Pak. j. life soc. Sci. (2024), 22(2): 21937-21953 E-ISSN: 2221-7630;P-ISSN: 1727-4915

Pakistan Journal of Life and Social Sciences
www.pjlss.edu.pk

https://doi.org/10.57239/PJLSS-2024-22.2.001555

RESEARCH ARTICLE

# Breaking Barriers: Exploring the Challenges Faced by Persons with Disabilities in the Labor Market

Elshemy, Radwa[1]*, Alzahrani, Fahad[2]; Moussa, Yasser[3]; Almasoudi, Fahad [4], Fawzy, Shereen[5], Alqarni, Ali[6]; Hashem, Heba[7], Jarah, Norah[8]

[1,2,3,4,5,6,7,8] University of Tabuk, Tabuk, Saudi Arabia

***ARTICLE INFO***

Received: Oct 22, 2024

Accepted: Dec 27, 2024

***Keywords***

Persons with Disabilities (PWD)

Challenges

Employment

Labor market

***Corresponding Author:**

relshemy@ut.edu.sa

**ABSTRACT**

This study aimed to shed light on the difficulties encountered by persons with disabilities (PWD) in the labor market. Despite numerous legislation and laws to ensure diversity in the labor market, PWD do not experience the same access to work opportunities as their counterparts without disabilities. Moreover, this study seeks to investigate employer attitudes towards hiring PWDs, identify the barriers and challenges PWD encounter in employment and their workplace, and analyze proposed solutions from the point of view of experts, specialists in special education and employers. The aim is to identify and recommend a suitable approach and procedure to assist graduated students with disabilities in overcoming the challenges they face when transitioning to the labor market. Data were collected and analyzed through questionnaires and interviews. Based on the employers' responses, five main challenges and obstacles were found to hinder the employment of PWD and prevent them from achieving success in the labor market. The identified challenges include institutional and administrative issues, accessibility and physical barriers, attitudinal, social and cultural obstacles, lack of skills and assistive technology services, and misconceptions surrounding disability inclusion. From the proposed solutions provided by specialists, experts in special education and employers, it is recommended to invest in comprehensive training programs and support will enhance their understanding and empower PWDs with the necessary knowledge and skills to navigate the job market successfully and achieve remarkable success.

## INTRODUCTION

Persons with disabilities (PWD) are confronted with a large number of barriers starting in the early stages of life, which can significantly impact their capacity to find decent work. The transition from university to the labor market is critical in many students' lives since it relates to their economic and psychosocial well-being (Gillies & Pedlar, 2003; Heckhausen, 2002) and it often determines their future (Bynner & Parsons, 2002). PWDs are typically at risk of being marginalized in the workplace and they usually expect unemployment, working in short-term or unskilled jobs (Bynner, Ferri & Shephard, 1997). The disability rights movement asserts that PWDs should have equal access to all facets of society, including education and employment (Oliver & Barnes, 1993; Rioux, 2002; 2003). Despite these efforts, many graduated students are disappointed as they enter the labor market, unable to get the jobs they aspire to and deserve (Bynner & Parsons, 2002).

Akhdar (2015) highlighted that many studies that indicate that public universities in Saudi Arabia are not linked to the world of work, and those students do not receive sufficient preparation to engage in the work field and public life. According to Akhdar, an analysis of educational outcomes revealed clear and tangible weaknesses and a decline in productive efficiency. Additionally, there is a notable inadequacy of the competencies and experiences provided by these educational systems,

making them insufficient for meeting the demands of economic competition and not preparing students for entry into the labor market.

**Statement of the problem**

PWD are over-represented among the world's poor, and many experience multiple deprivations at higher rates and in wider breadth, depth, and severity than people without disabilities (Mitra, Posarac, & Vick, 2013; Samman & Rodriguez-Takeuchi, 2013). The lack of access to paid work and/or wider economic activity is a significant social disadvantage, perpetuating the link between poverty and disability across various national contexts (Braitwaite & Mont, 2009; Haveman & Wolfe, 1990; Hoogeveen, 2005; Peiyun & Livermore, 2008; WHO, 2011; Zaidi & Burchardt, 2005). The Millennium Development Goals (MDGs) on eliminating poverty, launched by the United Nations in 2000, are unlikely to be achieved unless explicit and specific efforts are undertaken to support disabled people's participation in labor market activities (Department for International Development [DFID], 2000; Groce & Trani, 2009). For instance, in 2002, the World Bank initiated the integration of disability considerations into its operations and analysis (Mont, 2007). A major catalyst in this context is the Convention on the Rights of Persons with Disabilities (CRPD) adopted by the United Nations in 2006. This marked a significant advance in the recognition of the rights of disabled persons, including the right to work on an equal basis with others (United Nations [UN], 2006). With increasing recognition of employment as a key factor of empowerment and integrating people with disabilities into society, a shift to a broader framework for action has occurred. This shift underscores the role of interventions to improve labor market outcomes, which is receiving increased international attention (DFID, 2000; International Labor Organization [ILO], 2008; WHO, 2004).

The barriers faced by people with disabilities globally in accessing and sustaining paid work is a profound social challenge. Various reasons are provided to explain why these barriers exist and new policy visions are frequently offered up. Yet, efforts to promote development and poverty reduction have not always adequately included disability; for instance, people with disabilities are not explicitly included in MDG targets and indicators (WHO, 2011). The links between disability and employment vary considerably across impairment categories, their severity and duration (WHO, 2011; World Blind Union, 2004).

A range of environmental and personal factors can present barriers for persons with health conditions to function and participate in economic life. For example, the physical accessibility of local workplaces and transport facilities, available accommodations, and social attitudes can restrict participation in the labor market (Baldwin & Johnson, 2006; Bound & Burkhauser, 1999; Mitra & Sambamoorthi 2008). Lack of access to education and training or financial resources can result in exclusion from the labor market, and social protection systems may create disincentives for PWD to enter the labor market. There is evidence that people with disabilities face disadvantages when seeking to access and sustain employment in competitive, tight labor markets (Mitra, 2009). The particular educational facilities, employment support, health services, disability benefit systems, and other interventions that are available in a given context can influence the extent of PWD employment and its consequences.

Graduated students with disabilities who are marginalized, and lacking traits valued by employers face difficulties not only in securing employment but also in achieving a rewarding career. This can have far-reaching implications on their lives and futures. Although the transitional experience of youth with disabilities is well documented (Davies & Beamish, 2009; Estrada-Hernandez, Wadsworth, Nietupski, Warth & Winslow, 2008; Phelps & Hanley-Maxwell, 1997; Test et al., 2009; Wagner & Blackorby, 1996; Winn & Hay, 2009), we still face many challenges when transitioning students with disabilities from higher education to the labor market.

Despite work's importance for mental, physical, and material well-being, many PWDs continue to face multiple barriers in obtaining or returning to work (OECD, 2003; OECD, 2009b).

PWD in many countries have much lower employment rates than the general population, leading to poverty or low income and reliance on permanent disability benefits and a lower quality of life (Bloch & Prins, 2000; WHO, 2011). At the same time, many countries, including Saudi Arabia, face workforce shortages (particularly in some regions and especially for skilled jobs). This contributes to a considerable rise in public expenditures for disability benefits and work incapacity pensions, which threaten the sustainability of states' social and financial systems (OECD, 2012; Praxis, 2011; Saar Poll, 2013). People with disabilities are too often overlooked as individuals who can make meaningful contributions to the workforce and their communities.

Notwithstanding legislation specifically targeted at promoting and protecting the rights of people with disabilities (e.g., Americans with Disabilities Act [1990] of 1991), the employment of people with disabilities is still lagging when compared to their able-bodied, and comparably educated counterparts (WHO, 2011; see also Colella & Bruyère, 2011; Kruse & Schur, 2003).

The percentage of employed PWDs in the Kingdom of Saudi Arabia who could work was 7.7% in 2016, increasing to 14.6% in 2022, according to the National Transformation Program. This was due to the Kingdom seeking to create a PWD suitable labor market. However, it has not yet achieved the desired goal in the Kingdom`s Vision 2030.

A primary reason for the lower participation rates and underemployment of individuals with disabilities is that employers often harbor pessimistic views about the work-related abilities of these individuals. These pessimistic views have been well-documented in literature (e.g., Gold, Oire, Fabian, & Wewiorksi, 2012; Hernandez et al., 2008; Kaye, Jans, & Jones, 2011; Lengnick-Hall, Gaunt, & Kulkarni, 2008; see also white papers by Domzal, Houtenville, & Sharma, 2008; Gaunt & Lengnick-Hall, 2014). An in-depth analysis of where in the employment relationship employers' pessimistic views appear, and whether these concerns are supported by empirical evidence is missing.

To address this gap, this descriptive and qualitative study was conducted in order to contribute to understanding the challenges facing university graduates with disabilities as they move through the transitional stage from higher education to the labor market; it identifies the challenges faced by PWD for employment and the barriers they experienced in the workplace and social participation, from both their perspective and from that of the employers. Finally, we aimed to identify different recommended approaches and procedures for graduated students with disabilities to overcome the challenges and achieve better success in transitioning to the labor market. Moreover, it provides recommendations for organizations committed to creating more effective, equitable, and inclusive workplaces for all. This is achieved through exploring proposed solutions from the point of view of experts, specialists in special education and employers. It also involves determining the fields of employment in which graduates with disabilities can work, which suit their abilities and capabilities from specialists' perspectives in special education and related to their academic specialization.

## Connecting university to the labor market

The process of linking education and work can have great economic, social and educational benefits, and that teaching work skills to those with a good basic education is easier and less costly than training the uneducated or those with little education (Elshemy, 2020). Akhdar (2015) pointed out that educating people with disabilities requires relevant stakeholders to focus on professional guidance for learners, introducing them to the professions in the labor market, and instill the skills required to work in them along with general academic education.

## Unemployment of people with disabilities

Many college graduates often face difficulty in obtaining a job, and they unable to compete effectively in the labor market. This difficulty increases with PWD, as there is often a mismatch between the skills of many individuals with disabilities and the demands of the labor market (Akhdar, 2015). Looking at the employment landscape for persons with disabilities in the Arab world reveals that a significant majority suffer from unemployment due to various factors. Specifically, the unemployment rate for the Saudi population aged 15 years and over for the second quarter of 2017

is estimated at 12.8% out of the total Saudi population of 308,472, 31, which is an indication of the high unemployment rate.

**Obstacles to rehabilitation and employment of people with disabilities:**

1. Some people don't receive adequate education.
2. The inefficiency of training and skill development programs directed at them.
3. Some employers do not recognize the certificates granted to them.
4. PWDs are not keeping up with basic job requirements and professional growth, especially regarding languages.
5. The need to make necessary adjustments in the work environment to suit the abilities and capabilities of the disabled.
6. Low wages for PWDs compared to others, and lack of job security.
7. They are not sufficiently accepted as members with the same rights and aspirations as ordinary persons.
8. Employers are not convinced of the capabilities of PWDs and view them as less productive than others.
9. Modern technologies and the lack of training skills that are in line with the requirements of the labor market.

This research will also address employment challenges faced by students with disabilities through their transition from higher education to employment. It is recognized that students with disabilities may need additional support to access employment (OECD 2011; AHEAD 2014); however, it is unclear what support they should take. Therefore, this research explores the perspectives of employers and graduates with disabilities who plan to access employment. It investigates the support and skills that these students require before transitioning to the labor market, as well as the training courses they need during their university education. These skills will be achieved through the design of a higher education-to-labor market transition program, such as employment services, in relation to job search, CV writing, job interview skills, technical skills, personal skills (Enhancing self-confidence, developing creative intelligence, time management, and interacting with people in the labor market community and others), foreign language learning skills and computer skills.

**Research Questions**

Q1. What are the most important employability challenges for people with disabilities?

Q2. What is the attitude of employers towards hiring persons with disabilities?

Q3. What are the suggested recommendations to meet the challenges of students with disabilities upon graduation and before transitioning to the labor market?

**Research Objectives**

The following list provides the research objectives:

1. Identifying the attitude of employers towards hiring persons with disabilities.
2. Identifying the most important employability challenges for people with disabilities
3. Determining the fields of employment in which graduates with disabilities can work, which suit their abilities and capabilities from the point of view of specialists in special education and related to their academic specialization.
4. Bridging the gap between the learning outcomes of academic programs and the requirements of the labor market by identifying the most important skills that a graduate with disabilities needs to develop to match the requirements of the labor market.

## METHODOLOGY

### Description of the study context

This study targeted persons with disabilities, employers who work with or possibly hire PWDs in the Saudi labor market, as well as specialists and experts in the field of special education.

### Participants

The participants were intentionally selected for the study from four regions in Saudi Arabia, namely, Tabuk region, the central region, the easter region and the Makkah region. The criteria were as follows:

1. The working employees are persons with non-multiple disabilities.
2. Employers, managers, and supervisors who work with persons with disabilities.
3. Specialists and experts in special education.

### Study approach and design

This study adopted the Triangulation Design: Multilevel Model (Creswell, Plano Clark, et al., 2003). The model generally involves the concurrent, but separate, collection and analysis of quantitative and qualitative data so that the researcher may best understand the research problem. The researcher attempts to merge the two data sets, typically by bringing the separate results together in the interpretation or by transforming data to facilitate integrating the two data types during the analysis (Creswell, 2005; Dörnyei, 2007). This is hoped to assist in achieving a fuller understanding of a target phenomenon, besides improving the validity of the research and reaching multiple audiences (Dörnyei, 2007). Additionally, this study adopted the exploratory sequential design in which the researchers collected qualitative and quantitative information sequentially in three phases (as in Figure 1), with one form of data collection following and informing the other. In other words, this design consists of first collecting qualitative data and next collecting quantitative data and then collecting and analyzing qualitative data, which helps to explain or elaborate on the quantitative results (Creswell & Plano Clark, 2011; Tashakkori & Teddlie 2008; Onwuegbuzie et al. 2010). In this design, qualitative data is collected by interviewing employers, managers, and supervisors in order to identify important points about the problem. In the next step, quantitative data is collected through a survey questionnaire to participants in the study from hiring individuals with disabilities and analyzing them After analyzing the quantitative data and discovering the research problem, the researchers collected qualitative data again by conducting interviews and asking open-ended questions to the participants ranging from employers, managers, specialists, and experts in special education.

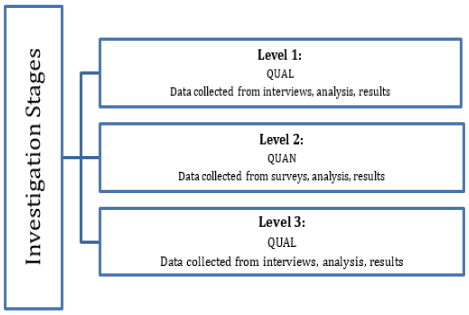


**Figure 1: The exploratory sequential design (Tashakkori & Teddlie, 2003)**

Given the primary aim of this study, two instruments were determined to be used for data collection: an interview and a questionnaire. These are discussed next.

## Interviews

Semi-structured individual interviews were the study tool for collecting qualitative data in this mixed study; To allow the natural emergence of topics during the interview.

An interview was conducted with the study sample of employers, managers and supervisors to identify their attitudes towards employing people with disabilities and to identify the most important challenges and obstacles facing workers with disabilities in the labor market. Moreover, provide some proposed solutions to meet the challenges of graduate students with disabilities before the transition to the labor market.

The interview was applied in the first and third stages of data collection. In the first stage, the interview consisted of two parts as follows:

The first part consists of (14) specific questions addressed to employers, managers and supervisors who have employed people with disabilities. The answers to these questions are either positive or negative, as the questions vary in terms of the employers' point of view regarding the capabilities of the disabled person, and the extent to which they perform the professional work required of them.

The second part consists of (8) questions addressed to employers, managers and supervisors who have employed persons with disabilities. Questions varied about employers' tendency to hire people with disabilities, and the most important challenges facing workers with disabilities in the labor market.

The interview was applied in Stage 3, and it consisted of questions addressed to specialists and experts in special education. During this stage, the questions focused on identifying key proposed solutions for the employment and success of PWDs in the labor market. The focus was on how higher education can offer vocational guidance and qualify graduate students professionally before they transition to the labor market.

## Questionnaire

The quantitative study relied on a questionnaire designed by researchers, as it is an appropriate tool to obtain facts, data, and information related to a specific reality. It is in the form of several questions that the research sample members are asked to answer (Obeidat, Abdel Haq and Adas, 2014). The questionnaire was built according to the objectives and the study research questions, and with reference to previous research related to the subject of the study (e.g., Al Sawaf, 2015; Bonner, 2017; Behroz-Sarcheshmeh et al., 2017; Ju, 2012; Ju et al., 2012; Kumin & Schoenbrod, 2015; Kim, 2018; McGuirk, 2016; Vanitha & Ramaa, 2013)).

The questionnaire is divided into two parts; the first of which was concerned with the demographic information of the study sample. The second part included five axes including institutional and administrative challenges, accessibility and physical barriers, attitudinal, social and cultural challenges, lack of skills and assistive technology services, and concerns about disability inclusion; to identify the most important challenges and find ways to devise strategies to address these issues. This effort aims to facilitate the rehabilitation of students with disabilities before they transition to the labor market and to empower them in the Saudi labor market.

The questionnaire was presented to a group of special education experts and professors. Following their review, the suggestions and recommendations were incorporated into the questionnaire before finalizing it. The internal consistency of the questionnaire was determined through reliability testing. Cronbach's alpha value was found to be $\alpha \geq 0.726$. Although this value is slightly lower than the expected value, it is acceptable and shows that all the items of the questionnaire provide answers to the research question.

**Table 1: Summary of demographic information of questionnaire**

| Hearing Impairment | Visual Impairment | Physical disability |
|---|---|---|
| 46 | 38 | 69 |
| 153 | | |

## Study procedures

After ensuring the validity and reliability of the study tools, the researchers took the necessary measures to apply them to the study sample as follows:

In stage One, structured interviews were conducted with (42) managers, supervisors, and employers hiring for persons with disabilities. The responses were then collected and analyzed by the researchers. In stage Two, the second study tool (i.e., questionnaire) was designed based on the data collected and analyzed after applying the first study tool (i.e., interviews). Then the questionnaire was distributed to persons with physical, visual and hearing disabilities who were enrolled in all government sectors, centers and departments. A total of (160) individuals were invited, and 153 responded and completed the questionnaire. Next, the questionnaire data was tabulated, coded, and entered into the computer, and then the data was processed statistically.

In the Stage 3, structured interviews were then conducted with 21 experts and specialists who are specialized in educating and training PWD. The responses were then collected and analyzed by the researchers.

## PWD hiring questionnaire

Data from the first qualitative phase were used to develop a questionnaire instrument for the second quantitative phase of the study. Targeting hiring people with disabilities who face challenges in the labor market, the following five dimensions arose from Phase I: 1) institutional and administrative challenges; 2) accessibility and physical barriers; 3) attitudinal, social and cultural challenges; 4) lack of skills and assistive technology services, and 5) concerns of disability inclusion. The questionnaire was thus developed to measure the dimensions in a total of 35 statements on a five-Likert scale divided into sections according to the dimensions, besides five questions at the very beginning for eliciting demographic information. The questionnaire was developed in Arabic. Finally, Cronbach's alpha coefficient (also known as the coefficient alpha technique) was tested for reliability as internal consistency (Cronbach, 1951) and scored .854 which is high reliability (>.7) indicating that this instrument was valid and reliable. Being validated, the surveys were distributed online using Google Forms over the spring semester of 2022.

## Ethical considerations

All ethical considerations were followed throughout the process of conducting this research. All data was generated with explicit permission from the participants. No one was coerced into participating in the study, and all were told they could withdraw from the study at any point in time without repercussions. The online-based questionnaire was set to anonymize responses; therefore, IP address and location and other personal information were not collected.

## Analysis of the interview transcripts

The qualitative phase of the study revealed interesting information about the experiences of employing people with disabilities and the attitudes of employers, managers and supervisors about their employment. To this end, interview responses were transcribed, summarized, and separated into common themes, following the thematic analysis proposed by Braun and Clarke (2006). Interrater reliability was calculated by the joint probability of agreement. Both authors coded the

data objectively, and most subjects agreed. The dispute was determined after further discussion. Frequencies and percentages were then used, as appropriate.

### Analysis of the questionnaire data

The Statistical Packages for Social Sciences (SPSS) program was used to extract the arithmetic means, standard deviations, and percentages of the study sample response, ANOVA analysis of variance, and the Scheffe test.

## RESULTS OF THE STUDY

This research intended to identify the attitude of employers towards hiring persons with disabilities. This section commences with a qualitative analysis of the structured interviews followed by a presentation of the quantitative statistical results and then a detailed exposition of the observed data from Phase 3 interview transcriptions.

### Phase 1 results

The primary purpose of conducting employers` interviews was to answer RQ.1. Six overarching themes became apparent from the thematic analysis. These main themes are shown in Table 2 and discussed next.

**Table 2: Main themes of interview transcripts analysis**

| NO | Main Theme | Frequency |
|---|---|---|
| **1** | Employers' perceptions of hiring PWDs | 90.4% |
| **2** | Employment qualifications of PWDs | 88.1% |
| **3** | The variables affecting the success of PWDs in the labor market | 92.9% |
| **4** | Influence of the type of disability for employment opportunities | 91.5% |
| **5** | Benefits of Hiring PWDs | 82.7% |
| **6** | The most important employability challenges for PWDs | 83.3% |

**Theme 1: Employers' perceptions of hiring PWDs.**

This theme reflects employers' views of whether they are with or against hiring PWD. The top concern of hiring PWDs as shared by the majority (38 out of 42 respondents) is overcoming the negative perceptions about hiring PWDs. Four respondents expressed this notion about hiring PWDs with their full acceptant to hiring PWD. They felt that it is hard to persuade higher management and get co-workers to accept the idea of hiring PWD. As pointed out by two respondents:

- "Getting other employees and customers to understand and accept why we hire PWDs still presents some challenges to me. I guess it's difficult to change the negative attitudes and mindset of a person without disability about PWDs" Respondent #19 (male, 51, General Manager, Recruitment)
- "I'm all for hiring PWDs if they have the right qualifications and are able to do the job. Unfortunately, some employers do not feel the same way...." Respondent #19 (male, 49, Senior Manager).

**Theme 2: Employment qualifications for PWDs.**

Employers discussed the employment qualifications of PWDs through five occupational competencies, namely:(1) digital skills, (2) ICT skills, (3) interpersonal skills, (4) customer service

and marketing skills, and (5) practical skills. Specifically, 88.1% of employers agreed that there were deficiencies in digital skills, followed by deficiencies in information and communication technology skills, and then deficiencies in interpersonal skills. Deficiencies in practical skills and customer service and marketing skills were at the fourth level. Employers also confirmed that PWDs, upon their transition from university education to the labor market, are not professionally qualified enough to succeed in the work entrusted to them, and they also have a noticeable deficiency in professional competencies.

**Theme 3: Variables affecting the success of PWDs in the labor market.**

Employers indicated a set of variables that negatively impact the success of disabled employees in their work. The most important of which are:

- The degree of disability
- The type of disability linked to the type of work
- The level of training and vocational rehabilitation before moving to the labor market
- Finally, the community's attitude towards accepting disabled people in the labor market.

**Theme 4: Influence of the type of disability on employment opportunities.**

Thirty-nine employers agreed that the type and degree of disability greatly influence the employment of persons with disabilities. People with hearing disabilities are one of the groups that face more challenges than others, particularly with educational opportunities. Others emphasized that the social, practical and academic challenges faced by people with disabilities require awareness of the capabilities of this group, in addition to raising awareness in society about the rights of people with disabilities.

One of the most important reasons that hinder people with hearing disabilities from working in government departments is their lack of communication with the local community.

It also means people with visual impairments encounter many challenges. This is mainly due to social anxiety and weak technical capabilities, which are necessary for success in any job.

All participants explained that people with mobility disabilities are the least likely group of people with disabilities to face challenges in the labor market.

**Theme 5: Advantages of hiring PWDs.**

Employers emphasized the importance of work and employment for PWDs, starting with preserving their rights, and meeting their own legislation and laws, in addition to the following:

- Work provides PWDs with an economic income that enables them to be self-reliant in providing basic needs for themselves and their families, thus contributing to a positive change in their lifestyle. Work contributes to improving opportunities for social inclusion of persons with disabilities in society, which reduces feelings of frustration and isolation, and contributes to building an independent family.

**Theme 6: The most important employability challenges for PWDs.**

Employers emphasized a set of challenges facing the employment of PWDs. It is not possible to ignore the impact of the level of scientific capabilities and vocational skills based on the rehabilitation stage, which in turn constitutes an obsession for them to engage in the employment of persons with disabilities, and the lack of vocational programs related to job opportunities for students of those with disabilities. The programs break the empowerment cycle upon rehabilitation. This is the same for university graduates with disabilities who have academic degrees and are becoming job seekers. In addition to the lack of comprehensive access and environmental equipment in the workplace that

helps disabled people move freely and provides them with comfort while performing their jobs, as well as the lack of appropriate assistive devices and services for people with disabilities.

## Stage 2 results

The following sections present and discuss the results based on the stages followed in the research.

The results of the survey analysis will be presented according to:

1) The challenges faced by workers with disabilities in the labor market.

2) The challenges of persons with disabilities according to the type of disability.

Table (3) shows the frequencies and means of the most common institutional and administrative challenges faced by PWDs in the labor market. The most common was "employers not accepting workers with disabilities" with a mean of (4.1 out of 5.00) and the least common response was "Job insecurity" with a mean of (3.38 out of 5.00).

**Table 3: First axis: Institutional and administrative challenges**

| Phrase no. | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | M | SD | Arrangement |
|---|---|---|---|---|---|---|---|---|
| 1 | 39 | 72 | 19 | 17 | 6 | 3.79 | 1.068 | 3 |
| 2 | 25 | 62 | 27 | 28 | 11 | 3.41 | 1.172 | 4 |
| 3 | 40 | 73 | 23 | 10 | 7 | 3.84 | 1.033 | 2 |
| 4 | 22 | 52 | 49 | 22 | 8 | 3.38 | 1.064 | 5 |
| 5 | 71 | 55 | 10 | 12 | 5 | 4.14 | 1.060 | 1 |
| **Mean of first axis** | | | | | | 3.71 | | |

Table (4) shows the frequencies and means of the most common accessibility and physical barriers faced by PWDs in the labor market. The most common was "Lack of office equipment designated for the disabled and suitable for their disability" with a mean of (3.8 out of 5.00) and the least common response was "The lack of a designated parking space for people with disabilities that suits their numbers" with a mean of (3.18 out of 5.00).

**Table 4: Second axis: Accessibility and physical barriers**

| Item no | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | M | SD | Arrangement |
|---|---|---|---|---|---|---|---|---|
| **1** | 32 | 61 | 29 | 23 | 8 | 3.56 | 1.135 | 3 |
| **2** | 29 | 45 | 75 | 3 | 1 | 3.64 | 0.832 | 2 |
| **3** | 18 | 30 | 80 | 12 | 13 | 3.18 | 1.029 | 7 |
| **4** | 12 | 27 | 103 | 7 | 4 | 3.24 | 0.767 | 6 |
| **5** | 34 | 73 | 34 | 6 | 6 | 3.80 | 0.960 | 1 |
| **6** | 15 | 30 | 104 | 1 | 3 | 3.35 | 0.746 | 5 |
| **7** | 20 | 37 | 81 | 9 | 6 | 3.37 | 0.923 | 4 |
| **Mean of second axis** | | | | | | **3.45** | | |

Table (5) shows the frequencies and means of the most common attitudinal, social and cultural challenges faced by PWDs in the labor market. The most common was "Inability to communicate with clients in the labor market" with a mean of (4.37 out of 5.00) and the least common response was "Lack of acceptance of the local community for workers with disabilities" with a mean of (3.14 out of 5.00).

**Table 5: Third axis: Attitudinal, social and cultural challenges**

| Item no | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | Means | Standard deviation | Arrangement |
|---|---|---|---|---|---|---|---|---|
| 1 | 48 | 30 | 8 | 30 | 37 | 3.14 | 1.489 | 7 |
| 2 | 113 | 8 | 16 | 8 | 8 | 4.37 | 1.307 | 1 |
| 3 | 84 | 15 | 11 | 15 | 28 | 3.73 | 1.552 | 4 |
| 4 | 15 | 47 | 52 | 23 | 16 | 3.14 | 1.205 | 7 |
| 5 | 34 | 73 | 34 | 6 | 6 | 3.80 | 0.960 | 2 |
| 6 | 35 | 59 | 30 | 20 | 9 | 3.59 | 1.490 | 5 |
| 7 | 27 | 60 | 36 | 22 | 8 | 3.49 | 1.101 | 6 |
| 8 | 35 | 71 | 33 | 10 | 4 | 3.80 | 0.953 | 2 |
| **Mean of third axis** | | | | | | **3.64** | | |

Table (6) shows the frequencies and means of the most common challenges related to the lack of skills and assistive technology services faced by PWDs in the labor market. The most common was "Inability to use computers and technical devices at work" with a mean of (4.5 out of 5.00) and the least common response was "Not obtaining prior training on the use of assistive devices and technical tools before starting the job" with a mean of (3.52 out of 5.00).

**Table 6: Fourth axis: Lack of skills and assistive technology services**

| Item no | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | Means | Standard deviation | Arrangement |
|---|---|---|---|---|---|---|---|---|
| 1 | 71 | 44 | 25 | 6 | 7 | 4.09 | 1.094 | 5 |
| 2 | 97 | 8 | 34 | 2 | 12 | 4.15 | 1.266 | 4 |
| 3 | 50 | 56 | 35 | 5 | 7 | 3.90 | 1.046 | 6 |
| 4 | 57 | 33 | 22 | 15 | 26 | 3.52 | 1.492 | 8 |
| 5 | 62 | 65 | 19 | 5 | 2 | 4.18 | 0.867 | 3 |
| 6 | 46 | 62 | 29 | 12 | 4 | 3.88 | 1.015 | 7 |
| 7 | 82 | 67 | 3 | 0 | 1 | 4.5 | 0.608 | 1 |
| 8 | 85 | 60 | 4 | 1 | 3 | 4.46 | 0.761 | 2 |
| **Mean of fourth axis** | | | | | | **4.09** | | |

As Table (7) illustrates about the frequencies and means of the most common concerns of disability inclusion faced by PWDs in the labor market, the highest rated statement was "Lack of access to job opportunities that are suitable for my specific type of disability" with a mean of (3.81 out of 5.00) and the least rated one was "Working hours are not appropriate" with a mean of (2.55 out of 5.00).

**Table (7): Fifth axis: Concerns of disability inclusion**

| Item no | Strongly agree | Agree | Neutral | Disagree | Strongly disagree | Means | Standard deviation | Arrangement |
|---|---|---|---|---|---|---|---|---|
| 1 | 43 | 41 | 38 | 17 | 14 | 3.54 | 1.262 | 2 |
| 2 | 56 | 50 | 21 | 14 | 12 | 3.81 | 1.245 | 1 |
| 3 | 37 | 30 | 46 | 21 | 19 | 3.29 | 1.312 | 4 |
| 4 | 20 | 18 | 108 | 3 | 4 | 3.32 | 1.245 | 3 |
| 5 | 18 | 30 | 80 | 12 | 13 | 3.18 | 1.029 | 6 |
| 6 | 12 | 27 | 103 | 7 | 4 | 3.24 | 0.767 | 5 |
| 7 | 6 | 45 | 31 | 16 | 55 | 2.55 | 1.342 | 7 |
| **Mean of fourth axis** | | | | | | **3.28** | | |

**Table (8): Results of a one-way ANOVA according to the disability type variable on the dimensions of the questionnaire**

| | Type of disability | N | Mean | Std. Deviation | F | Sig |
|---|---|---|---|---|---|---|
| Institutional and administrative challenges | Hearing impairment | 46 | 20.2826 | 1.55868 | 72.312 | .000 |
| | Visual impairment | 38 | 21.7632 | 1.10121 | | |
| | Physical disability | 69 | 18.3478 | 1.10121 | | |
| | Total | 153 | 19.7778 | 2.01384 | | |
| Accessibility and physical barriers | Hearing impairment | 46 | 28.3696 | 1.71735 | 73.645 | .000 |
| | Visual impairment | 38 | 29.9474 | 1.22909 | | |
| | Physical disability | 69 | 26.3188 | 1.52906 | | |
| | Total | 153 | 27.8366 | 2.12893 | | |
| Attitudinal, social, and cultural challenges | Hearing impairment | 46 | 32.3696 | 1.71735 | 73.645 | .000 |
| | Visual impairment | 38 | 33.9474 | 1.22909 | | |
| | Physical disability | 69 | 30.3188 | 1.52906 | | |
| | Total | 153 | 31.8366 | 2.12893 | | |
| Lack of skills and Assistive | Hearing impairment | 46 | 32.5435 | 1.62899 | 46.062 | .000 |
| | Visual impairment | 38 | 34.0263 | 1.26249 | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| Technology/ services | Physical disability | 69 | 30.8261 | 1.90939 | | |
| | Total | 153 | 32.1373 | 2.12770 | | |
| Concerns of disability inclusion | Hearing impairment | 46 | 28.2826 | 1.55868 | 72.312 | .000 |
| | Visual impairment | 38 | 29.7632 | 1.10121 | | |
| | Physical disability | 69 | 26.3478 | 1.53226 | | |
| | Total | 153 | 27.7778 | 2.01384 | | |
| Total | Hearing impairment | 46 | 141.8478 | 5.52959 | 131.368 | .000 |
| | Visual impairment | 38 | 149.4474 | 4.83063 | | |
| | Physical disability | 69 | 132.1594 | 5.65327 | | |
| | Total | 153 | 139.3660 | 8.93747 | | |

Furthermore, it was found that there are statistically significant differences at the level of significance of 0.001 less than 0.05 among hiring persons with disabilities according to the type of disability when they respond to the scale as shown in Table (8). It was also found that the average scores of people with visual impairments got the highest average value, and this confirms that they are the most exposed to challenges in the labor market. While people with physical disabilities got the lowest average value, and this shows that they are the least exposed to challenges in the labor market.

### Stage 3 results

The researchers in Stage 3 interviewed 8 individuals whom they work for the Saudi Ministry of Human Resources and Social Development and at Services Center for People with Disabilities and with 11 University professors specialized in special education from different Saudi universities. The most important key results from Stages 1 and 2 were first presented to them. This was to familiarize them with the most important challenges that workers with disabilities face in the labor market. Importantly, the interviews aimed and yielded interesting results in regard to the most imperative solutions and suggestions to confront these challenges and ensure their success in the labor market. Among the most important recommendations and suggestions:

- It is necessary to training PWDs to acquire the essential skills for the labor market.
- Designing training programs to develop the personal and social skills necessary to integrate people with disabilities into the labor market.
- Designing training programs to develop language skills and acquire foreign languages for people with disabilities before moving to the labor market.
- Designing training programs for people with visual impairment to develop the technical skills necessary for the labor market, such as training on the use of the most important electronic devices, such as the advanced Braille Sense device.
- Need to create a culture for inclusion that promote equal opportunities.

## CONCLUSION, IMPLICATIONS, AND FUTURE RESEARCH DIRECTIONS

The study focused on addressing the challenges faced by persons with disabilities (PWD) in the labor market, particularly during the transition from university to the workplace. The research investigated the attitudes of employers, the barriers and challenges faced by PWDs in employment, and proposed solutions from experts in special education and employers. The key findings from the interviews with employers highlighted the challenges and variables affecting the success of PWDs in the labor market. Employers expressed concerns about negative perceptions, employment qualifications, and accessibility barriers. Moreover, the type and degree of disability were seen to significantly influence employment opportunities. Interviews also revealed the potential benefits of hiring PWDs, including economic independence and social inclusion.

The questionnaire-based quantitative analysis identified several challenges faced by workers with disabilities in the labor market. These included institutional and administrative challenges, accessibility and physical barriers, attitudinal, social, and cultural obstacles, lack of skills and assistive technology services, and concerns about disability inclusion. The results indicated that workers with disabilities encountered varying degrees of challenges, with some challenges being more prevalent than others.

Moreover, the analysis revealed significant differences in the challenges faced by workers with different types of disabilities. For example, individuals with visual impairment appeared to face the highest average level of challenges, while those with physical disabilities faced the lowest average level of challenges. In conclusion, the study provided valuable insights into the employment challenges for PWDs, shedding light on the attitudes of employers, the impact of disability type, and the prevalent barriers in the labor market. The findings underscore the need for tailored support, vocational guidance, and training programs to facilitate the successful transition of graduates with disabilities into the workforce. This comprehensive approach aims to empower PWDs and create more inclusive and equitable workplaces.

This research is hoped to pave the way for improved employment outcomes for PWDs and lead fulfilling lives. The research outcomes have implications for policy development, vocational rehabilitation programs, and organizational practices to enhance the employment prospects and well-being of PWDs in the labor market. By addressing the identified challenges and recommendations, organizations and stakeholders can work towards creating more inclusive and supportive environments for PWDs in the workforce that promote equal opportunities. Additionally, investing in PWDs through comprehensive training programs and support will enhance their understanding and empower them with the necessary knowledge and skills to navigate the job market successfully and achieve remarkable success.

**Acknowledgment**

The authors extend their appreciation to the Deanship of Research and Graduate Studies at University of Tabuk for funding this work through Research no. 1442-0139-S

## REFERENCES:

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 179-211.

Allen, S., & Carlson, G. (2003). To conceal or disclose a disabling condition? A dilemma of employment transition. Journal of Vocational Rehabilitation, 19, 19-30.

Bailey, J. W. (1991). Evaluation of a task partner who does or does not have a physical disability: Response amplification or sympathy effect? Rehabilitation Psychology, 36, 99-110.

Baldridge, D. C., & Veiga, J. F. (2001). Toward a greater understanding of the willingness to request an accommodation: Can requesters' beliefs disable the Americans with disabilities act? Academy of Management Review, 26, 85-99.

Baldridge, D. C., & Veiga, J. F. (2006). The impact of anticipated social consequences on recurring disability accommodation requests. Journal of Management, 32, 158-179.

Balser, D. B. (2007). Predictors of workplace accommodations for employees with mobilityrelated impairments. Administration & Society, 39, 656-683.

Balser, D. B., & Harris, M. M. (2008). Factors affecting employee satisfaction with disability accommodation: A field study. Employee Responsibilities and Rights Journal, 20, 13-28.

Becker, G. S. (1964). Human capital. New York, NY: Columbia University Press.

Berry, J. O., & Meyer, J. A. (1995). Employing people with disabilities: Impact of attitude and situation. Rehabilitation Psychology, 40, 211-222.

Bies, R. J., & Moag, J. S. (1986). Interactional justice: Communication criteria of fairness. In R. J. Lewicki, B. H. Sheppard & M. H. Bazerman (Eds.), Research in Negotiations in Organizations, 1, 43-55. Greenwich, CT: JAI Press.

Boyle, M. A. (1997). Social barriers to successful reentry into mainstream organizational culture: Perceptions of people with disabilities. Human Resource Development Quarterly, 8, 259-268.

Bressler, R. B., & Lacy, A. W. (1980). An analysis of the relative job progression of the perceptibly physically handicapped. Academy of Management Journal, 23, 132-143. Byrne, D. E. (1971). The attraction paradigm. New York, NY: Academic Press. Campolieti, M. (2009). Worker adaptation and the desire for accommodations after the onset of a disability. Industrial Relations, 48, 329-349.

Cascio, W. F., & Boudreau, J. W. (2010). Investing in people: Financial impact of human resource initiatives (2nd ed.). Upper Saddle River, NJ: Financial Times Press.

Christman, L. A., & Slaten, L. (1991). Attitudes toward people with disabilities and judgments of employment potential. Perceptual and Motor Skills, 72, 467-475. Clardy, A. (2003). The legal framework of human resources development, Part II: Fair employment, negligence, and implications for scholars and practitioners. Human Resource Development Review, 2, 130-154.

Cleveland, J. N., Barnes-Farrell, J. L., & Ratz, J. M. (1997). Accommodation in the workplace. Human Resource Management Review, 7, 77-107.

Colella, A. (1994). Organizational socialization of employees with disabilities: Critical issues and implications for workplace interventions. Journal of Occupational Rehabilitation, 4, 87-106.

Colella, A. (1996). The organizational socialization of employees with disabilities: Theory and research. In G. R. Ferris (Ed.), Research in Personnel and Human Resources Management, 14, 351-417. Greenwich, CT: JAI Press. Colella, A. (2001). Coworker distributive fairness judgments of the workplace accommodation of employees with disabilities. Academy of Management Review, 26, 100-116.

Colella, A., DeNisi, A., & Varma, A. (1997). Appraising the performance of employees with disabilities: A review and model. Human Resource Management Review, 7, 27-53.

Colella, A., DeNisi, A. S, & Varma, A. (1998). The impact of ratee's disability on performance judgments and choice as partner: The role of disability-job fit stereotypes and interdependence of rewards. Journal of Applied Psychology, 84, 102-111

Colella, A., Paetzold, R. L., Belliveau, M. A., & Hollenbeck, J. (2004). Factors affecting coworkers' procedural justice inferences of the workplace accommodations of employees with disabilities. Personnel Psychology, 57, 1-23.

Colella, A., & Varma, A. (2001). The impact of subordinate disability on leader-member exchange relationships. Academy of Management Journal, 44, 304-315.

Comer, R. J., & Piliavin, J. A. (1972). The effects of physical deviance upon face-to-face interactions: The other side. Journal of Personality and Social Psychology, 23, 33-39. Cropanzano, R. (1993). Justice in the workplace: Approaching fairness in human resource management. Hillsdale, NJ: Lawrence Erlbaum Associates.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. American Sociological Review, 48, 147-160. Dipboye, R. L. (1992). Selection interviews: Process perspectives. Cincinnati, OH: Southwestern Publishing.

Feldman, D. C. (2004). The role of physical disabilities in early career: Vocational choice, the school-to-work transition, and becoming established. Human Resource Management Review, 14, 247-274.

Fine, M., & Asch, A. (1988). Disability beyond stigma: Social interaction, discrimination, and activism. Journal of Social Issues, 44, 3-21.

Florey, A. T., & Harrison, D. A. (2000). Responses to informal accommodation requests from employees with disabilities: Multistudy evidence on willingness to comply. Academy of Management Journal, 43, 224-233.

Freeburg, E. W. (1994). Employment provisions of the Americans with Disabilities Act: Implications for HRD practices. Human Resource Development Quarterly, 5, 93-98.

Gouvier, W. D., Sytsma-Jordan, S., & Mayville, S. (2003). Patterns of discrimination in hiring job applicants with disabilities: The role of disability type, job complexity, and public contact. Rehabilitation Psychology, 48, 175-181.

Harcourt, M., Lam, H., & Harcourt, S. (2005). Discriminatory practices in hiring: Institutional and rational economic perspectives. International Journal of Human Resource Management, 16, 2113-2132.

Hastorf, A. H., Northcraft, G. B., & Picciotto, S. R. (1979). Helping the handicapped: How realistic is the performance feedback received by the physically handicapped. Personality and Social Psychology Bulletin, 5, 373-376.

Hebl, M. R., & Kleck, R. E. (2002). Acknowledging one's stigma in the interview setting: Effective strategy or liability? Journal of Applied Social Psychology, 32, 223-249.

Hernandez, B., Keys, C., & Balcazar, F. (2000). Employer attitudes toward workers with disabilities and their ADA employment rights: A literature review. Journal of Rehabilitation, 66, 4-16.

Hernandez, B., McDonald, K., Divilbiss, M., Horin, E., Velcoff, J., & Donoso, O. (2008). Reflections from employers on the disabled workforce: Focus groups with healthcare, hospitality and retail administrators. Employee Responsibilities and Rights Journal, 20, 157-164.

Houtenville, A. J., & Ruiz, T. (2011). Annual disability statistics compendium: 2011. Durham: University of New Hampshire, Institute on Disability.

Hunt, C. S., & Hunt, B. (2004). Changing attitudes toward people with disabilities: Experimenting with an educational intervention. Journal of Managerial Issues, 16, 266-280. Huseman, R. C., Hatfield, J. D., & Miles, E. W. (1985). Test for individual perceptions of job equity: Some preliminary findings. Perceptual and Motor Skills, 61, 1055-1064.

Jones, G. E. (1997). Advancement opportunity issues for people with disabilities. Human Resource Management Review, 7, 55-76.

Jones, G. E., & Stone, D. L. (1995). Perceived discomfort associated with working with persons with disabilities. Perceptual and Motor Skills, 81, 911-919. Jones, G. R. (1986). Socialization tactics, self-efficacy, and newcomers' adjustments to organizations. Academy of Management Journal, 29, 262-279.

Katz, I., & Glass, D. G. (1979). An ambivalence amplification theory of behavior toward the stigmatized. In W. Austin & S. Worchel (Eds.), The social psychology of intergroup relations (pp. 55-70). Monterey, GA: Brooks-Cole.

Klimoski, R., & Donahue, L. (1997). HR strategies for integrating individuals with disabilities in the workplace. Human Resource Management Review, 7, 109-138.

Konrad, A. M., Moore, M. E., Ng, E. S.W., Doherty, A. J., & Breward, K. (2012). Temporary work, underemployment, and workplace accommodations: Relationship to well-being for workers with disabilities. British Journal of Management. doi: 10.1111/j.1467-8551.2011.00809.x

Kulkarni, M. (2012a). Contextual factors and help seeking behaviors of people with disabilities. Human Resource Development Review, 11, 77-96. Kulkarni, M. (2012b). Social networks and career advancement of people with disabilities. Human Resource Development Review, 11, 138-155. Kulkarni, M., & Lengnick-Hall, M. L. (2011). Socialization of people with disabilities in the workplace. Human Resource Management, 50, 521-540.

Leasher, M. K., Miller, C. E., & Gooden, M. P. (2009). Rater effects and attitudinal barriers affecting people with disabilities in personnel selection. Journal of Applied Social Psychology, 39, 2236-2274. Lee, B. A. (2001). The implications of ADA litigation for employers: A review of federal appellate court decisions. Human Resource Management, 40, 35-50.

Lengnick-Hall, M. L., Gaunt, P. M., & Kulkarni, M. (2008). Overlooked and underutilized: People with disabilities are an untapped human resource. Human Resource Management, 47, 255-273. Lerner, M. J. (1980). The belief in a just world: A fundamental delusion. New York, NY: Plenum Press.

Louvet, E. (2007). Social judgment toward job applicants with disabilities: Perception of personal qualities and competences. Rehabilitation Psychology, 52, 297-303.

Macan, T. F., & Hayes, T. L. (1995). Both sides of the employment interview interaction: Perceptions of interviewers and applicants with disabilities. Rehabilitation Psychology, 40, 261-278.

Mankin, D. P. (2001). A model for human resource development, Human Resource Development International, 4, 65-85. McDowall-Long, K. (2004). Mentoring relationships: Implications for practitioners and suggestions for future research. Human Resource Development International, 7, 519-534.

McFarlin, D. B., Song, J., & Sonntag, M. (1991). Integrating the disabled into the work force: A survey of Fortune 500 company attitudes and practices. Employee Responsibilities and Rights Journal, 4, 107-123.

McGuire, D. (2011). Foundations of human resource development. In D. McGuire & K. M. Jorgensen (Eds.), Human Resource Development: Theory and Practice (pp. 1-11). London: SAGE.

Miceli, N. S., Harvey, M., & Buckley, M. R. (2001). Potential discrimination in structured employment interviews. Employee Responsibilities and Rights Journal, 13, 15-38.

Miller, B. K., & Werner, S. (2007). Predictors of helping behavior toward coworkers with disabilities. Journal of Applied Social Psychology, 37, 2660-2687.

Moore, M. E., Konrad, A. M., Ng, E. S.W., & Doherty, A. J. (2011). The vocational well-being of workers with childhood onset of disability: Life satisfaction and perceived workplace discrimination. Journal of Vocational Behavior, 79, 681-698.

Morrison, E. W. (2002). Newcomers' relationships: The role of social network ties during socialization. Academy of Management Journal, 45, 1149-1160.

Nadler, A., Fisher, J. D., & DePaulo, B. M. (1983). New directions in helping, Volume 3: Applied perspectives on help-seeking and receiving. New York, NY: Academic Press.

Nafukho, F. M., Roessler, R. T., & Kacirek, K. (2010). Disability as a diversity factor: Implications for human resource practices. Advances in Developing Human Resources, 12, 395-406.

Noonan, B. M., Gallor, S. M., Hensler-McGinnis, N. F., Fassinger, R. E., Wang, S., & Goodman, J. (2004). Challenge and success: A qualitative study of the career development of highly achieving women with physical and sensory disabilities. Journal of Counseling Psychology, 51, 68-80.

Nordstrom, C. R., Huffaker, B. J., & Williams, K. B. (1998). When physical disabilities are not liabilities: The role of applicant and interviewer characteristics on employment interview outcomes. Journal of Applied Social Psychology, 28, 283-306. Ren, L. R., Paetzold, R. L., & Colella, A. (2008). A meta-analysis of experimental studies on the effects of disability on human resource judgments. Human Resource Management Review, 18, 191-203.

Rousseau, D. M. (1990). New hire perceptions of their own and their employer's obligations: A study of psychological contracts. Journal of Organizational Behavior, 11, 389-400.

Russell, D., Lenel, J. C., Spicer, C., Miller, J., Albrecht, J., & Rose, J. (1985). Evaluating the physically disabled: An attributional analysis. Personality and Social Psychology Bulletin, 11, 23-31.

Schartz, H. A., Hendricks, D. J., & Blanck, P. (2006). Workplace accommodations: Evidence based outcomes. Work, 27, 345-354.

Scheier, M. F., Carver, C. S., Schultz, R., Glass, D. C., & Katz, I. (1978). Sympathy, selfconsciousness, and reactions to the stigmatized. Journal of Applied Social Psychology, 8, 270-282.

Shore, L. M., Chung-Herrera, B. G., Dean, M. A., Ehrhart, K. H., Jung, D. I., Randel, A. E., & Singh, G. (2009). Diversity in organizations: Where are we now and where are we going? Human Resource Management Review, 19, 117-133. Stone, D. L., & Colella, A. (1996). A model of factors affecting the treatment of disabled individuals in organizations. Academy of Management Review, 21, 352-401.

Stone, D. L., & Williams, K. J. (1997). The impact of ADA on the selection process: Applicant and organizational issues. Human Resource Management Review, 7, 203-231.

Tajfel, H. (1981). Human groups and social categories: Studies in social psychology. Cambridge, England: Cambridge University Press. Tsui, A. S., & O'Reilly, C. A. (1989). Beyond simple demographic effects: The importance of relational demography in superior-subordinate dyads. Academy of Management Journal, 32, 402-423.

Van Maanen, J., & Schein, E. H. (1979). Toward a theory of organizational socialization. In B. M. Staw (Ed.), Research in organizational behavior, 1, 209-264. Greenwich, CT: JAI Press.

Wertlieb, E. C. (1985). Minority group status of the disabled. Human Relations, 38, 1047-1063

West, M. S., & Cardy, R. L. (1997). Accommodating claims of disability: The potential impact of abuses. Human Resource Management Review, 7, 233-246.

Zernitsky-Shurka, E. (1988). Ingroup and outgroup evaluation by disabled individuals. The Journal of Social Psychology, 128, 465-472.