work' 'Awareness of jobs at own company that a legally blind person could person could so on	The main reason why employers hire people with sight impairments is their attitudes about the productivity of their employees	A cross-sectional study Self-reported data There was no evaluation of the impact of artitudes, norms, and control on the actual hiring behaviour of sight-impaired employees

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References	Country	Objective of the study	Research question(s)	Method/approach/ theory	Method/approach/ Sample/sample size theory	Mean age and sex/sampling technique/ software	Instruments	Conclusions	Limitations of the study
(2021)	South Africa	To discuss the psychological costs of job performance To illustrate the essence of an open, responsive, and creative attitude of ablebodied peers and employers	₹ Z	A cross-sectional study. Qualitative. Autoethnography	A sight-impaired university lecturer in Psychology	NA NA	₹ Z	University policies should include the rights of disabled academics. Both managers and disabled academics should be aware of these rights (particularly about obtaining RWA) before employment	₹ Z
Makkawy and Long (2021)	The United States	To explore the experiences of sight-impaired employees in the virtual workplace via a phenomenological approach	What are the experiences of sight-impaired employees in the virtual workplace about technology access?	A cross-sectional study Qualitative (in-depth online questionaire) Interpretive phenomenology Co-cultural theory	A total of 10 full- time employees self-identify as sight-impaired with experience working in a virtual workplace at least 75% of the time: in transportation, labour relations, health care, higher education, human services, government, and technology	22–30 years old – 30%, 31–40 – 30%, 41–50 – 10%, 51–60 – 10% and 61–65 – 20% NA NA	How do any beliefs limit you from fully participating in the workplace? "Have you ever experienced discrimination while being a teleworker?" How did you aquire access to technology at your workplace?" "Describe the interaction between the access technology and the mainstream technology and the mainstream technology and so on	Technology, ingenuity, and defined by blindness are primary themes, which were emerged	₹

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References	Country	Objective of the study	Research question(s)	Method/approach/ theory	Method/approach/ Sample/sample size theory	Mean age and sex/sampling technique/software	Instruments	Conclusions	Limitations of the study
Tagoe et al. (2021)	Ghana	To determine the causes of being sight-impaired among Eye Centre staff	₹ Z	A cross-sectional study Quantizative NA	A total of 84 staff members (research officers, resident doctors, ophthalmic nurses, and ophthalmologists) at the Korle Bu Teaching Hospital	23–60 years old — mean 35.8 64.3% – female. NA SPSS, version 20	₹ 2	The main causes of being sight-impaired are uncorrected refractive error, open-angle glaucoma, macular scar, and sutural cataract	₹ Z
(2021)	Canada	To explore the employment rates, support, and barriers of sight-impaired people	∢ Z	A cross-sectional study Quantitative NA	A total of 50,000 individuals	5.7%— 15–24 years old, 58.7% 16.4 years old, and 35.5%— above 65 years old two-phase stratified sampling SPSS, version	The level of difficulty in vision even wearing glasses/contact elenses.' How often does this difficulty limit daily activities'	Labour force participation is much lower among sight-impaired people than the general population	The cause-effect relationships between different predictors of employment among sight-impaired people are not determined people are not determined beplation living in collective dwellings were excluded Stigma, job quality, and experiences of sight-impaired people are not taken into consideration

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References	Country	Objective of the study	Research question(s)	Method/approach/ theory	Sample/sample size	Mean age and sex/sampling technique/ software	Instruments	Conclusions	Limitations of the study
Bhaskar et al. (2023)	India	To explore the factors that lead to career sustainability and success among employees of various professions with sight impairment	How do the sight-impaired overcome obarriers (stereotypes, stigma, and discrimination) and manage to build successful and sustainable careers?	A cross-sectional study Qualitative (semi-structured interviews) Grounded theory Career ecosystem theory theory theory theory theory	A total of 66 fully blind employees: 43 – high career achievements (HCA) (accountants, lawyers, IT professionals, entrepreneurs, government policymakers, performing artists, start-up entrepreneurs) and 23 – low career achievements (LCA) (small-shop owners, front-desk clerks, office attendants, front-desk clerks, office attendants, front-desk clerks, office attendants, assage therapists, receptionists, and analyses.	21–65 years old – median 33 NA NA Sampling NVivo 10	∢ Z	Employees with HCA are 'masters' while employees with LCA are 'victims' of circumstance	A lack of a strong sample size
Jeon et al. (2022)	South Korea	To investigate the relationship between labour market outcomes and the onset age of sight impairment among 20–49- and 50–64 year-old employees	₹ Z	A cross- sectional study. Quantitative NA	A total of 583 participants (245 – 20-49/ears old and 338 – 50-64 years old)	20–49 years old NA – 38.9% and 50–64 years old – 57.4% 68.5% – male (20–49 years old) and 59.7% – male (50–64 years old) NA	∢ Z	When the age of visual impairment onset increases, the possibility of being employed decreases among 20-49 year-olds. The employees with more is low among female employees with more than 25 years of vision impairment, working on both a permanent and temporary basis, it is high among 50-64-year-old temporary employees whose work does not require professional skills	Sight-impaired employees with severe levels of disability were not included insufficient final sample size

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Garcia et al. (2022)	The Philippines	To determine the association between quality of life (QoL) in participants with Type 2 Diabetes Mellitus (T2DM), vision impairment (VI), and hearing impairment (HI)	₫ Z	A cross-sectional study Quantitative NA	A total of 301 working and retired university employees with sight impairments (aged 55 and above)	55–83 years old – mean 64.8 years 50.2% – male Stratified random sampling STATA SE 14	The 27-item WHO-QoL questionnaire (domains: social relationship, psychological relationship, physical health, and environment)	All T2DM participants with HI, 80% with VI, and more than 70% with dual sensory impairments (DSI) had a good QoL	Separate analysis for eyes and ears was not conducted
Zaheer et al. (2024)	Pakistan	To investigate the role of psychological capital (PC) and capital (PC) and virtuousness (OV) in predicting job satisfaction (IS) among sight-impaired employees	∢ Z	A cross-sectional study Quantitative NA	A total of 160 sight-impaired professionals in law, teaching, and so on	21–58 years old – mean 34 years 72.5% – female Purposive and snowballing sampling 21	The 15-item Organizational Viruousness Scale (subscales: optimism, integrity, compassion, trust, and forgiveness) The 12-item Psychological Capital questionnaire (subscales: optimism, resilience, self-efficacy, and hope) The 5-item General Job Satisfaction Scale	A positive relationship exists between PC, OV, and JS among sight-impaired employees. In turn, PC is the bridge between JS and OV	Small sample size Limited sight- impaired employees from urban areas were involved in the study

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Kim and Park South (2023) Korea	South Korea	To assess the mental health of sight-impaired people To examine the factors associated with depressive mood among sight-impaired people	Ž	A cross- sectional study. Quantitative NA	A total of 559 registered sight- impaired people aged 15–64 years	15-29 years old - 16.6%, 30-39 - 22.0%, 40-49 - 22.0%, 50-59 - 22.7%, and - 22.7%, and - 22.7%, and NA SPSS, version 23	'How have you ever felt so depressed or hopeless as to have noticeable problems in day-to-day activities for more than 2 weeks during the past year?'	In addition to stress due to daily life, depressive mood can also result from stress due to disability among sight-impaired people. The depressive mood became lower when sight- impaired people were	A cross-sectional study The definition of depressive mood is a bit different in this study Depression was measured by a dichotomous question, not by a
Connors et al. (2023)	The United States and Canada	To investigate the strengths, weaknesses, opportunities, and threats (SWOT) of vision rehabilitation therapy (VRT)	₹	A cross- sectional study. Quantitative NA	A toral of 255 certified vision rehabilitation professionals	23-30 years old – 6.7%, 31-40 – 20.8%, 41-50 – 15.7%, 51-60 – 28.2% and 61 and older – 28.6% – 28.5% – female Snowball sampling. Qualtrics & SPSS, version 28	A total of 29 specific SWOT statements	The weakness of vision rehabilitation therapy is the lack of awareness of the roles of therapists in the fields of vision and medicine as well as the community	Only 3000 of certified vision rehabilitation therapists were involved in the study Self-reported data

and discrimination and are seldom consulted for their opinions or included in decision-making processes. Many service providers possess an inadequate understanding of the rights of persons with disabilities (PWDs) and lack policies to accommodate them. Physically, individuals with disabilities encounter challenges when accessing accommodation rooms, height-adjustable tables, transportation, elevators, toilets, passages, doorways, drinking water, and handwashing facilities. The absence of information presented in sign language, Braille, large-print format, plain language, or visuals poses a communication obstacle for those with hearing, vision, and cognitive impairments.

By fostering an inclusive work environment that incorporates individuals with disabilities, they can effectively fulfil their job responsibilities at the necessary standard and, in some cases, beyond the anticipated level of performance. Offering appropriate accommodations for eligible disabled individuals is a crucial means of fostering a workplace climate that is supportive of people with disabilities. Providing appropriate accommodation is a vital stage to enhance productivity, job performance, and career advancement while also enhancing motivation, self-assurance, and psychological well-being for those with disabilities, particularly those with visual impairments.

To cultivate a corporate atmosphere that fosters inclusivity and provides ample support to those with visual impairments, it is advisable to conduct training sessions and instructional campaigns through mass media channels, posters, and brochures. This will help to educate employers and colleagues since the primary factor contributing to creating a non-inclusive and unsupportive work environment is the absence of knowledge regarding blindness-related matters. Moreover, it is imperative to guarantee that those who are fully blind (with a visual ability ranging from 0% to 3%) and those who are almost blind (with a visual ability ranging from 4% to 8%), especially researchers and educators, are provided with Braille-based technologies and materials. The devices and materials that fall under this category are Braille printers, Braille displays, Braille layouts, Braille books, Braille journals, Braille posters, and Braille maps. Providing voice-based technologies and materials, such as talking traffic lights, talking buses, speaking canes, computers with screen readers, audiobooks, journals with audio capabilities, and talking maps and globes, is crucial for meeting the needs of individuals who are fully blind, almost blind, or have limited vision (with a visual ability ranging from 9% to 20%). Individuals with impaired eyesight should be provided with magnification devices, such as mechanical, electrical, or video magnifiers. These resources should be accessible at organisations for blind people, libraries catering to visually impaired individuals, and educational or professional settings that accommodate those who are fully blind, almost blind, or have low vision ability.

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References

Bhaskar, A. U., Baruch, Y., & Gupta, S. (2023). Drivers of career success among the visually impaired: Improving career inclusivity and sustainability in a career ecosystem. *Human Relations*, 76(10), 1507–1544. https://doi.org/10.1177/00187267221103529

- Connors, E. M., Abbott, P. M., Norris, D. E., Ottowitz, J. J., & Morren, B. N. (2023). The perspectives of vision rehabilitation therapists on the state of the profession: A time for action? *Journal of Visual Impairment and Blindness*, 117(4), 303–313. https://doi.org/10.1177/0145482X231194634
- Dong, S., & Guerette, A. R. (2013). Workplace accommodations, job performance and job satisfaction among individuals with sensory disabilities. *Australian Journal of Rehabilitation Counselling*, 19(1), 1–20. https://doi.org/10.1017/jrc.2013.1
- Dos Santos, L. N., & De Carvalho, R. J. M. (2012). Ergonomics and accessibility for people with visual impairment in hotels. *Work*, 41, 1417–1424. https://doi.org/10.3233/WOR-2012-0332-1417
- Garcia, A. P., De la Vega, S. A., Giron, M. S., & Fabito, S. J. (2022). Visual and hearing impairments among working and retired employees with type 2 diabetes mellitus in two academic communities in the Philippines. *Acta Medica Philippina*, 56(3), 72–81. https://doi.org/10.47895/amp.vi0.3133
- Gulyamova, S. T., Abdul Aziz, S. F., Nik, H. O., & Rusyda, H. M. (2023). Workplace-related socioeconomic issues associated with job performance and productivity among employees with various impairments: A systematic literature review. Social Sciences, 12(5), 1–25. https://doi.org/10.3390/socsci12050275
- Gupta, S., Sukhai, M., & Wittich, W. (2021). Employment outcomes and experiences of people with seeing disability in Canada: An analysis of the Canadian survey on disability 2017. *PLOS ONE*, *16*, 1–17. https://doi.org/10.1371/journal.pone.0260160
- Jeon, B., Koo, H., Lee, H. J., & Han, E. (2022). Effect of the age of visual impairment onset on employment outcomes in South Korea: Analysis of the national survey on persons with disabilities data. BMC Public Health, 22(1613), 1–15. https://doi.org/10.1186/s12889-022-13747-z
- Joshi, B., & Thomas, B. (2019). Barriers faced by persons with disabilities in formal employment in India. *Disability, CBR and Inclusive Development*, 30(3), 125–132. https://doi.org/10.5463/dcid.v30i3.823
- Kim, A. M., & Park, J. H. (2023). Mental health and depressive mood in people with visual impairments. *Journal of Visual Impairment and Blindness*, 117(4), 314–325. https://doi.org/10.1177/01454 82X231193970
- Lourens, H. (2021). Supercripping the academy: The difference narrative of a disabled academic. *Disability & Society*, 36(8), 1205–1220. https://doi.org/10.1080/09687599.2020.1794798
- Makkawy, A., & Long, S. (2021). Visual impairment in the virtual workplace: Exploration, experience, and interpretation. *Journal of Visual Impairment and Blindness*, 115(4), 299–309.
- McDonnall, M. C., & Lund, E. M. (2020). Employers' intent to hire people who are blind or visually impaired: A test of the theory of planned behavior. *Rehabilitation Counseling Bulletin*, 63(4), 206–215. https://doi.org/10.1177/0034355219893061
- Patvardhan, N., & Santoki, S. (2019). Connecting governments' accessibility policy to its visually challenged stakeholders for an all-inclusive smart infrastructure. *International Journal of Innovative Technology and Exploring Engineering*, 8(11S), 280–285. https://doi.org/10.35940/ijitee.K1054.09811S19
- Tagoe, N. N., Abaidoo, B., Fordjuor, G., Seidu, Y. A., Ac-Quah, S. A., Akafo, A. E., Buxton, E., Fiadoyor, D., Afenyo, G., Asiedu, S. O., & Essuman, V. A. (2021). Visual impairment among eye health workers in a tertiary eye centre in Ghana. *Ghana Medical Journal*, 55(4), 278–284. https://doi.org/10.4314/gmj. v55i4.8
- World Health Organization. (2020). Disability-inclusive health services toolkit: A resource for health facilities in the western pacific region.
- Zaheer, A., Rauf, N. K., & Wazir, V. (2024). Organizational virtuousness and job satisfaction among employees with visual impairment: Role of psychological capital. *British Journal of Visual Impairment*, 42(2), 390–398. https://doi.org/10.1177/02646196221135009