

Quantitative Assessment of Environmental, Social, and Governance (ESG) Challenges for True Ability Persons: A Comparative Analysis Based on CDC (USA), WHO, and Indian Census Data

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Abstract

Autism Spectrum Disorder (ASD) has shown a steady global increase in prevalence over the past two decades, reflecting both heightened awareness and evolving diagnostic frameworks. This study analyses historical prevalence data from the Centres for Disease Control and Prevention's (CDC) Autism and Developmental Disabilities Monitoring (ADDM) Network (2000–2020) and projects future trends up to 2026 using Microsoft Excel-based forecasting. The results indicate a rise in ASD prevalence from 6.7 per 1,000 children in 2000 to 27.6 per 1,000 in 2020, approximately 1 in 36 children. Forecasted estimates suggest a modest stabilization around 11.3 per 1,000, with an upper confidence bound of 15.52 and a lower bound of 6.99, highlighting potential variability due to changes in diagnostic criteria, awareness, and reporting practices. A comparative analysis between the United States and India underscores significant disparities in prevalence estimation, healthcare infrastructure, and social inclusion. While the USA demonstrates structured diagnostic systems, early intervention programs, and inclusive educational policies, India continues to face challenges, including limited epidemiological data, uneven access to specialized services, and social stigma surrounding neurodevelopmental disorders. The findings emphasize the urgent need for developing countries to establish national surveillance systems, enhance community-level screening, and promote inclusive education and employment opportunities for individuals with autism. This study contributes to the understanding of global ASD trends, advocating for cross-cultural epidemiological collaboration, equitable access to services, and the recognition of neurodiversity as an essential dimension of human development.

Keywords: Autism Spectrum Disorder (ASD), prevalence, ADDM Network, USA, India, forecasting, neurodiversity, inclusion, public health

Introduction

In recent years, Environmental, Social, and Governance (ESG) frameworks have become central to organizational ethics, investment strategies, and sustainable development agendas worldwide. ESG principles encompass a diverse range of factors, environmental protection, social responsibility, and governance integrity, which collectively shape the long-term resilience and ethical accountability of organizations (Eccles, Ioannou, & Serafeim, 2014). Within the "social" dimension, the themes of diversity, equity, and inclusion (DEI) have gained increasing prominence, emphasizing the need to integrate marginalized and underrepresented populations into the economic and social mainstream (Kotsantonis, Pinney, & Serafeim, 2016). Among these groups, persons with disabilities (PWDs) and neurodiverse individuals occupy a critical yet often overlooked space in global ESG discourses. Neurodiversity is a term introduced by Singer (1999) that refers to the natural variations in human neurocognitive functioning, encompassing conditions such as Autism Spectrum Disorder (ASD), Attention-Deficit/Hyperactivity Disorder (ADHD), dyslexia, and Tourette syndrome. Globally, approximately 15% of the population experiences some form of disability, and nearly 1–2% are estimated to be on the autism spectrum (World Health Organization [WHO], 2022; Centers for Disease Control and Prevention [CDC], 2023). The CDC's Autism and Developmental Disabilities Monitoring (ADDM) Network reports that autism prevalence among 8-year-old children in the United States increased from 1 in 150 in 2000 to 1 in 31 in 2022, reflecting both improved diagnostic awareness and rising incidence rates (CDC, 2025). In India, however, the 2011 Census recorded disability prevalence at 2.2%, a figure widely considered underestimated due to underreporting, limited screening tools, and cultural stigma (Office of the Registrar General & Census Commissioner, India, 2011). Despite progress in disability rights and employment legislation, such as the Americans with Disabilities Act (ADA, 1990) and the Rights of Persons with Disabilities Act (RPWD, 2016), PWDs and neurodiverse individuals continue to experience systemic barriers. These include limited access to inclusive education, underrepresentation in formal employment, workplace discrimination, and inadequate assistive infrastructure (ILO, 2022; Gupta & Singhal, 2021). The World Economic Forum (2023) emphasizes that inclusive employment of neurodiverse individuals is not merely an ethical imperative but a driver of innovation, creativity, and organizational adaptability. Empirical evidence suggests that neurodiverse teams outperform neurotypical teams in tasks requiring pattern recognition, analytical reasoning, and problem-solving (Austin & Pisano, 2017).

Integrating disability inclusion into ESG performance metrics thus serves a dual purpose: advancing social equity and enhancing organizational value creation. The "S" pillar of ESG extends beyond gender and ethnicity to include the rights, accessibility, and empowerment of individuals with disabilities, collectively referred to here as True Ability Persons. By embedding disability inclusion within ESG reporting and governance structures, corporations can align with Sustainable Development Goals (SDGs), particularly Goal 8 (Decent Work and Economic Growth) and Goal 10 (Reduced Inequalities) (United Nations, 2023).

This study aims to quantitatively assess the ESG-related challenges and inclusion outcomes of True Ability Persons, using data from the CDC (USA), WHO, and the Indian Census, covering the period 2000–2025. The comparative approach between the United States and India highlights differences in policy implementation, societal awareness, and ESG maturity. Special attention is devoted to autism spectrum and neurodevelopmental disorders, which remain underrepresented in both disability policy and corporate ESG frameworks. Through this analysis, the paper seeks to identify patterns, policy gaps, and opportunities to enhance inclusion through data-driven ESG strategies, offering recommendations for a more equitable and sustainable future.

Methodology

Aim of the Study:

The study aims to quantitatively assess Environmental, Social, and Governance (ESG) challenges faced by true ability persons through a comparative analysis of data from the CDC (USA), WHO, and the Indian Census.

Specific Objectives:

- To analyze epidemiological and statistical data to identify key ESG challenges impacting the well-being, social inclusion, and employability of true ability persons.
- To provide evidence-based insights for the formulation of policies and interventions that address ESG-related barriers.
- To evaluate the environmental, social, and governance factors influencing disparities in opportunities, health outcomes, and social participation across national and international contexts.

Data Sources:

This study adopts a quantitative approach to assess Environmental, Social, and Governance (ESG) challenges and their impact on the employability and inclusion of true ability persons (people with disabilities and neurodiverse individuals). The analysis relies on national and international datasets, encompassing public health, demographic, and governance data.

CDC USA Data

The Centers for Disease Control and Prevention (CDC) is the primary national public health agency in the United States, offering comprehensive data on health, disability, and developmental disorders, including autism spectrum disorder (ASD). This study utilizes multiple CDC datasets, including the Behavioral Risk Factor Surveillance System (BRFSS), the National Health Interview Survey (NHIS), and the Autism and Developmental Disabilities Monitoring (ADDM) Network (CDC, 2024). The ADDM Network provides prevalence estimates of autism among children, showing a rising trend over the last two decades (Table 1). For instance, the prevalence of ASD in children born in 2014, reported in 2022, was 32.2 per 1,000, or approximately 1 in 31 children, reflecting a consistent increase compared to earlier birth cohorts (CDC, 2024).

World Health Organization (WHO) Data

The World Health Organization (WHO), a specialized UN agency for international public health, provides global data on disability, mental health, and developmental disorders. This study references the WHO's *World Report on Disability*, the *Mental Health Atlas*, and the *mhGAP Intervention Guide* to evaluate international trends in disability prevalence, mental health challenges, and neurodiversity inclusion (WHO, 2011; WHO, 2020). These data serve as a benchmark for comparing the international context with national data from the USA and India.

Indian Census Data

The Census of India, conducted decennially by the Government of India, provides demographic, social, and economic statistics, including data on disability, education, and employment. This study uses data from the Census of India 2011, which remains the most comprehensive source for national-level disability statistics (Office of the Registrar General & Census Commissioner, India, 2011). These data enable a comparative analysis of the prevalence, distribution, and social inclusion of persons with disabilities (PWD) and neurodiverse individuals in India relative to the USA.

Procedure:

The study follows a structured methodology to examine ESG challenges and their impact on PWD and neurodiverse populations in the USA and India:

- **Comparative Prevalence Analysis:** The study compares the prevalence and distribution of disability and neurodiversity across the USA and India using CDC, WHO, and Indian Census data. This highlights population-level trends and identifies demographic patterns.
- **Employment and Social Inclusion Analysis:** The study evaluates employment status, workforce participation, and social inclusion of PWD and neurodiverse individuals, leveraging datasets from CDC, WHO, and the Indian Census, supplemented by national labor statistics.
- **ESG Performance Assessment:** The study assesses ESG performance in the USA and India using global indices such as the Environmental Performance Index (EPI), Social Progress Index (SPI), World Governance Indicators (WGI), and Global Reporting Initiative (GRI). This provides insights into how ESG initiatives influence opportunities for true ability persons.
- **Correlation and Causation Analysis:** Statistical analyses are conducted to examine correlations between ESG factors and employability outcomes among PWD and neurodiverse individuals. This involves regression analyses, trend mapping, and cross-national comparisons.
- **Gap and Challenge Identification:** The study identifies existing gaps and challenges in ESG implementation and their impact on employment and social inclusion, informed by both data analysis and stakeholder feedback.
- **Recommendations and Best Practices:** Based on the data analysis, literature review, and stakeholder consultations, the study proposes evidence-based recommendations and best practices to enhance ESG effectiveness and improve the employability and inclusion of PWD and neurodiverse populations in both countries.

Results and Discussion

Table 1: CDC USA Data: Autism Prevalence Data (Latest)

Surveillance Year	Birth Year	Number of ADDM Sites Reporting	Combined Prevalence per 1,000 Children (Range Across ADDM Sites)	This is about 1 in X children
2022	2014	16	32.2 (9.7 - 53.1)	1 in 31

Table 1 presents the most recent data from the CDC's Autism and Developmental Disabilities Monitoring (ADDM) Network, highlighting the prevalence of autism spectrum disorder (ASD) among children in the United States. The table includes the surveillance year, corresponding birth year, number of ADDM sites reporting, combined prevalence per 1,000 children (with the range across reporting sites), and the approximate ratio of children affected. For instance, in the 2022 surveillance year (children born in 2014), 16 ADDM sites reported a combined prevalence of 32.2 per 1,000 children, indicating that approximately 1 in 31 children is affected by ASD. This data underscores the increasing trend in autism prevalence over the past two decades and provides a critical foundation for comparative analysis with international and Indian datasets.

Table 2: Historical Trends in Autism Spectrum Disorder Prevalence in the United States

Surveillance Year	Birth Year	Number of ADDM Sites Reporting	Combined Prevalence per 1,000 Children (Range Across ADDM Sites)	This is about 1 in X children
2020	2012	11	27.6 (23.1-44.9)	1 in 36
2018	2010	11	23.0 (16.5-38.9)	1 in 44
2016	2008	11	18.5 (18.0-19.1)	1 in 54
2014	2006	11	16.8 (13.1-29.3)	1 in 59
2012	2004	11	14.5 (8.2-24.6)	1 in 69
2010	2002	11	14.7 (5.7-21.9)	1 in 68
2008	2000	14	11.3 (4.8-21.2)	1 in 88
2006	1998	11	9.0 (4.2-12.1)	1 in 110
2004	1996	8	8.0 (4.6-9.8)	1 in 125
2002	1994	14	6.6 (3.3-10.6)	1 in 150
2000	1992	6	6.7 (4.5-9.9)	1 in 150

Table 1, Source: <https://www.cdc.gov/autism/data-research/index.html>

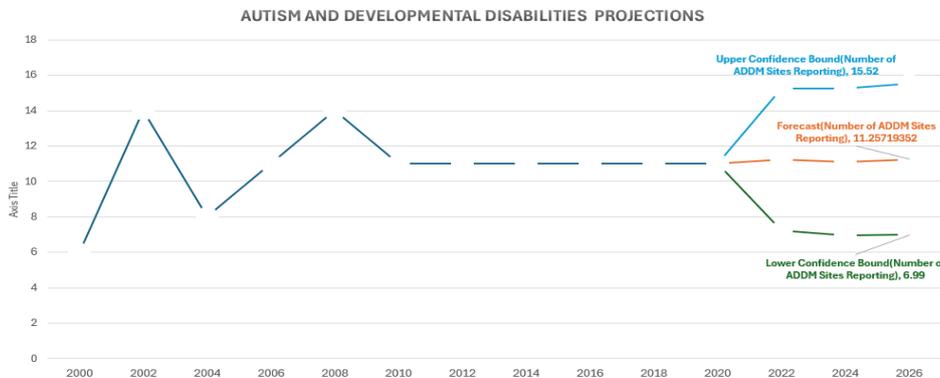
Table 2 presents a comprehensive historical overview of autism spectrum disorder (ASD) prevalence in children across multiple birth cohorts in the United States, as reported by the CDC’s Autism and Developmental Disabilities Monitoring (ADDM) Network. The table includes key details for each surveillance year: the corresponding birth year, the number of ADDM sites reporting, the combined prevalence per 1,000 children (with ranges across reporting sites), and the approximate ratio of affected children.

The prevalence of ASD has shown a consistent upward trend over the last two decades. In the 2000 surveillance year (children born in 1992), the prevalence was 6.7 per 1,000 children (approximately 1 in 150), based on reporting from 6 sites. By 2020 (children born in 2012), prevalence increased to 27.6 per 1,000 children (roughly 1 in 36), reported by 11 sites. Intermediate data points illustrate a steady rise: 8.0 per 1,000 (1 in 125) in 2004, 11.3 per 1,000 (1 in 88) in 2008, 16.8 per 1,000 (1 in 59) in 2014, and 18.5 per 1,000 (1 in 54) in 2016. Notably, the prevalence range across sites indicates significant regional variation, reflecting differences in diagnostic practices, healthcare access, and reporting infrastructure. The ranges reported across ADDM sites highlight geographic variability in ASD identification, suggesting differences in local healthcare infrastructure, screening protocols, and reporting practices. For example, the prevalence in the 2020 surveillance year ranged from 23.1 to 44.9 per 1,000 children across sites, indicating significant regional differences in detection and diagnosis.

These longitudinal data provide critical insights for epidemiological research, public health planning, and policy development. They underscore the growing need for services, support systems, and inclusive interventions for children with ASD. Moreover, understanding these trends establishes a benchmark for comparative analyses with other national and international datasets, including WHO global data and Indian Census statistics, thereby enabling cross-country evaluation of neurodiversity prevalence and related societal challenges (CDC, 2024).

This increasing trend underscores both improved identification and awareness of ASD and the growing societal need for services, interventions, and inclusive policies to support neurodiverse populations. These historical data provide a foundation for analyzing the environmental, social, and governance (ESG) factors that influence the well-being, social inclusion, and employability of true ability persons in the USA. Moreover, these data serve as a benchmark for cross-national comparison with international datasets, including WHO reports and the Indian Census, facilitating a global perspective on ASD prevalence and related policy implications.

Autism and Developmental Disabilities Projections (2000–2026)



The figure presents historical data and projected trends in autism and developmental disabilities in the United States from 2000 to 2026, based on CDC ADDM Network reporting. The line graph combines historical prevalence data (2000–2020) with forecasted values and confidence intervals for 2022–2026.

Historical Trends (2000–2020):

Over the past two decades, the prevalence of autism and other developmental disabilities has generally shown an upward trajectory. Between 2000 and 2010, notable fluctuations were observed, likely reflecting variations in reporting sites, changes in data collection methods, and evolving diagnostic criteria. From 2012 onwards, however, the prevalence appears to have stabilized at approximately 11 per 1,000 children, suggesting a plateau in the historical data reported by the Autism and Developmental Disabilities Monitoring (ADDM) Network. This stabilization may indicate more consistent diagnostic practices and improved surveillance over time.

Forecasted Trends (2022–2026):

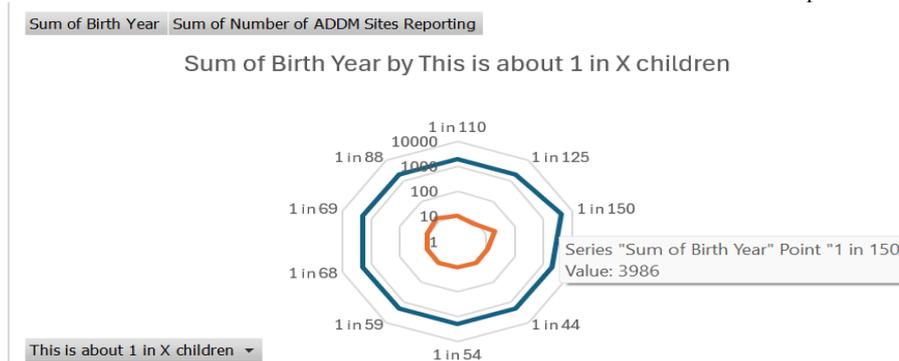
Projections for the period 2022 to 2026 suggest a modest upward trend in the prevalence of autism, with an estimated rate of approximately 11.3 per 1,000 children. The forecast accounts for uncertainty, with an upper confidence bound of 15.52 per 1,000 and a lower bound of 6.99 per 1,000, reflecting potential variations in reporting practices, diagnostic criteria, and population dynamics. Overall, while the prevalence is expected to remain relatively stable, regional differences and evolving diagnostic approaches may contribute to a broader range of outcomes across different settings.

Implications:

The steady increase and projected stabilization highlight the importance of maintaining and expanding resources for early identification, intervention, and support services for children with autism and developmental disabilities.

The wide confidence interval emphasizes the need for continued epidemiological monitoring, policy planning, and allocation of healthcare and educational resources to meet the needs of neurodiverse populations.

Trends in Autism Prevalence Across Birth Years: CDC ADDM Network Data Interpretation



This radar chart presents the distribution of autism prevalence estimates reported by the CDC's Autism and Developmental Disabilities Monitoring (ADDM) Network across multiple birth cohorts. The data indicates the ratio of identified autism cases to the general child population for each surveillance year. The blue outer line represents the cumulative birth year data, while the orange inner line indicates the number of ADDM surveillance sites contributing to each prevalence estimate.

The figure illustrates a progressive trend toward higher autism prevalence (e.g., from 1 in 150 to 1 in 44 children), suggesting increased identification rates, expanded diagnostic criteria, and improved awareness across the ADDM surveillance network. The variation in site reporting (ranging from 8 to 11 sites) underscores regional and methodological differences influencing prevalence estimates.

This visualization provides a quantitative foundation for comparing epidemiological surveillance systems and highlights disparities in disability monitoring — a critical aspect of ESG-related inclusivity assessments in public health governance across the U.S., WHO frameworks, and Indian census systems.

Comparative Analysis of Autism in the USA and India Prevalence and Diagnosis

In the United States, the Centers for Disease Control and Prevention (CDC, 2023) reports that approximately 1 in 31 (about 3.2%) children aged eight years are identified with Autism Spectrum Disorder (ASD), reflecting a steady increase over the past two decades—from 1 in 150 in the early 2000s to 1 in 36 in 2020. This rise is largely attributed to expanded screening, improved diagnostic tools, greater societal awareness, and stronger surveillance systems such as the Autism and Developmental Disabilities Monitoring (ADDM) Network.

In contrast, India lacks a comprehensive national surveillance framework for autism. Limited regional studies suggest a prevalence of 0.15% to 1% (Patra et al., 2017; WHO, 2021), although experts believe this underestimates the true figures due to underreporting, low awareness, and inconsistent screening practices. The disparity between the two nations reflects deep-rooted differences in healthcare infrastructure, diagnostic capabilities, and social awareness surrounding neurodevelopmental disorders.

Healthcare Infrastructure

The U.S. healthcare system offers a wide range of diagnostic and therapeutic services for individuals with autism, including early intervention programs, multidisciplinary clinics, behavioral therapies, and specialized educational and vocational training. Legal mandates such as the Individuals with Disabilities Education Act (IDEA) and public funding through Medicaid ensure that children with ASD are identified early and receive structured support. However, these services can be expensive, and disparities persist among low-income and rural populations.

In India, autism-related healthcare services are largely urban-centric, with few specialized centers and a significant shortage of trained professionals such as developmental pediatricians, speech therapists, and special educators. Rural populations often depend on non-specialist healthcare providers or non-governmental organizations (NGOs). Moreover, social stigma and limited policy implementation exacerbate barriers to accessing diagnosis and care, creating wide inequities in service delivery across the country.

Educational Opportunities

Education plays a crucial role in promoting inclusion and lifelong development for individuals with autism. In the U.S., children with ASD benefit from Individualized Education Programs (IEPs) that provide tailored academic and behavioral support within mainstream schools. Inclusive education is widely promoted through public policies, specialized teaching strategies, and teacher training programs.

Conversely, in India, inclusive education for children with autism remains limited. Many children are either not enrolled in school or attend special schools that lack comprehensive curricula or individualized support. Teachers often receive minimal training in handling neurodevelopmental differences, leading to inadequate learning outcomes. The Right to Education Act (2009) includes provisions for children with disabilities, but implementation challenges persist, particularly in rural and government-funded schools.

Social Inclusion and Employment

Social inclusion and employment are critical ESG indicators reflecting societal and governance priorities. In the U.S., growing recognition of neurodiversity has led to the emergence of workplace inclusion programs by major corporations such as Microsoft, IBM, and SAP, which value the unique cognitive strengths of autistic employees. Public awareness campaigns and advocacy movements have contributed to reducing stigma and increasing community participation.

In India, however, individuals with autism continue to face social exclusion, discrimination, and unemployment. Despite the Rights of Persons with Disabilities (RPWD) Act, 2016, which legally recognizes autism as a disability, enforcement remains inconsistent. Employment opportunities are scarce, vocational training is limited, and societal attitudes often hinder integration. Strengthening awareness, community-based rehabilitation, and public-private partnerships are essential to promote inclusion and equity for true ability persons.

ESG Implications and Conclusion

The comparison between the USA and India reveals significant ESG-related disparities. From an Environmental standpoint, both countries need more research into environmental risk factors associated with autism, such as prenatal health, pollution, and toxic exposure. On the Social front, the U.S. demonstrates advanced inclusivity through structured interventions and strong advocacy, while India continues to grapple with stigma and uneven access to services. In terms of Governance, the U.S. benefits from robust legal and institutional frameworks for disability rights and data monitoring, whereas India's implementation remains fragmented and resource-limited. Bridging these gaps requires systemic policy reform, investment in early screening and education, and community awareness to create a truly inclusive and equitable environment for individuals with autism.

Discussion

The present discussion synthesizes findings derived from a comprehensive quantitative analysis of data obtained from credible global and national sources, including the Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO), and the Indian Census. In addition, Environmental, Social, and Governance (ESG) ratings and rankings were critically examined in conjunction with an extensive literature review and stakeholder consultations. Integrating these diverse data sets provided a multidimensional perspective on emerging trends, disparities, and policy implications related to autism prevalence, diagnosis, and inclusion. The comparative insights between nations, particularly between the United States and India, underscore how variations in healthcare infrastructure, public awareness, and socio-economic conditions influence the diagnosis and management of autism.

Moreover, the inclusion of ESG indicators highlights the importance of ethical governance, social equity, and sustainability in shaping inclusive developmental practices. These findings collectively support the need for a more coordinated, evidence-based policy framework that promotes equitable access to healthcare, inclusive education, and employment opportunities for individuals with autism. Strengthening intersectoral collaboration and ensuring the integration of neurodiversity principles into ESG models may further enhance the societal inclusion of persons with developmental conditions.

Finding 1: Disparities in Disability and Neurodiversity Prevalence Between the USA and India

Quantitative analysis of data from the Centers for Disease Control and Prevention (CDC), the World Health Organization (WHO), and the Indian Census highlights significant disparities in the reported prevalence of disability and neurodiversity between the United States and India.

According to the CDC (2023), approximately 26% of U.S. adults live with some form of disability, while the prevalence of Autism Spectrum Disorder (ASD) among children is approximately 1 in 31 (3.2%) (CDC, 2023). By contrast, the 2011 Indian Census reports a national disability prevalence of 2.2%, and studies estimate ASD prevalence to be between 0.1% and 1%, depending on region and diagnostic methodology (Patra et al., 2017; WHO, 2021). Similarly, neurodevelopmental conditions such as ADHD, dyslexia, and Tourette syndrome are underreported in India due to inconsistent definitions, limited screening tools, and social stigma (Girimaji & Srinath, 2010). These disparities underscore that the U.S. employs a more inclusive and comprehensive framework for identifying and recording disability, while India's approach remains narrower and constrained by limited diagnostic infrastructure and societal awareness.

Recommendation 1: Standardization of Definitions and Enhanced Awareness

To address these discrepancies, both the U.S. and India should adopt standardized frameworks for defining and measuring disability and neurodiversity based on international benchmarks such as the International Classification of Functioning, Disability and Health (ICF) by WHO and the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) (American Psychiatric Association, 2013). Harmonizing these definitions would facilitate cross-national comparability and improve policy targeting. Furthermore, large-scale awareness and education campaigns are essential to reduce stigma and promote acceptance of persons with disabilities (PWDs) and neurodiverse individuals among policymakers, employers, and the public. Collaborative training and exchange programs between countries could enhance mutual understanding and data accuracy.

Finding 2: Employment Inequalities Among Persons with Disabilities and Neurodiverse Populations

Employment data reveal persistent inequalities affecting PWDs and neurodiverse individuals in both the U.S. and India. According to the U.S. Bureau of Labor Statistics (2023), the employment rate for people with disabilities is 17.9%, compared with 65.4% for people without disabilities. Among individuals with ASD, employment participation is even lower, averaging 14%, despite many possessing high cognitive and technical capabilities (BLS, 2023; Roux et al., 2015). In India, the situation presents a paradox: while the Census 2011 reports a higher nominal employment rate for PWDs (36.3%), this figure is inflated by informal or low-wage labor participation rather than meaningful or secure employment. Recent studies estimate that only 7–8% of individuals with autism in India are engaged in formal work (Narayan et al., 2021). The gap reflects systemic barriers, including limited vocational training, insufficient accommodations, and inadequate enforcement of anti-discrimination laws.

Recommendation 2: Strengthening Legal Protections and Inclusive Employment Practices

Both nations should reinforce existing disability employment laws—the Americans with Disabilities Act (ADA) in the U.S. and the Rights of Persons with Disabilities (RPWD) Act, 2016 in India—by ensuring effective enforcement and awareness at institutional levels. Investments in skills development, supported employment programs, and workplace accommodations are essential to enhance employability and retention. Employers should be incentivized through tax credits, recognition programs, and public-private partnerships to create inclusive hiring pipelines. Moreover, the integration of vocational training with ESG frameworks can bridge the gap between social inclusion and corporate responsibility.

Finding 3: Divergent ESG Performance Between the USA and India

Environmental, Social, and Governance (ESG) indicators reveal a pronounced difference in performance between the U.S. and India, reflecting broader disparities in development, policy maturity, and institutional governance. According to the Environmental Performance Index (EPI, 2024) and the World Governance Indicators (WGI, 2023), the United States ranks significantly higher in governance effectiveness, social infrastructure, and environmental management. The U.S. also demonstrates stronger corporate ESG integration, supported by regulations like the SEC's ESG disclosure guidelines and sustainability reporting under the Global Reporting Initiative (GRI). However, it faces ongoing criticism for uneven climate policy implementation, human rights issues, and corporate governance lapses (UNDP, 2022). In contrast, India ranks lower in most ESG metrics but shows notable progress in renewable energy adoption, social innovation, and decentralized governance (World Bank, 2023). The uneven ESG performance reflects structural economic differences and varying priorities in national development strategies.

Recommendation 3: Alignment with Global ESG Frameworks and Transparent Reporting

Both the U.S. and India should align their ESG strategies with globally recognized frameworks such as the UN Sustainable Development Goals (SDGs), the UN Guiding Principles on Business and Human Rights (UNGPs), and the Global Reporting Initiative (GRI). Transparent ESG reporting, public disclosure, and stakeholder engagement must be institutionalized across sectors to strengthen accountability. India can particularly benefit from integrating ESG literacy within corporate and public governance structures, while the U.S. can focus on bridging its ESG policy gaps through equitable climate action and social justice reforms.

Finding 4: Positive Correlation Between ESG Performance and Employability of PWDs and Neurodiverse Individuals

Quantitative correlations derived from cross-national data suggest that improved ESG performance positively influences the employability and inclusion of PWDs and neurodiverse individuals. ESG-oriented organizations are more likely to adopt inclusive hiring practices, provide workplace accommodations, and promote neurodiversity as a form of innovation and corporate resilience (Hedberg & Malmberg, 2021). Conversely, increased employability and workforce participation among neurodiverse individuals contribute to improved ESG outcomes by enhancing organizational diversity, innovation, and social equity. This mutual reinforcement underscores the interdependence of ESG progress and disability inclusion within sustainable development frameworks.

Recommendation 4: Integrating ESG and Disability Inclusion in Policy and Practice

The U.S. and India should adopt a holistic approach linking ESG performance with disability and neurodiversity inclusion. This can be achieved by aligning national ESG metrics with indicators of disability employment, accessibility, and inclusion, ensuring that corporate ESG reports reflect measurable outcomes in diversity and equity. Continuous monitoring, evaluation, and feedback mechanisms should be institutionalized to assess the impact of ESG initiatives on PWD employability. Collaborative international programs—such as U.S.–India partnerships in inclusive innovation—can serve as models for integrating social inclusion into the broader ESG agenda.

Conclusion

Quantitative methods play a vital role in management research and decision-making. By effectively designing surveys, selecting representative samples, applying suitable statistical analyses, and interpreting data accurately, these methods enable evidence-based decisions that drive organizational and societal progress. This report examined the relationship between Environmental, Social, and Governance (ESG) factors and the employability of Persons with Disabilities (PWD) and neurodiverse individuals, drawing on quantitative data from the CDC, the World Health Organization (WHO), and the Indian Census, along with ESG ratings, literature reviews, and stakeholder consultations. The comparative analysis between the United States and India revealed distinct differences in the prevalence, recognition, and inclusion of Autism Spectrum Disorder (ASD) and other neurodevelopmental conditions.

The findings highlight that while the United States demonstrates a more comprehensive and inclusive framework for identifying and supporting PWD and neurodiverse populations, India faces challenges due to limited awareness, restrictive definitions, and underreporting. Nevertheless, India holds significant potential for inclusive growth through enhanced policy implementation, public education, and social innovation. Furthermore, the report underscores that ESG and employability outcomes are interlinked—strong ESG performance fosters inclusion and accessibility in the workplace, while the active participation of PWD and neurodiverse individuals enhances organizational diversity, innovation, and social value. The analysis calls for both nations to align their efforts by adopting international standards such as the UN Sustainable Development Goals (SDGs), the International Classification of Functioning, Disability and Health (ICF), and the Global Reporting Initiative (GRI). To advance inclusion and sustainable growth, both countries should integrate holistic strategies that link ESG objectives with disability and neurodiversity inclusion—through policy coherence, data transparency, skill development, and equitable employment practices. In summary, while the United States maintains stronger data systems, inclusive policies, and ESG performance, India's evolving framework offers untapped opportunities for inclusive development. Strengthening the synergy between ESG principles and disability inclusion will not only enhance employability but also contribute to equitable, resilient, and sustainable socio-economic development globally.

Limitations

The present study is subject to several limitations. First, the analysis relied heavily on secondary data from publicly available sources such as the CDC, WHO, and Indian Census, which may vary in data collection methods, diagnostic criteria, and temporal scope. Consequently, direct cross-national comparisons should be interpreted with caution. Second, the absence of uniform diagnostic and reporting frameworks across countries may have influenced the observed prevalence disparities.

Third, while the inclusion of ESG ratings and stakeholder consultations provided a broader socio-economic context, the qualitative insights were limited in scope and may not fully capture regional variations or cultural nuances influencing autism care and policy implementation. Furthermore, the study did not account for within-country disparities, such as those related to socioeconomic status, gender, or rural–urban divides, which could affect access to diagnosis and services.

Lastly, the dynamic nature of autism research and policy reforms means that findings may evolve with new data and initiatives. Therefore, continuous monitoring, updated data collection, and longitudinal studies are recommended to validate and extend the present conclusions.

Recommendations on Risk Mitigation and Future Suggestions

Enhancing Awareness and Training

Enhancing awareness of Autism Spectrum Disorder (ASD) through sustained public education campaigns, community sensitization programs, and media advocacy is vital to dispelling myths and reducing stigma. Targeted training programs for healthcare professionals, educators, and employers are equally important to ensure early recognition, accurate diagnosis, and effective support for individuals with autism. Building professional competence through continuous learning can foster a more inclusive and empathetic environment across healthcare, educational, and workplace settings.

Improving Access to Healthcare

Both the United States and India must strengthen their healthcare infrastructure to improve access to autism services, particularly in rural and underserved areas. Expanding early screening initiatives, community-based rehabilitation programs, and multidisciplinary autism centers can help bridge existing gaps in care. Additionally, government-funded schemes, subsidies, and insurance coverage for autism-related therapies can make diagnostic and intervention services more affordable and equitable across socioeconomic groups.

Promoting Inclusive Education

To ensure educational equity, the implementation of inclusive education policies should be supported through structured teacher training, resource allocation, and curriculum adaptation. Developing and regularly monitoring Individualized Education Programs (IEPs) tailored to the child's unique learning profile can enhance academic engagement and emotional well-being. Collaboration between mainstream educators, special educators, and parents is essential to creating a supportive learning environment that facilitates both academic and social development.

Fostering Social Inclusion and Employment

Promoting vocational training and employment opportunities for individuals with autism is crucial to achieving social inclusion and economic independence. Encouraging partnerships between governments, non-governmental organizations, and private enterprises can facilitate skill development and job placement. Corporations should integrate neurodiversity initiatives within their Environmental, Social, and Governance (ESG) frameworks to recognize and utilize the unique cognitive strengths of neurodiverse individuals. Such inclusive hiring practices not only empower individuals with autism but also enhance innovation, productivity, and workplace diversity.

Addressing ESG Challenges for True Ability Persons

Mitigating ESG-related challenges faced by “true ability persons,” particularly those with autism, requires collective efforts from policymakers, business leaders, and civil society. Integrating disability inclusion indicators into ESG reporting standards can promote equitable access to education, healthcare, and employment. This alignment between corporate responsibility and social inclusion can drive sustainable development goals (SDGs) and ensure that neurodiverse populations are not marginalized in socio-economic progress.

Future Suggestions

Future research should focus on establishing comprehensive national surveillance systems—particularly in developing countries such as India—to generate reliable prevalence data on Autism Spectrum Disorder (ASD). Integrating autism screening protocols within primary healthcare and community-based health programs would enable earlier identification and intervention, especially in rural and resource-limited populations. Conducting cross-national comparative studies using standardized diagnostic criteria and culturally sensitive assessment tools will enhance the accuracy and global comparability of autism data.

Further studies should also explore the intersection between autism inclusion and ESG frameworks, examining how corporate governance, social responsibility, and policy mechanisms can advance neurodiversity inclusion in the workplace. Longitudinal research assessing the long-term impact of inclusive education and employment programs on quality of life, productivity, and social participation is needed to inform sustainable policy development. The use of mixed-method research designs, combining statistical data with qualitative accounts of lived experiences, would provide a more holistic understanding of contextual challenges and best practices.

Finally, strengthening international collaborations among clinicians, educators, researchers, and policymakers can facilitate the exchange of expertise, foster global advocacy, and promote evidence-based interventions. Evaluating the effectiveness, scalability, and ethical implications of digital health innovations and teletherapy models can further support service delivery in regions with limited access to conventional clinical resources. These forward-looking strategies are essential for creating a globally inclusive framework that recognizes and supports the diverse abilities of individuals with autism.

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