

# Unconscious Bias and Perceived Discrimination by Tech Professionals in Brazil

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**Abstract.** *Diversity and inclusion are essential drivers of innovation in software engineering, yet systemic inequalities and implicit bias persist as key challenges. By surveying 220 Brazilian tech professionals, this study aims to explore how inclusion and discrimination are perceived in the workplace. Findings reveal that 95.2% of women report experiencing sexism; 77.1% of non-white professionals identify racism as a key issue; 61.5% of disabled professionals report experiencing ableism. Despite widespread acknowledgment of discrimination, only 23% of respondents explicitly recognized the presence of unconscious bias in themselves. These results reveal persistent equity gaps and call for DEI (Diversity, Equity, and Inclusion) strategies in Brazil’s tech sector.*

## 1. Introduction

Diversity and inclusion are proven drivers of creativity, profitability, and team effectiveness in software engineering (SE), yet Brazilian tech organizations struggle to realize these benefits [Albusays et al. 2021]. Deep-rooted social inequalities and workplace biases often undermine efforts to integrate diverse perspectives, and prior research has largely examined only single identity dimensions (*e.g.*, gender) or relied on global, rather than Brazil-specific, samples. Addressing these gaps, this study conducts a nationwide survey of 220 Brazilian professionals to investigate how different work models, company contexts, and intersecting identities shape perceptions of inclusion, discrimination, and unconscious bias. The results supply organizations with concrete, locally grounded insights for designing more equitable, innovative, and sustainably high-performing teams.

## 2. Methodology

We follow the guidelines provided by [Punter et al. 2003] for designing and conducting the survey. We adopted a mixed-methods approach to analyze the survey data, predominantly qualitative research complemented by quantitative data. For qualitative analysis, we applied the Grounded Theory procedures by performing open and axial codings for open-ended questions to improve the reliability of the findings [Corbin and Strauss 2014] by systematically categorizing responses to identify key themes and patterns.

### 3. Conclusions

The results of this study were published and presented at SBES 2025 [Canuto et al. 2025]. Diversity is a proven driver of innovation and organizational performance in Brazilian software development, yet experiences of inclusion and discrimination vary markedly by race, gender, and sexual orientation. Sexism emerges as the most prevalent form of discrimination (74.1%), signaling a persistent, cross-cutting problem. Organizational context matters: smaller companies report higher rates of ableism, likely due to limited resources and weaker policies; hybrid work coincides with the highest perceptions of sexism and elevated ageism, while remote and on-site workers report similar levels of gender discrimination, so interventions must be organization-wide rather than tied to a single work model. Awareness of unconscious bias is uneven: roughly a quarter of respondents explicitly recognize their own biases, 10% deny having any, and 5% are unsure of what bias means. These findings underscore the need for structured, practical training and routine bias audits to promote equitable workplace practices.

A pronounced advancement gap shows that team-level inclusion rarely translates into leadership. Representation drops from teams to leadership for most groups: race (84.5% to 62.7%), gender/sexuality (79.1% to 62.3%), neurodivergent (53.2% to 36.4%), and disabled professionals (31.4% to 25.9%), with older workers as an exception (32.7% to 43.6%). Looking ahead, inclusive software workplaces in Brazil require targeted DEI, transparent promotions, mentoring and sponsorship, regular advancement audits, and on-going collaboration among practitioners, researchers, and policymakers.

Future work will extend the analysis with intersectional statistical methods to examine compounded experiences (e.g., Black women with disabilities) and incorporate survey questions not covered in this study. All anonymized datasets, analysis scripts, and supporting materials are made available for replication and further research [Canuto et al. 2024].

### References

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