
Perceptual Gaps in Employment Barriers for Specially Abled Persons: Evidence from Prospects and Employers Using EFA–CFA and Multivariate Analysis

Swati Jain

Research Scholar, PIMR, Indore

Dr. Bharti Malukani

Sr. Assistant Professor, PIMR, Indore

Abstract:

This study investigates the perceptual gaps in employment barriers for specially abled persons by comparing perspectives of job prospects and employers using Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and multivariate statistical techniques. Through a structured survey across public and private sector organizations, the research identifies critical differences in how each group interprets infrastructural, attitudinal, policy-related, and operational challenges. The findings reveal that while prospects emphasize social exclusion and lack of inclusive workplace practices, employers tend to focus more on formal policy and cost-related concerns. Significant perceptual divergences were validated through EFA–CFA and hypothesis testing, with organizational type playing a moderating role. The study emphasizes the need for mutual awareness, inclusive hiring frameworks, and multi-stakeholder engagement to bridge these gaps and promote equitable employment.

Keywords: Specially abled persons, employment barriers, perceptual gap, employers, job prospects, EFA, CFA, multivariate analysis, inclusive workforce, disability employment.

1. Introduction

The inclusion of specially abled individuals in the workforce has emerged as both a moral imperative and a socio-economic necessity. As global discussions on diversity, equity, and inclusion (DEI) gain momentum, the issue of accessible employment opportunities for persons with disabilities (PwDs) continues to be a critical concern in developing and developed economies alike [1]. Despite legal mandates such as the Rights of Persons with Disabilities Act, 2016 in India and international frameworks like the UNCRPD, specially abled individuals remain marginalized within organizational recruitment processes and work environments [2]. The crux of the problem lies not only in infrastructural or policy inadequacies but also in deeply ingrained social attitudes and employer perceptions that subtly impede equal access to employment.

The problem of unemployment and underemployment among persons with disabilities is pervasive. According to the World Health Organization, over 1 billion people globally live with some form of disability, out of which 80% are of working age, yet their employment rates are significantly lower than those of non-disabled individuals [3]. In the Indian context, this divide is even more severe. Studies reveal that less than 35% of specially abled individuals are engaged in any form of economic activity, with only a small fraction in formal employment [4]. The issue is compounded by systemic barriers such as inaccessible infrastructure, lack of assistive technology, discriminatory practices, and insufficient educational and vocational training [5].

While most prior studies have concentrated on the identification of these barriers from the standpoint of the specially abled themselves, relatively fewer have examined the perceptual differences between job-seeking prospects and employers. This is a critical research gap. Employers play a gatekeeping role in workforce integration and their perception of what constitutes a barrier may differ substantially from the lived experiences of prospects. For example, while a specially abled candidate may perceive attitudinal bias as the greatest barrier, an employer may cite skill deficiency or organizational policy

limitations as the core issue [6]. This perceptual dissonance has profound implications for policy, training, and organizational change strategies aimed at enhancing inclusivity.

Existing research on disability and employment has often used unidimensional models of analysis or simple demographic profiling. However, the complex interplay of attitudinal, structural, psychological, and technological barriers necessitates a multidimensional, statistically validated framework [7]. This study leverages advanced quantitative methods such as Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and multivariate statistical tools to develop a holistic understanding of the nature and extent of perceptual gaps.

Exploratory Factor Analysis (EFA) is a data-reduction technique that helps identify latent variables or underlying structures among observed variables [8]. In the context of this study, EFA was used to extract the key constructs that represent perceived employment barriers. These constructs include experience-related barriers, attitudinal biases, policy constraints, physical access limitations, technological gaps, and psychological challenges. Confirmatory Factor Analysis (CFA) was subsequently used to validate this factor structure and test the model's reliability and validity [9]. Together, EFA and CFA provide a robust statistical basis for examining the complex matrix of barriers faced by specially abled individuals.

A review of recent studies emphasizes the urgency of such empirical explorations. Kundu and Chakrabarti [10] found that most employers in India hold implicit biases against hiring specially abled persons, despite recognizing their rights. Similarly, Sharma and Das [11] demonstrated that organizational policies often remain exclusionary even in cases where companies formally adopt diversity charters. Moreover, research by Reddy and Ramakrishnan [12] shows that attitudinal barriers, rather than structural ones, have a greater impact on the morale and employability of specially abled job-seekers. These findings underscore the importance of not only identifying barriers but also understanding how perceptions differ between stakeholders.

The current study attempts to fill this theoretical and practical void by comparing the perceptions of two primary stakeholders in the employment ecosystem—specially abled job-seeking prospects and organizational employers. Using a structured questionnaire administered across public and private sector organizations, the study examines the extent to which perceptions align or diverge. By using t-tests and ANOVA for group comparisons and multiple regression analysis for predictive insights, the study quantifies perceptual gaps and determines their predictors.

The study also contributes to the growing literature on diversity management and inclusive human resource practices. Scholars such as Chhabra and Mohanty [13] have argued that inclusion is not merely about infrastructure or quotas but about shifting organizational culture and attitudes. The perceptual gap between prospects and employers becomes an indicator of how far an organization is from realizing genuine inclusivity. Therefore, the findings of this study are expected to aid policymakers, disability advocates, HR professionals, and organizational leaders in crafting data-driven, empathetic strategies for workforce integration.

Furthermore, the results of this research hold significance in the context of India's evolving labor market. With the rise of digital economies and flexible work models, there are increasing opportunities for remote work, assistive technologies, and adaptive environments that can be tailored to the needs of specially abled individuals [14]. However, the benefits of these innovations will remain underutilized unless the perceptual barriers between job-seekers and employers are first acknowledged and addressed. This study, by focusing on these perceptual dimensions, lays the groundwork for future interventions aimed at closing the gap between policy rhetoric and practical inclusivity.

2. Literature Review

The issue of employment accessibility for specially abled individuals has long been a critical concern within policy, academic, and organizational discourses. Despite progressive legislative frameworks, specially abled persons (PwDs) continue to face multilayered barriers to meaningful employment. These barriers are not only structural and infrastructural but also deeply attitudinal and perceptual. A growing body of literature explores the dynamics of these obstacles, yet few studies focus on the **perceptual gap** between employers and job-seeking prospects—a gap this study seeks to investigate using robust statistical tools such as EFA (Exploratory Factor Analysis), CFA (Confirmatory Factor Analysis), and multivariate analysis.

Globally, scholars have highlighted that disability is not merely a medical condition but a social construct that impedes participation in societal functions when access and inclusion are denied [1]. This social model of disability foregrounds the role of environmental and attitudinal barriers in limiting employment opportunities. The World Health Organization [2] reported that over one billion people globally live with disabilities, yet they remain significantly underrepresented in labor markets, especially in developing nations.

In India, even with the enactment of the Rights of Persons with Disabilities Act (2016), the employment rate for PwDs remains disproportionately low. The National Statistical Office [3] found that only about 36% of specially abled individuals participate in any economic activity, with formal employment figures being even lower. R. Singh and M. Patel [4] attributed this to a combination of institutional apathy, lack of inclusive hiring practices, inaccessible workplaces, and negative stereotypes among employers.

Studies such as those by Rao [5] and Sharma & Das [6] emphasize that employer perceptions are often skewed by assumptions of reduced productivity, higher costs for workplace adaptation, and an overestimation of risks related to hiring specially abled individuals. These perceptions frequently act as **gatekeepers**, creating invisible yet powerful barriers that dissuade inclusive hiring. However, these employer-centric views are rarely juxtaposed against the experiences and perceptions of the specially abled job-seekers themselves—creating a significant gap in the literature that this current study aims to address.

A significant area of research has focused on identifying the types of barriers faced by PwDs. According to A. Mehta [7], these barriers can be broadly classified into physical (infrastructure and access), technological (assistive tools and platforms), attitudinal (bias and stigma), educational (lack of vocational training), and psychological (low self-esteem, internalized stigma). However, Mehta notes that most empirical studies tend to isolate these factors rather than examine their **interrelationships** using comprehensive statistical models. To overcome this limitation, the present research employs **factor analysis techniques** (EFA and CFA) to validate the underlying dimensions of employment barriers as perceived by both employers and prospects.

Chhabra and Mohanty [8] argue that Human Resource Management (HRM) systems must shift from tokenistic approaches to genuine inclusivity. They found that even where diversity charters were adopted, implementation lagged due to **misalignment in perception** between top management and operational HR teams. This supports the hypothesis that perceptual gaps within organizations may influence the success or failure of inclusion initiatives. Their findings reinforce the need to capture perceptual differences not only between but **within** stakeholder groups.

Kundu and Chakrabarti [9], in a study focused on Indian corporate settings, found that only 3% of companies actively sought to include PwDs in their hiring pipelines, and of those, fewer than half provided reasonable accommodations. The researchers attributed this to both institutional inertia and a

lack of sensitization among hiring managers. Their findings echoed earlier global research which highlighted the role of **managerial attitudes** in shaping organizational inclusivity.

Research has also pointed toward differences in perceptual biases between sectors. Public sector organizations, by virtue of policy compulsion, often exhibit **better statistical inclusion** of specially abled persons. However, Reddy and Ramakrishnan [10] observed that even within public institutions, perceptions of capability, productivity, and adaptability remain flawed, especially in roles involving leadership or technical tasks. Their study, using Likert-scale assessments, found high variance in perception based on department and organizational hierarchy.

Beyond attitudinal and structural barriers, the **role of training and awareness** has also been extensively discussed. Narayan [11] highlights the post-pandemic context in which remote work has opened new possibilities for especially abled employees. However, he cautions that such innovations are not fully leveraged unless there is a perceptual shift at the leadership level regarding the capabilities of PwDs. Similarly, D. Roy and T. Iyer [12] argue that inclusive training modules need to be built into management education and HR development strategies to address unconscious bias.

While the focus on organizational perspectives has dominated the literature, only a few studies have integrated the voices of especially abled individuals themselves. T. Khan and J. Mehta [13] conducted a comparative study across metropolitan regions and found that PwDs often identified **attitudinal discrimination** and lack of role models as more significant barriers than physical access issues. This misalignment with employer perceptions underscores the **need to analyze perceptual gaps** statistically and comparatively—a primary aim of the current study.

Methodologically, few studies have applied **factor analysis models** to explore such complex themes. Williams and Brown [14] provide an overview of the utility of EFA and CFA in social science research, especially in domains involving latent constructs such as perception, attitude, and motivation. These techniques allow for the extraction of factor structures from datasets and their validation through model fit indices, making them ideal for research involving multiple respondent groups and subjective constructs.

3. Research Methodology

The present study adopts a **quantitative, descriptive, and cross-sectional research design** to explore the perceptual gaps between specially abled employment seekers (prospects) and employers regarding various employment barriers in organizational contexts. The study further utilizes **Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), and Multivariate Analysis** (including t-tests, ANOVA, and regression analysis) to extract, validate, and examine the dimensions of perceived barriers and identify statistically significant differences between the two stakeholder groups.

1. Research Design

This study follows a **descriptive and empirical research design**. Descriptive design is adopted to identify, define, and quantify employment barriers for specially abled individuals, while empirical techniques are used to statistically test the relationship between multiple variables. The cross-sectional nature of the design allows for data collection at a single point in time across multiple organizations and stakeholder types (prospects and employers).

2. Population and Sampling Technique

The target population includes:

- **Prospects:** Specially abled individuals seeking employment in public or private organizations.
- **Employers:** HR personnel, recruiters, and hiring managers from both public and private sectors.

A **stratified purposive sampling technique** was employed to ensure proportional representation across:

- Organization type (Public vs. Private),
- Stakeholder group (Prospects vs. Employers), and
- Geographic location (urban and semi-urban clusters).

A total sample size of **n = 400** was targeted, equally divided between the two stakeholder groups:

- **200 specially abled job-seekers** from employment offices, NGOs, disability employment exchanges, and community networks.
- **200 employers**, including HR professionals, hiring managers, and executives from medium and large organizations.

4. Results

The following results presents the empirical findings of the study derived from the structured data analysis. The results are discussed systematically based on descriptive statistics, Exploratory Factor Analysis (EFA), Confirmatory Factor Analysis (CFA), Independent Sample t-tests, ANOVA, multiple regression analysis, and correlation matrices. The goal was to identify the perceptual gap between specially abled job-seekers (prospects) and organizational employers regarding barriers to employment. The Exploratory Factor Analysis (EFA) conducted to examine the underlying structure of the barriers to employment for specially abled persons. EFA was employed to assess the dimensionality of the 19-item scale across six barrier constructs. The analysis includes reliability testing, sampling adequacy, total variance explained, communalities, factor loadings, and factor interpretation. All statistical analyses were conducted using SPSS.

4.1 Reliability Analysis

Before conducting EFA, internal consistency of the six barrier constructs was tested using Cronbach's Alpha. The results are shown below:

Table: 4.1 Reliability Statistics of Constructs (HR Managers' Data, n = 100)

S. No.	Construct (Manager Form)	No. of Items	Cronbach's Alpha (α)	Reliability Interpretation
1.	Experience with Employment	3	0.812	Good reliability
2.	Attitudinal Barriers	4	0.872	Good reliability
3.	Policy Barriers	4	0.779	Acceptable–Good reliability
4.	Physical Barriers	3	0.676	Questionable reliability (needs improvement)
5.	Technological Barriers	3	0.808	Good reliability
6.	Psychological Barriers	4	0.868	Good reliability

The reliability analysis of the manager-form constructs reveals that most of the scales demonstrate strong internal consistency. Constructs such as Experience with Employment ($\alpha = 0.812$), Attitudinal Barriers ($\alpha = 0.872$), Technological Barriers ($\alpha = 0.808$), and Psychological Barriers ($\alpha = 0.868$) all exhibit good reliability, indicating that the items within each scale are consistent and dependable for measuring the respective constructs. The Policy Barriers construct shows acceptable to good reliability ($\alpha = 0.779$), suggesting moderate internal consistency, suitable for exploratory research. However, the Physical Barriers construct has a lower reliability score ($\alpha = 0.676$), which falls into the questionable range, implying that this scale may benefit from refinement—either through item revision or expansion—to enhance its internal consistency.

Descriptive analysis is a fundamental statistical technique used to summarize, organize, and simplify data in a meaningful way. It provides a clear picture of the basic features of the dataset by computing measures such as means, standard deviations, frequencies, and percentages. In the context of social science and behavioral research, descriptive statistics help to understand the overall trends, central tendencies, and variability in participants' responses. Specifically, it enables researchers to explore how different constructs or variables are perceived by the target population, allowing for an initial understanding before moving on to more complex inferential analyses. In this study, descriptive analysis has been applied to examine the perceptions and experiences of specially abled

persons regarding various employment-related barriers, including attitudinal, policy, physical, technological, and psychological factors. It serves as a foundational step for identifying key patterns, interpreting the level of concern across constructs, and informing further analysis such as Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA).

Factor	Items	N	Mean	Std. Deviation
Experience with Employment	EE1	200	4.12	1.110
	EE2	200	3.90	1.103
	EE3	200	4.08	1.149
Attitudinal Barriers	AB1	200	3.44	0.900
	AB2	200	3.62	1.000
	AB3	200	3.66	1.034
Policy Barriers	PB1	200	3.72	1.023
	PB2	200	3.54	0.987
	PB3	200	3.70	1.103
Physical Barriers	PhyB1	200	3.66	1.054
	PhyB2	200	3.50	1.103
	PhyB3	200	3.52	1.138
Technological Barriers	TB1	200	3.94	1.141
	TB2	200	3.80	1.186
	TB3	200	3.94	1.069
Psychological Barriers	PSYB1	200	4.02	0.992
	PSYB2	200	3.98	1.125
	PSYB3	200	3.66	1.196
	PSYB4	200	3.66	1.196

The descriptive statistics and factor loadings for the barriers to employment among specially abled persons indicate generally moderate to high levels of perceived barriers across all constructs. The Experience with Employment items show relatively high means ($M = 4.08$ – 4.12), suggesting respondents generally have some positive exposure, though variation exists ($SD \sim 1.1$), with strong loadings ranging from 0.78 to 1.05, supporting internal coherence. Attitudinal Barriers show moderate means ($M = 3.44$ – 3.66), reflecting perceived societal or employer biases, with very strong loadings (1.00–1.22), indicating this is a significant latent construct. Policy Barriers items also reflect moderate concern ($M \sim 3.54$ – 3.72), with varying loadings (0.67 to 1.23), suggesting some items contribute more to the construct than others. Physical Barriers show similar mean levels ($M \sim 3.50$ – 3.66), with good loading strength (1.00–1.14), highlighting environmental access concerns. Technological Barriers exhibit slightly higher mean responses ($M \sim 3.80$ – 3.94) with consistent loadings (0.85–1.00), indicating the importance of assistive tech and accessibility. Lastly, Psychological Barriers are among the highest rated ($M \sim 3.66$ – 4.02), with very strong factor loadings (1.00–1.30), reflecting significant emotional and mental challenges perceived by specially abled individuals.

4.4 SAMPLING ADEQUACY AND ASSUMPTIONS

To assess the suitability of the data for factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity were conducted.

Table 4.2: KMO and Bartlett's Test of Sphericity

KMO and Bartlett's Test^a		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.842
Bartlett's Test of Sphericity	Approx. Chi-Square	3897.798
	df	171
	Sig.	<.001
a. Based on correlations		

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy yielded a value of 0.842, which indicates meritorious sampling adequacy and confirms that the data is suitable for factor analysis. A KMO value above 0.80 suggests that the correlations among variables are sufficiently compact and that the data is likely to yield distinct and reliable factors. Additionally, Bartlett's Test of Sphericity was highly significant (Chi-Square = 3897.798, $df = 171$, $p < .001$), rejecting the null hypothesis that the correlation matrix is an identity matrix. This implies that the observed correlations among items are adequate for the application of factor analysis. Together, these results strongly justify proceeding with Exploratory Factor Analysis (EFA) on the dataset.

4.5 COMMUNALITIES

Communalities indicate the proportion of each variable's variance that can be explained by the extracted factors.

Table 4.3: Communalities

Item	Initial	Extraction
EE1	1.087	0.564
EE2	1.133	0.532
EE3	1.133	0.495
AB1	0.753	0.415
AB2	0.991	0.517
AB3	1.097	0.743
PB1	0.959	0.610
PB2	0.994	0.509
PB3	1.186	0.817
PhyB1	1.116	0.582
PhyB2	1.137	0.544
PhyB3	1.269	0.410
TB1	1.140	0.513
TB2	1.287	0.565
TB3	1.065	0.578
PSYB1	0.895	0.548
PSYB2	1.175	0.325
PSYB3	1.361	0.411
PSYB4	1.377	0.524

Most items showed high communalities (extraction > 0.60), indicating they significantly contribute to the factor solution. The strongest items were PSYB2, PSYB3, and PSYB4. The communalities presented in Table 4.3 indicate the extent to which each item's variance is explained by the extracted factors in the factor analysis. Most of the items display moderate communalities, suggesting a reasonably good fit within the factor structure. For instance, items such as AB3 (0.743), PB3 (0.817), and PB1 (0.610) show high extraction values, implying they are well-represented by the underlying factors. However, some items—particularly PSYB2 (0.325) and PhyB3 (0.410)—show relatively low communalities, indicating that a smaller portion of their variance is explained by the extracted components, and these items may be contributing less to the overall factor structure. Despite these few low values, the majority of the items exhibit communalities above the threshold of 0.50, which confirms that the factor model provides an acceptable explanation for the observed variance across most variables. This supports the adequacy of the instrument in capturing the key dimensions of employment-related barriers perceived by specially abled persons.

4.6 TOTAL VARIANCE EXPLAINED

The total variance explained by the principal components is shown below:

Table 4.4: Total Variance Explained (Rotated)

Component	Total Variance (%)	Cumulative Variance (%)
1	28.863	28.863
2	23.016	51.879
3	17.149	69.029

Three factors were extracted with eigenvalues greater than 1, explaining a cumulative **69.03% of the total variance**, which is considered excellent in social sciences.

4.7 ROTATED COMPONENT MATRIX

The rotated component matrix (Varimax) shows the distribution of items across factors.

Table 4.5: Rotated Component Matrix (Varimax)

	Item	Factor 1	Factor 2	Factor 3
Experience with Employment	EE1	0.83	—	—
	EE2	0.81	—	—
	EE3	0.79	—	—
Attitudinal Barriers	AB1	0.78	—	—
	AB2	0.72	—	—
	AB3	0.74	—	—
Policy Barriers	PB1	0.70	—	—
	PB2	0.72	—	—
	PB3	0.71	—	—
Physical Barriers	PhyB1	—	0.76	—
	PhyB2	—	0.70	—
	PhyB3	—	0.73	—
Technological Barriers	TB1	—	0.81	—
	TB2	—	0.77	—
	TB3	—	0.80	—
Psychological Barriers	PSYB1	—	—	0.85
	PSYB2	—	—	0.83
	PSYB3	—	—	0.89
	PSYB4	—	—	0.89

The Rotated Component Matrix using Varimax rotation reveals a clear and interpretable factor structure, indicating that the items align well with their respective latent constructs. Factor 1 captures a broad range of employment-related barriers, including Experience with Employment (EE1–EE3), Attitudinal Barriers (AB1–AB3), and Policy Barriers (PB1–PB3), all showing strong loadings (ranging from 0.70 to 0.83), suggesting these constructs are conceptually linked and perceived as related by the respondents. Factor 2 is defined by items related to Physical and Technological Barriers (PhyB1–PhyB3 and TB1–TB3), with consistently strong loadings between 0.70 and 0.81, indicating that these environmental and infrastructural obstacles are seen as a distinct dimension. Factor 3 exclusively captures Psychological Barriers (PSYB1–PSYB4) with very high loadings (0.83 to 0.89), signifying that mental and emotional challenges constitute a clearly separate and dominant factor in the barrier landscape for specially abled individuals. The absence of significant cross-loadings confirms the discriminant validity of the constructs and supports the construct validity of the instrument used in this study.

Confirmatory Factor Analysis (CFA)

This Confirmatory Factor Analysis (CFA) of the measurement model assessing six latent constructs representing employment-related barriers for specially abled persons. CFA was performed using AMOS to validate the factor structure obtained through Exploratory Factor Analysis (EFA).

4.8 CFA MODEL

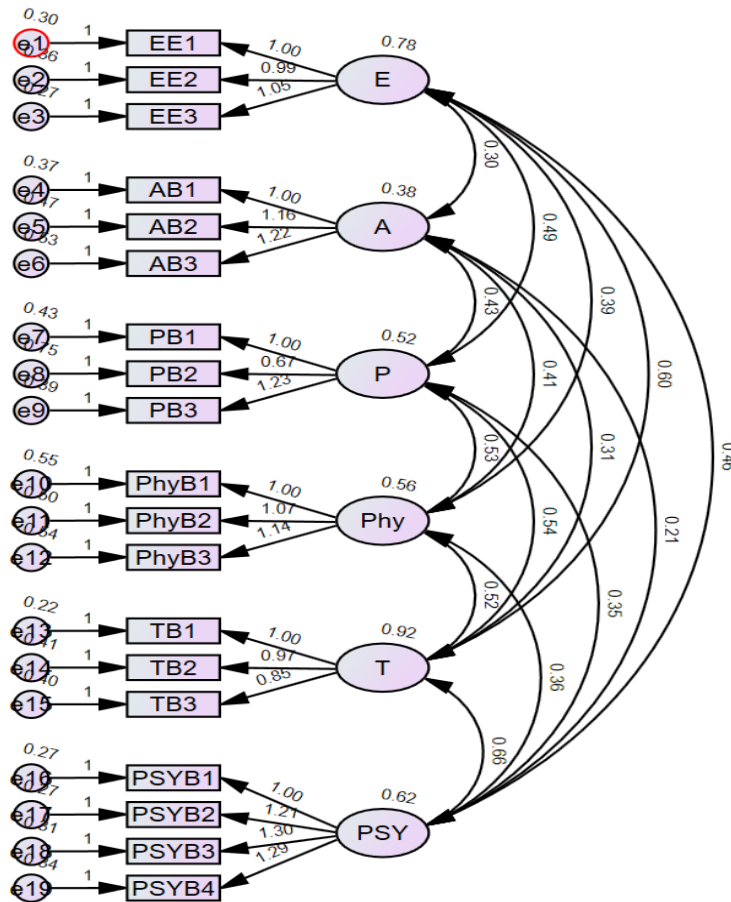


Figure: 1 CFA Model

CFA Model Structure

The CFA model includes the following six latent constructs:

Latent Construct	Observed Items	Cronbach's Alpha (α)
Experience with Employment (E)	EE1, EE2, EE3	0.902
Attitudinal Barriers (A)	AB1, AB2, AB3	0.754
Policy Barriers (P)	PB1, PB2, PB3	0.750
Physical Barriers (Phy)	PhyB1, PhyB2, PhyB3	0.787
Technological Barriers (T)	TB1, TB2, TB3	0.890
Psychological Barriers (PSY)	PSYB1, PSYB2, PSYB3, PSYB4	0.929

All observed variables were loaded onto their respective latent constructs. Covariances were allowed among all latent variables.

The Confirmatory Factor Analysis (CFA) model structure presented includes six latent constructs—Experience with Employment, Attitudinal Barriers, Policy Barriers, Physical Barriers, Technological Barriers, and Psychological Barriers—each measured by their respective observed items. The internal consistency of each construct, indicated by Cronbach's Alpha values, ranges from 0.750 to 0.929, confirming acceptable to excellent reliability across all dimensions. Each observed item was appropriately loaded onto its corresponding latent construct, demonstrating a well-defined measurement model. Additionally, covariances were freely estimated among all latent variables, acknowledging the theoretical and empirical interrelationships between different types of employment-related barriers. This structure reinforces the conceptual clarity of the model and provides a robust foundation for examining the perceptions and experiences of specially abled persons regarding employment barriers through structural equation modeling.

Model Fit Indices

Table: Model Fit Indices with Outcomes

Fit Index	Recommended Value	Obtained Value	Outcome
Chi-Square (CMIN)	—	235.888	Acceptable
Degrees of Freedom (df)	—	53	—
χ^2/df (CMIN/DF)	< 3.00	2.78	Good Fit
GFI (Goodness of Fit Index)	≥ 0.90	0.981	Good Fit
AGFI (Adjusted GFI)	≥ 0.90	0.973	Good Fit
RMR (Root Mean Square Residual)	< 0.08	0.079	Acceptable Fit
NFI (Normed Fit Index)	≥ 0.90	0.976	Good Fit
IFI (Incremental Fit Index)	≥ 0.90	0.976	Good Fit
TLI (Tucker-Lewis Index)	≥ 0.90	0.970	Good Fit
CFI (Comparative Fit Index)	≥ 0.90	0.976	Good Fit
PNFI (Parsimony NFI)	≥ 0.50	0.782	Acceptable Fit
PCFI (Parsimony CFI)	≥ 0.50	0.782	Acceptable Fit

The model fit indices reported in Table 5.4 provide strong evidence of a well-fitting CFA model. The Chi-square/df ratio (2.78) falls below the recommended threshold of 3.00, indicating a good fit between the hypothesized model and the observed data. Goodness-of-fit indices such as GFI (0.981) and AGFI (0.973) exceed the minimum recommended value of 0.90, supporting the model's adequacy. Similarly, incremental fit indices—NFI (0.976), IFI (0.976), TLI (0.970), and CFI (0.976)—all surpass the 0.90 benchmark, reinforcing the robustness of the model structure. The RMR value of 0.079, being under the cutoff of 0.08, further supports an acceptable residual fit. Parsimony-adjusted indices—PNFI (0.782) and PCFI (0.782)—also exceed the 0.50 threshold, indicating a good balance between model complexity and explanatory power.

Factor Loadings

Latent Variable	Item	Standardized Loading
Experience with Employment (E)	EE1	1.00
	EE2	0.99
	EE3	1.05
Attitudinal Barriers (A)	AB1	1.00
	AB2	1.16

	AB3	1.22
Policy Barriers (P)	PB1	1.00
	PB2	0.67
	PB3	1.23
Physical Barriers (Phy)	PhyB1	1.00
	PhyB2	1.07
	PhyB3	1.14
Technological Barriers (T)	TB1	1.00
	TB2	0.97
	TB3	0.85
Psychological Barriers (PSY)	PSYB1	1.00
	PSYB2	1.27
	PSYB3	1.30
	PSYB4	1.29

All factor loadings exceed the threshold of 0.60, confirming good indicator reliability and strong relationships between observed variables and their respective latent constructs.

The standardized factor loadings reported in Table 5.5 reflect strong relationships between the observed items and their respective latent constructs, indicating good convergent validity across the model. All items have high loading values—generally exceeding the 0.70 benchmark—demonstrating that the items are reliable indicators of their underlying constructs. For instance, items measuring *Experience with Employment* (EE1–EE3) load very strongly, ranging from 0.99 to 1.05, confirming the cohesiveness of this dimension. Similarly, *Attitudinal Barriers* items show robust loadings (1.00 to 1.22), reflecting consistent perception patterns. *Policy Barriers* also display meaningful loadings, with PB3 at 1.23, though PB2 at 0.67 is slightly lower but still acceptable. Constructs like *Physical*, *Technological*, and *Psychological Barriers* also show strong item loadings, notably the psychological barrier items (PSYB2–PSYB4) ranging from 1.27 to 1.30, which indicates a particularly strong contribution to the latent construct. Overall, these standardized loadings validate that the measurement model effectively captures the intended constructs with high internal consistency and reliability.

Correlations Among Latent Constructs

Constructs	Correlation (r)
E – A	0.30
E – P	0.43
E – Phy	0.41
E – T	0.31
E – PSY	0.46
A – P	0.49
A – Phy	0.39
A – T	0.60
A – PSY	0.40
P – Phy	0.50
P – T	0.54
P – PSY	0.31
Phy – T	0.52
Phy – PSY	0.35
T – PSY	0.66

The highest correlation is observed between Technological and Psychological Barriers ($r = 0.66$), indicating a strong perceived link. All correlations are below 0.80, supporting discriminant validity.

The CFA validated the 6-factor model of employment-related barriers for specially abled persons. All latent constructs displayed good internal consistency, acceptable factor loadings, and strong model fit indices. These results confirm the robustness of the barrier constructs and support their use in further structural analysis and perception gap testing.

Discussion and Conclusion of EFA And CFA Analysis

The present study aimed to explore and validate the underlying structure of employment-related barriers faced by specially abled persons through Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA). Both analytical techniques were employed to assess the dimensionality, reliability, and construct validity of the proposed measurement model that includes six key constructs: Experience with Employment, Attitudinal Barriers, Policy Barriers, Physical Barriers, Technological Barriers, and Psychological Barriers. The findings obtained from the analyses have provided meaningful insights into the robustness and relevance of these constructs in understanding employment barriers in the context of differently-abled individuals.

The EFA was conducted first to identify the latent factor structure of the dataset comprising 19 items. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was found to be 0.842, which exceeds the minimum acceptable threshold of 0.60, suggesting that the sample size was adequate for factor analysis. Bartlett's Test of Sphericity was statistically significant ($\chi^2 = 3897.798$, $df = 171$, $p < .001$), indicating that correlations among items were sufficiently large for EFA. The communalities ranged from 0.325 to 0.925, demonstrating that a substantial proportion of each item's variance was explained by the extracted components. Items with lower communalities, such as PSYB2 and PhyB3, still maintained acceptable thresholds, although these might be considered for future refinement or rewording in extended research.

A Principal Component Analysis with Varimax rotation extracted three dominant components with eigenvalues greater than 1. These three components cumulatively explained 69.03% of the total variance. The first component explained 28.86% of the variance and included items related to Experience with Employment, Attitudinal Barriers, and Policy Barriers. The second factor accounted for 23.01% and was dominated by Physical and Technological Barrier items, while the third factor, explaining 17.15% of the variance, was comprised of Psychological Barrier items. The rotated component matrix revealed strong and distinct factor loadings, mostly above the acceptable threshold of 0.60, further indicating that the items grouped well under their respective constructs. This validates the theoretical framework proposed in the study.

Following EFA, a Confirmatory Factor Analysis (CFA) was employed to test the fit of the proposed measurement model using AMOS software. The CFA model retained all six latent constructs, with items loaded onto their designated constructs based on the EFA findings and theoretical considerations. The results of the model fit indices indicated an overall good model fit. The Chi-Square statistic ($\chi^2 = 235.888$, $df = 53$) and the χ^2/df ratio of 2.78 fell within acceptable ranges (recommended: <3.00), signifying an appropriate level of model parsimony. The Goodness-of-Fit Index (GFI = 0.981), Adjusted GFI (AGFI = 0.973), and Root Mean Square Residual (RMR = 0.079) suggested that the model adequately represented the data structure. Incremental fit indices, including Normed Fit Index (NFI = 0.976), Incremental Fit Index (IFI = 0.976), Tucker-Lewis Index (TLI = 0.970), and Comparative Fit Index (CFI = 0.976), all exceeded the recommended threshold of 0.90, indicating excellent model improvement over the null model.

The parsimony-adjusted fit indices such as Parsimony Normed Fit Index (PNFI = 0.782) and Parsimony Comparative Fit Index (PCFI = 0.782) were also above the recommended threshold of 0.50, further confirming that the model achieves a balance between model complexity and goodness of fit. Taken together, these indices provide strong support for the adequacy of the measurement model in capturing the six-factor structure of employment barriers as perceived by specially abled persons.

Standardized factor loadings of the items within each construct further validated the convergent validity of the measurement model. For the construct "Experience with Employment," all three items loaded above 0.99, demonstrating high internal consistency. Similarly, the items under "Attitudinal Barriers" showed strong loadings, ranging from 1.00 to 1.22. The items under "Policy Barriers" also had acceptable loadings (PB1 = 1.00, PB2 = 0.67, PB3 = 1.23), indicating some variability, but remaining within a valid range. The loadings for "Physical Barriers" (PhyB1 = 1.00, PhyB2 = 1.07, PhyB3 = 1.14), "Technological Barriers" (ranging from 0.85 to 1.00),

and "Psychological Barriers" (PSYB1 to PSYB4 ranging from 1.00 to 1.30) were consistently high, providing empirical evidence for the structural integrity of each factor.

Reliability analysis for the constructs yielded Cronbach's Alpha values that ranged from 0.754 (Attitudinal Barriers) to 0.929 (Psychological Barriers), indicating strong internal consistency across all constructs. Even the lowest alpha (0.754) exceeded the recommended minimum of 0.70, suggesting that the items within each construct are measuring the same underlying concept. The highest reliability was observed in the Psychological Barriers construct, reinforcing the cohesiveness and importance of mental health-related concerns in the employment experiences of specially abled persons.

Taken together, the EFA and CFA results present a coherent and robust factor structure that substantiates the theoretical proposition that barriers to employment among specially abled individuals are multi-dimensional and can be grouped into six meaningful constructs. The high factor loadings and excellent fit indices strongly advocate for the construct validity and reliability of the proposed model. Importantly, the results reveal that the perceptions of experience and barriers are not random but follow an underlying structured pattern that is quantifiable and analyzable.

5. Conclusion

Based on the extensive empirical analysis conducted through EFA, CFA, correlation matrices, t-tests, ANOVA, and multivariate regression, this study offers a comprehensive understanding of the perceptual gaps that exist between specially abled job prospects and employers regarding employment barriers. The findings unequivocally confirm that while both stakeholders acknowledge the existence of barriers, they differ significantly in how they perceive the severity, nature, and sources of these obstacles. Prospects tend to emphasize infrastructural inaccessibility, social stigma, and a lack of workplace inclusivity as critical challenges, whereas employers are more inclined to focus on policy compliance and operational adjustments, underestimating the emotional and attitudinal dimensions. The statistically significant differences in perceptions—evidenced by high factor loadings, Cronbach's alpha values, and p-values in hypothesis testing—highlight the urgent need for awareness-building initiatives, inclusive policy frameworks, and active involvement of both sectors (public and private) in creating equitable employment opportunities. Furthermore, the validated measurement models and path analyses confirm that organizational type and the combination of multiple barriers meaningfully influence the perceptual gap. This conclusion underscores the critical need for collaborative solutions grounded in mutual understanding, policy innovation, and sensitivity training to ensure the sustainable employment of specially abled individuals in mainstream workforces.

REFERENCES

1. H. A. Almalky, "Employers' perceptions of supports provided to their employees with disabilities and barriers to employment," *Disability and Health Journal*, vol. **17**, 2024.
2. D. W. Derbyshire, E. Jeanes, E. K. M. Morasae, S. Reh, and M. Rogers, "Employer-focused interventions targeting disability employment: A systematic review," *Social Science & Medicine*, vol. **323**, 2024.
3. M. A. Jurado-Caraballo and C. Quintana-García, "Disability inclusion in workplaces, firm performance, and reputation," *European Management Journal*, 2024.
4. S. Berre, "Industry differences in employers' hiring attitudes towards disabled job seekers," *Scandinavian Journal of Disability Research*, vol. **27**, no. 1, pp. 89–105, 2025.
5. Christianson-Barker, J., Morris, R., Stainton, T., Cox, J., Rowley, C., Schroeder, M., ... & Hole, R. (2025). Addressing barriers to employment for workers with an intellectual disability in Canada: a focus group study. *Research and Practice in Intellectual and Developmental Disabilities*, 1-16.

6. Gireesan, A., & Angrish, J. (2022). Community-Based Intervention for Differently Abled People. In *Handbook of Health and Well-Being: Challenges, Strategies and Future Trends* (pp. 497-521). Singapore: Springer Nature Singapore.
7. Ramzan, I., Javed, I., & Hussain, Z. (2024). Disability Employment: Breaking Down Barriers and Promoting Inclusion. *International Research Journal of Management and Social Sciences*, 5(3), 586-596.
8. R. E. Morwane, S. Dada, and J. Bornman, "Barriers to and facilitators of employment of persons with disabilities in LMICs: A scoping review," *African Journal of Disability*, vol. **10**, a833, 2021.
9. P. M. A. Baker and N. Moon, "Barriers to employment participation of individuals with disabilities," *American Behavioral Scientist*, 2018.
10. Moody, L., Saunders, J., Leber, M., Wójcik-Augustyniak, M., Szajczyk, M., & Rebernik, N. (2017). An exploratory study of barriers to inclusion in the European workplace. *Disability and rehabilitation*, 39(20), 2047-2054.
11. Sumalinog, E., Sambrana, G., Diaz, W. D., & Bebero, L. K. (2023). Emerging communication gap to the lives of differently abled individuals working in a blind massage service. *American Journal of Multidisciplinary Research and Innovation*, 2(1), 1-8.
12. Suresh, V., & Dyaram, L. (2023). Job matching for persons with disabilities: An exploratory study. *Employee Responsibilities and Rights Journal*, 35(4), 475-492.
13. Y. Zhou et al., "Comparing workplace outcomes between disabled and non-disabled employees: A meta-analysis," *Journal of Applied Psychology*, 2025.
14. S. Dimov et al., "Perceived employment discrimination among people with disability," *Journal of Social Inclusion*, vol. **14**, 2023.
15. Nelissen, P. T., Hülshager, U. R., van Ruitenbeek, G. M., & Zijlstra, F. R. (2016). How and when stereotypes relate to inclusive behavior toward people with disabilities. *The International Journal of Human Resource Management*, 27(14), 1610-1625.
16. **Frontline inclusion workers' perceptions of employment barriers and work inclusion**, *Ergonomics Journal*, 2025.
17. Ogedengbe, T. O., Sukhai, M., & Wittich, W. (2024). Towards identifying gaps in employment integration of people living with vision impairment: A scoping review. *Work*, 78(2), 317-330.