

A Systematic Review of the Barriers to Workplace Participation for Marginalized Groups in Virtual Environments

Dr. Jyoti Chaudhery¹; Dr. Pragya Dheer²; Dr. Shreya Bhootra³

¹(Guest Faculty), Department of Management, University of Kota, Kota, Rajasthan

²(Associate Professor), Department of Management, University of Kota, Kota, Rajasthan

³ (Guest Faculty), Department of Management, University of Kota, Kota, Rajasthan

DOI: <https://doi.org/10.51584/IJRIAS.2026.11070077>

Received: 19 July 2026; Accepted: 24 July 2026; Published: 04 August 2026

ABSTRACT

The rapid expansion of virtual and hybrid work places remote employment and digital collaboration has restructured how organisations function yet these transformations are never truly unbiased objective or void this calls for a power dynamics influence outcomes and generates substantial impact. Virtual work environments rely on digital literacy access to technology organization culture which includes employees shared value, belief, behaviour, norms ,etc. marginalised worker frequently face barriers in equal participation and career growth .Systematic review, rigorous and reproducible literature are extensively done across disability studies, digital research centres and workplace inclusion literature demonstrates that technological, organizational, social And structural barriers continue to effect participation outcomes.

Keywords: Virtual Teams/ Environments Marginalized Groups, Workplace Participation, Digital Divide, Barriers and Proximity Bias.

INTRODUCTION

The rapid shift toward virtual work has been heralded as an equalizer for workplace participation. However, emerging evidence suggests that virtual environments often replicate—and in some cases, exacerbate—traditional social hierarchies. While the "office" has moved to the cloud, the power dynamics remain tethered to physical and socio-economic realities. This paper aims to map the barriers preventing full participation for women, ethnic minorities, and individuals with disabilities in the virtual sphere.

Objective of the study

To study the technological, social, psychological and structural barriers to virtual workplace participation of marginalized groups. This paper systematically reviews research papers/articles/books/survey to identify the specific hurdles preventing equitable participation in these digital spaces.

REVIEW OF LITERATURE

Researcher examines how the shift from traditional work pattern to virtual and hybrid work has created a "dual-edged sword" for marginalized groups. It helps in offering flexibility while introducing invisible barriers. The rapid shift to virtual environments quicker post-pandemic and Digital transformation was initially hailed as a "great equalizer". However, recent evidence suggests that without intentional design, virtual workspaces can reproduce and even amplify existing structural inequalities (Toscano et al., 2025).

This review synthesizes barriers across five primary dimensions:

3.1 Structural

3.2 Organizational

3.3 Socio-Psychological

3.4 Tool-Specific Barriers: Synchronous vs. Asynchronous

3.5 The "Algorithmization" of Meritocracy

3.1 Structural Barriers: The New Digital Age

While physical access to the office is no longer a requirement, "Access Stratification" has emerged as a primary barrier for marginalized employees.

- **Digital Infrastructure & Socio-economic factors:** Access to hybrid or virtual work is divided by job levels and socio-economic factors. Lower-level roles often get less stipend for using high-speed networks or user-centred design for home offices, leading to digital exhaustion and lower performance ratings (Lange & Kayser, 2022; Pothuganti, 2024).
- **Physical disability Access:** For individuals with physical disabilities, while remote work removes frequent travelling barriers but the lack of common design in collaboration software is a major obstacle left till now. As the employee and the employer or manager may have different softwares with network issues too. (e.g., lack of real-time hi-fi captioning or screen-reader compatibility) (Frontiers in Public Health, 2025).
- **Excess Burden:** Virtual work often destroys the limits as employee works from home shorten the gap between professional and personal spaces. Researches indicate that women and care-givers in marginalized communities face higher technical stress due to the pressure of continuous online visibility while managing personal life. (Lorentzon et al., 2024).

3.2 Organizational Barriers: Visibility and Monitoring

In virtual environments, "out of sight" often equates to "out of mind," creating a phenomenon known as **Visibility Bias**.

- **The Proximity Bias:** Managers continue to favor employees they see physically or those who engage in high levels of "digital impression management." High-performing marginalized workers often spend disproportionate time making their work visible—time that could be spent on actual tasks—to avoid being overlooked for promotions (Felix et al., 2023).
- **Algorithmic Bias & Surveillance:** The use of AI-driven monitoring tools in virtual settings often penalizes non-standard work patterns. Marginalized groups, who may require more flexible schedules due to health or family needs, are disproportionately flagged by "productivity" algorithms that prioritize continuous activity over output (Toscano, 2025).

3.3 Socio-Psychological Barriers: Exclusion & "Othering"

Virtual environments can mask subtle forms of exclusion that are harder to detect and rectify than in-person interactions.

- **Digital Microaggressions:** Research into online professional forums and gaming-style workspaces reveals that "weaponized femininity" and "competence questioning" are prevalent. Women and minorities are often presumed to have lesser digital fluency, leading to their exclusion from high-stakes virtual projects (Jubran et al., 2025; Paaßen et al., 2024).
- **Intersectionality of Disadvantage:** The "Intersectionality Theory" (Crenshaw, 1989) remains critical in 2026. For example, older adults from low-income backgrounds with limited English proficiency experience a "compounded oppression" where language barriers and digital illiteracy interact to erode trust in virtual platforms (Husain et al., 2025).

To provide a more comprehensive systematic review, we must examine the **mechanisms of exclusion** that occur within specific virtual tools (synchronous vs. asynchronous) and the emerging role of **AI-driven management** as a gatekeeper.



3.4 Tool-Specific Barriers: Synchronous vs. Asynchronous

The "medium" of virtual work is not neutral; different platforms create distinct participation hurdles for marginalized groups.

- **Synchronous Video Exhaustion (The "Camera On" Policy):** Research into "Zoom Fatigue" (2024–2025) highlights that marginalized employees—particularly women and those from lower socioeconomic backgrounds—report higher levels of self-consciousness. The "gaze" of the camera forces a performance of "professionalism" that often requires masking home environments or neurodivergent traits (e.g., avoiding eye contact), leading to faster cognitive depletion compared to their peers (Toscano, 2025).
- **Asynchronous Text-Based Exclusion:** Platforms like Slack or Teams rely heavily on written communication. For employees who speak English as a second language (ESL) or those with dyslexia, the rapid-fire nature of these channels can lead to "communication apprehension." This often results in self-silencing to avoid being judged for grammatical errors or slower response times (Husain & Greenhalgh, 2025).

3.5 The "Algorithmization" of Meritocracy

As organizations move toward "People Analytics," the barriers to participation have shifted from human bias to mathematical bias.

- **The Trick of Data Poverty:** Marginalized communities frequently exhibit "thinner" digital footprints as a result of caregiving responsibilities or a history of being excluded from prominent tasks or roles. When used for talent assessment, predictive AI tends to view a deficiency in ongoing digital engagement as a sign of low ambition, thereby perpetuating the "glass ceiling". (Felix et al., 2023)
- **Cultural Uniformity in Virtual Onboarding:** Virtual onboarding often misses the chance for natural cultural connection with coworkers or teammates. New hires from marginalized backgrounds have expressed feeling more like operational components than integral team members. The virtual orientation process tends to prioritize task-oriented training over the essential psychological safety needed to share diverse perspectives.

CONCLUSION

The systematic review concludes that the "Virtual Workplace" is not a neutral geography. It is a social construct that currently favors those with high technological literacy, stable domestic environments, and existing social power. For the "Virtual Shift" to be a true success, organizations must move from **Digital Adoption** to **Digital Equity**. Failure to address these barriers will result in a "Two-Tier" workforce where marginalized groups are functionally present but systemically silent.

RECOMMENDATIONS AND SUGGESTIONS

Organizations should move from simple access to highly digitalized software and working style. Organizations must reduce the dependence on video calls/conferencing to support neurodiversity and global time-zone justice. Assign task to marginalized employees under the expert virtual mentors so they can direct the digital networks of the company.

Some major look out can be as follows:

- Increase the digital literacy with connectivity as well.
- Affordable and accessible software and get familiar with technologies.
- Free Camera installation and tutorial by employers.
- Establish Workplace modifications under disability legislatures.



- Set the time lines for meetings
- Surveillance, committees, redressal agencies for smooth functioning and grievance handling.
- Time to time physical meet-up and reporting of employees.
- Transparent reporting and feedback for bias free promotions.

REFERENCES

1. **Castelli, P. A. (2024).** Inclusive leadership in global virtual teams: Overcoming cultural diversity and geographical distance challenges to enhance belongingness, uniqueness, accessibleness, and usefulness. *Journal of Business Ethics*. <https://doi.org/10.1007/s10551-024-05620-w>
2. Crenshaw, Kimberle () "Demarginalizing the Intersection of Race and Sex: A Black Feminist Critique of Antidiscrimination Doctrine, Feminist Theory and Antiracist Politics," University of Chicago Legal Forum: Vol. 1989: Iss. 1, Article 8. Available at: <http://chicagounbound.uchicago.edu/uclf/vol1989/iss1/8>
3. **Felix, B., et al. (2023).** Impression management in remote work: The cost of being seen. *Journal of Management Studies*, 60(4). <https://doi.org/10.1111/joms.12800>
4. **Frontiers in Public Health. (2025).** Telemedicine utilization and digital inclusion among people with disabilities: Post-pandemic associated factors and policy implications. *Frontiers in Public Health*, 13. <https://www.frontiersin.org/journals/public-health>
5. **Husain, L., & Greenhalgh, T. (2025).** Examining intersectionality and barriers to the uptake of video consultations among older adults from disadvantaged backgrounds with limited English proficiency. *Journal of Medical Internet Research*, 27, e65690. <https://www.jmir.org/2025/1/e65690/>
6. **Jubran, S., et al. (2025).** Inclusion and exclusion in digital communities: A systematic review and future directions to increase inclusivity. *Frontiers in Psychology*, 16. <https://doi.org/10.3389/fpsyg.2025.1796305>
7. **Lange M, Kayser I (2022),** The Role of Self-Efficacy, Work-Related Autonomy and Work-Family Conflict on Employee's Stress Level during Home-Based Remote Work in Germany. *Int J Environ Res Public Health*. 2022 Apr 19;19(9):4955. doi: 10.3390/ijerph19094955, PMID: 35564349; PMCID: PMC9105450.
8. **Lorentzon, K., et al. (2024).** A systematic review of the impact of remote working referenced to the concept of work-life flow on physical and psychological health. *Human Resource Management Review*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10612377/>
9. **Paaßen, B., et al. (2024).** Beyond embodiment and social presence: Preferences for virtual assistant gender and clothing style. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2024.108120>
10. **Pothuganti, R. (2024).** Technostress, digital fatigue, and AI dependency as antecedents of burnout and SDG-4 achievement. *Technology in Society*. <https://doi.org/10.1016/j.techsoc.2024.102510>
11. **Smith, J., & Robinson, K. (2026).** The impacts of algorithmic work assignment on fairness perceptions and productivity: Evidence from field experiments. *Manufacturing & Service Operations Management*, 28(2). <https://doi.org/10.1287/msom.2022.1120>
12. **Toscano, F. (2025).** Loneliness and isolation in the era of telework: A comprehensive review of challenges for organizational success. *Informing Science: The International Journal of an Emerging Transdiscipline*. <https://pmc.ncbi.nlm.nih.gov/articles/PMC12385570/>
<https://www.pib.gov.in/PressReleasePage.aspx?PRID=2174773®=3&lang=2>
<https://gsconlinepress.com/journals/gscarr/sites/default/files/GSCARR-2025-0130.pdf>