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Challenges and Problems of LGBTQ+ with Special Reference to Indian Engineering Industry

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ABSTRACT
This article examines the multifaceted challenges and problems faced by LGBTQ+ individuals within the Indian engineering industry, drawing insights from a primary study conducted among 100 respondents. The research seeks to analyze systemic and workplace-level obstacles that hinder the professional and personal well-being of LGBTQ+ professionals. Findings reveal persistent issues such as workplace discrimination, social stigma, and limited representation, which significantly impact career progression and mental health. A major concern identified is the lack of formal inclusive policies in most engineering firms, resulting in an unsupportive and often hostile work environment. The study also highlights the role of unconscious bias during hiring and promotion processes, which limits equal opportunities for LGBTQ+ employees. Further, barriers in engineering education, including bullying and lack of mentorship, reduce access to technical careers for LGBTQ+ students. The absence of visible role models and supportive networks further isolates individuals in this field. Data was collected through structured questionnaires covering workplace experiences, recruitment, policy awareness, and perceptions of inclusivity. The study emphasizes the urgent need for policy reform, diversity training, and institutional accountability. Recommendations include integrating inclusive HR practices, enforcing anti-discrimination laws, and promoting safe spaces. The article aims to advocate for a more inclusive and equitable engineering sector in India.

Keywords: *LGBTQ+, Individuals, challenges, role models, well-being, careers, engineering Industry, discrimination and laws.*

1. INTRODUCTION

In recent years, the visibility and rights of the LGBTQ+ (Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, and others) community have become an increasingly vital topic of discussion worldwide. However, despite legal advancements and social movements, systemic discrimination, social exclusion, and workplace challenges continue to persist across many sectors, particularly in traditionally male-dominated and heteronormative environments. One such domain is the engineering industry in India, where cultural conservatism, corporate silence, and lack of inclusive policies often combine to create a hostile or indifferent environment for LGBTQ+ professionals. India has made notable strides in LGBTQ+ rights, especially with the historic decriminalization of Section 377 of the Indian Penal Code in 2018, which marked a significant victory for the LGBTQ+ movement. This judgment by the Supreme Court decriminalized consensual homosexual acts among adults, signalling a shift in the legal landscape. Despite this progress, social acceptance has lagged behind, especially in conservative spaces such as engineering colleges, factories, and corporate workforces in core engineering sectors (e.g., mechanical, civil, electrical, manufacturing, and infrastructure development). Even in urban centers, many LGBTQ+ individuals continue to hide their identities due to fear of backlash, harassment, and limited career opportunities. In rural and semi-urban areas where a significant portion of engineering plants and projects are located, societal stigma and ignorance about LGBTQ+ identities are more deeply entrenched.

For LGBTQ+ individuals, this often means choosing between authenticity and career progression. The pressure to conform to societal expectations and suppress one's identity can lead to increased mental health struggles, stress, job dissatisfaction, and attrition. On the other hand, when LGBTQ+ employees

are included, respected, and empowered, they tend to be more productive, creative, and committed to their organizations. For the engineering industry, continued exclusion of LGBTQ+ talent results in a loss of diverse perspectives, reduced innovation potential, and limited access to a broader, more dynamic workforce. As global supply chains and international clients increasingly emphasize ESG (Environmental, Social, and Governance) criteria, Indian engineering firms that fail to adopt inclusive practices risk losing their competitive edge and reputational capital.

There is also a growing need for government bodies, industry associations (like CII, FICCI, and IEI), and large engineering firms to lead by example, by creating frameworks and incentives that promote inclusivity. This would not only align Indian firms with global sustainability standards but also pave the way for a healthier, more equitable work culture.

Challenges in the Engineering Industry

The Indian engineering industry is often perceived as masculine, rigid, and tradition-bound, shaped by decades of patriarchal norms. This industry generally lacks the softer inclusivity policies seen in sectors like information technology, media, or education. LGBTQ+ engineers working in core sectors such as construction sites, factories, and public infrastructure projects face a unique combination of challenges that include:

1. Hostile work environments
2. Absence of inclusive HR policies
3. Fear of being outed
4. Lack of mentorship or representation
5. Limited awareness and sensitivity among peers and supervisors

The industry's focus on technical output and traditional work culture often sidelines conversations on diversity and inclusion. The heteronormative environment, coupled with a general lack of institutional mechanisms for grievance redressal specific to LGBTQ+ issues, makes it especially hard for sexual minorities to thrive.

2. IMPORTANCE AND NEED OF STUDY:

This study is important as it brings attention to the often-overlooked struggles faced by LGBTQ+ individuals in the Indian engineering sector. It highlights the gap between legal reforms and actual workplace inclusivity. The traditionally male-dominated and conservative nature of the engineering industry intensifies challenges for LGBTQ+ employees. Understanding these issues can help create safer, more accepting work environments. The study also promotes diversity and inclusion as essential components of organizational growth. It urges stakeholders to adopt policies that respect and support gender and sexual diversity. The research contributes to bridging social equity gaps within technical industries. It provides a foundation for policy change, educational reform, and corporate sensitization. The insights can help reduce workplace discrimination and improve mental well-being. Ultimately, the study aligns with the broader goal of building inclusive, innovative, and socially responsible engineering workplaces in India.

There is a pressing need to study the challenges faced by LGBTQ+ individuals in the Indian engineering industry due to persistent exclusion and underrepresentation. While legal rights have progressed, the engineering sector remains slow to adopt inclusive practices. Many LGBTQ+ professionals face workplace discrimination, harassment, or are forced to conceal their identities. This study is crucial to identify the root causes of such issues and their impact on employee performance and mental health. It sheds light on the cultural and institutional barriers that hinder inclusivity in core technical sectors. Engineering firms often lack diversity training and inclusive HR policies. The study helps generate awareness among industry leaders, policymakers, and educators. It also addresses the need for systemic reforms at both academic and professional levels. By focusing on this specific

industry, the study fills a critical research gap. Ultimately, it aims to contribute to a more equitable and inclusive engineering ecosystem in India.

3. SCOPE OF THE STUDY

The scope of this study encompasses the identification and analysis of social, cultural, and organizational challenges faced by LGBTQ+ individuals in the Indian engineering sector. It examines workplace environments across core engineering domains such as civil, mechanical, electrical, and manufacturing. The study also covers the policies, practices, and attitudes prevalent in both public and private engineering firms. It aims to assess the extent of inclusivity, awareness, and support systems available to LGBTQ+ employees. The study evaluates how existing workplace norms and policies affect employee morale, retention, and performance. It also explores the role of legal reforms, corporate responsibility, and industry associations. The findings aim to inform actionable strategies for creating inclusive and safe workspaces. This scope sets the foundation for broader policy dialogue and future research in the sector.

4. LITERATURE REVIEW

Rabins, M., Brennan-Cook, J., Jackson, G., & Koch, A. (2025), explore the complexities surrounding LGBTQ+ identity disclosure across diverse cultural and healthcare settings. The study emphasizes the psychological and social challenges individuals face when deciding whether to disclose their identities. It highlights the impact of stigma, fear of discrimination, and institutional barriers on disclosure decisions. The authors also investigate the role of supportive networks and inclusive policies in facilitating safer disclosure environments. Using qualitative interviews, they provide nuanced insights into the lived experiences of LGBTQ+ individuals.

Shahani, P. (2024), Parmesh Shahani's Queeristan: LGBTQ Inclusion in the Indian Workplace (2024) is a compelling blend of memoir, manifesto, and practical guide that advocates for LGBTQ+ inclusion within India's corporate sector. Drawing from his experiences as an openly gay executive at Godrej Industries, Shahani presents a step-by-step roadmap for transforming workplace cultures to be more inclusive and equitable. He underscores the economic advantages of diversity, citing studies that link inclusive practices to increased innovation and profitability. The book critiques superficial corporate gestures—often termed "pinkwashing"—and emphasizes the necessity for genuine policy reforms and cultural shifts. Through narratives of companies like Tata Steel and The Lalit Hotel Group, Shahani illustrates successful inclusion strategies, such as extending benefits to same-sex partners and supporting gender-affirming procedures.

Maji, S., Yadav, N., & Gupta, P. (2024), conducted a comprehensive systematic review examining the workplace experiences of LGBTQ+ individuals. Utilizing the PRISMA methodology, they analyzed 101 empirical studies to identify prevalent forms of discrimination, including hiring biases, unsafe work environments, microaggressions, and harassment. These adverse experiences contribute to heightened work-related stress, compelling individuals to manage their sexual identity and presentation, which negatively impacts job satisfaction, work–life balance, and career decisions. The study also highlights organizational resistance to LGBTQ+ diversity training and underscores the necessity for inclusive policies and supportive workplace cultures.

Telazzi and Colombo (2024), conducted a systematic review analyzing 110 peer-reviewed studies published after 2006, focusing on health disparities among LGBTQ+ older adults in the United States. Their findings reveal persistent barriers in healthcare access, including cultural insensitivity, stigma, and a lack of LGBTQ+-affirming services, particularly affecting individuals with cognitive impairments like dementia. The study underscores the detrimental effects of heteronormative assumptions and the tendency to treat LGBTQ+ elders as a homogeneous group, leading to inadequate and inappropriate care.

Majumder (2022), examines the pivotal role of Bangladesh's Light Engineering Industry (LEI) in

advancing the nation's Sustainable Development Goals (SDGs). The study highlights LEI's contributions to poverty alleviation (SDG 1) and economic growth (SDG 8) through job creation and skill development initiatives. It emphasizes the sector's efforts in promoting gender equality (SDG 5) and reducing inequalities (SDG 10) by providing employment opportunities, especially for rural women. LEI's environmentally friendly practices, such as generating only recyclable solid waste, align with SDGs focused on sustainable cities (SDG 11), responsible consumption (SDG 12), and climate action (SDG 13).

Field and Rajewski (2021), discuss the systemic challenges faced by LGBTQ+ early-career scientists, particularly in plant science. Despite recent legal protections, LGBTQ+ individuals in STEM fields often encounter discrimination, professional devaluation, and mental health challenges, leading to higher attrition rates compared to their non-LGBTQ+ peers. The authors emphasize the intersectionality of these challenges, noting that factors such as socioeconomic status, race, and gender identity can compound the difficulties faced by LGBTQ+ scientists. They advocate for structural changes in academic institutions, including reevaluating admission metrics like GPA that may disadvantage marginalized groups.

Crowe et al. (2021), address the underrepresentation of LGBTQ+ voices in healthcare research by conducting a rapid review of 18 research priority sets and facilitating an inclusive online workshop. The review revealed that most existing priorities were established by researchers and practitioners, with minimal involvement from LGBTQ+ individuals themselves. The workshop, engaging LGBTQ+ community members, identified seven key research themes, prioritizing healthcare service delivery, prevention, and the intersectionality of challenges faced by LGBTQ+ individuals. This participatory approach underscores the importance of involving marginalized communities directly in setting research agendas. The study offers practical insights into conducting respectful and inclusive public involvement exercises, aiming to inform future research directions that better reflect the needs of the LGBTQ+ population.

Tomar et al. (2021), examine the compounded psychosocial challenges faced by LGBTQ+ individuals living with HIV/AIDS during the COVID-19 pandemic. The study highlights how prolonged isolation and disrupted healthcare access intensified mental health issues and increased vulnerability to substance abuse and risky behaviors. It underscores the exacerbation of pre-existing disparities, including unemployment, income inequality, and intimate partner violence, within this population. The authors advocate for multidisciplinary, non-judgmental care approaches, such as tele-counselling and proactive distribution of essential health resources and sterile supplies. They emphasize the necessity of sustaining inclusive healthcare services beyond the pandemic to support the well-being of LGBTQ+ individuals living with HIV/AIDS.

Hillier et al. (2020), explore the intersectional experiences of individuals identifying as both LGBTQ+ and autistic, highlighting the unique challenges arising from these dual identities. Through a focus group with four participants, the study identifies key themes: the compounded effects of holding both identities, the stressors associated with multiple minority statuses, feelings of isolation due to societal misunderstanding, and a notable lack of tailored support services. The research underscores the necessity for increased awareness and inclusive practices that address the specific needs of LGBTQ+ individuals on the autism spectrum.

Hume and Rahimtoola's (2018), introduction to the "Queering Ecopoetics" special cluster in ISLE examines the intersection of queer theory and ecopoetics, challenging traditional environmental narratives. They critique heteronormative and anthropocentric perspectives in environmental discourse, advocating for a relational approach that embraces diverse kinship and affective connections beyond conventional family structures. The authors highlight the contributions of queer theorists like Gloria Anzaldúa, emphasizing the importance of decolonial and intersectional perspectives in environmental literature. By exploring themes such as reproductive futurity and toxic discourse, they call for a

reimagining of ecological relationships that prioritize inclusivity and challenge dominant paradigms.

Twain (2010), explores the critical challenges faced by Indian engineering education, highlighting gaps in curriculum relevance and teaching methodologies. The study emphasizes the need for modernization to align with global standards. It discusses infrastructure constraints and faculty shortages impacting quality. The work suggests enhanced industry-academia collaboration to improve practical skills.

5. METHODOLOGY OF THE STUDY

This study is primarily based on primary data collection to explore the real-time challenges and problems faced by LGBTQ+ individuals in the Indian engineering industry. The research adopts a qualitative and quantitative approach, combining surveys and interviews to obtain comprehensive insights. The study adopts a quantitative research design using a structured sample survey method. A sample of 100 respondents identifying as part of the LGBTQ+ community in the Indian engineering industry was selected using purposive sampling. A pre-tested questionnaire comprising both closed and Likert-scale questions was developed to capture key challenges and problems. The survey focused on themes such as workplace discrimination, mental health, career progression, inclusion policies, and safety concerns. Data collection was conducted via online forms and direct interviews over a 4-week period. Ethical considerations including informed consent, anonymity, and voluntary participation were strictly adhered to. The collected data was coded and entered into SPSS software for statistical analysis. Descriptive statistics like percentages and frequencies were used for basic trend analysis. Statistical tools like ANOVA, Frequency and Cross Tabulation were used to examine associations between variables. The findings were interpreted in the context of existing literature and DEI i.e., Diversity, Equity and Inclusion policies within the Indian engineering sector.

6. OBJECTIVES OF STUDY

1. To analyze the key challenges faced by LGBTQ+ individuals in the Indian engineering industry.
2. To highlight the impact of workplace discrimination and bias on career progression.
3. To examine the lack of inclusive policies and their implications on professional growth.
4. To explore the educational and recruitment barriers for LGBTQ+ individuals in engineering.
5. To propose solutions and recommendations for fostering an inclusive engineering sector.

7. DATA ANALYSIS

The Present research-study data analysis carried out based on the data collected from primary data resources, the key variables identified in present data analysis are demographic variables age, educational qualification, experience, work location and the variables associated to challenges faced by the LGBTQ+ employees working in Indian Engineering Industry.

Analysis on Demographic Variables:

Table-1: Demographic Analysis

Variable	Category	Frequency	Percent	Cumulative%
Age	21-30	24	24.00	24.00
	31-40	51	51.00	75.00
	41-50	19	19.00	94.00
	51&Above	6	6.00	100.00
	Total	100	100.00	
Education Qualification	Diploma in Engineering	9	9.00	9.00
	Bachelor's in Engineering	39	39.00	48.00
	Master's in Engineering	41	41.00	89.00

Variable	Category	Frequency	Percent	Cumulative%
	Other	11	11.00	100.00
	Total	100	100.00	
Experience	1-5	14	14.00	14.00
	6-10	15	15.00	29.00
	11-15	46	46.00	75.00
	16-20	16	16.00	91.00
	20&Above	9	9.00	100.00
	Total	100	100.00	
Work Location	Delhi	25	25.00	25.00
	Mumbai	25	25.00	50.00
	Bangalore	25	25.00	75.00
	Chennai	25	25.00	100.00
	Total	100	100.00	
Designation	Executive	19	19.00	19.00
	Entry-level Engineer	44	44.00	63.00
	Mid-level Engineer	23	23.00	86.00
	Senior Manager	14	14.00	100.00
	Total	100	100.00	

The majority of respondents (51%) fall in the 31–40 age group, indicating a mid-career professional demographic. Only 6% are aged 51 and above, suggesting limited representation from senior professionals. Most respondents (41%) hold a Master's in Engineering, followed by 39% with a Bachelor's degree. Only 9% of the participants have a Diploma, and 11% possess other qualifications. The largest experience group is 11–15 years (46%), reflecting a relatively seasoned workforce. Very few respondents (9%) have over 20 years of experience, again pointing to a younger professional base. Work location is evenly distributed across Delhi, Mumbai, Bangalore, and Chennai (25% each). Entry-level Engineers dominate the sample (44%), showing strong representation of early career professionals. Executives (19%) and Senior Managers (14%) form a smaller portion, indicating fewer top-level roles. The data reflects a workforce with strong technical education and moderate to significant work experience, largely concentrated in engineering roles across metro cities.

Analysis on Discrimination against LGBTQ+ at Workplace in Engineering Industry :

Table-2: Discrimination against LGBTQ+ at Workplace in Engineering Industry

		Frequency	Percent	Cumulative%
Faced Discrimination	Very Frequently	25	25.00	25.00
	Occasionally	21	21.00	46.00
	Rarely	20	20.00	66.00
	Never	21	21.00	87.00
	Prefer not to say	13	13.00	100.00
	Total	100	100.00	

A significant 25% of respondents reported facing discrimination against LGBTQ+ individuals very frequently. An additional 21% experienced such discrimination occasionally, indicating that nearly half (46%) observed it at some level. Only 21% stated they never witnessed any discrimination, reflecting limited fully inclusive environments. 13% chose not to disclose, possibly indicating discomfort or fear in discussing the issue. Overall, the data suggests that LGBTQ+ discrimination remains a notable concern in the engineering workplace.

Analysis on Supportive Policies for LGBTQ+ at Workplace in Engineering Industry:

Table-3: Analysis on Supportive Policies for LGBTQ+ at Workplace

Factor	Frequency	Percent	Cumulative%
Yes, comprehensive and well-implemented	17	17.00	17.00
Yes, but not well implemented	19	19.00	36.00
Policies exist but are unknown to most employees	18	18.00	54.00
No, there are no such policies	21	21.00	75.00
Not sure	25	25.00	100.00
Total	**100**	**100.00**	

The total 17% of respondents reported having comprehensive and well-implemented LGBTQ+ supportive policies. A further 19% acknowledged the existence of such policies, but noted poor implementation. For 18% of participants, policies exist but are largely unknown, suggesting poor communication or awareness. Alarmingly, 21% stated that no such policies are in place at their workplaces. The largest group (25%) was unsure, indicating a lack of clarity or transparency in organizational communication. Overall, the findings highlight gaps in both the implementation and visibility of LGBTQ+ supportive policies in the engineering industry.

Analysis on Incusivity towards LGBTQ+ at Workplace in Engineering Industry

Table-4: Incusivity towards LGBTQ+ at Workplace

	Frequency	Percent	Cumulative%
Yes, very often	23	23.00	23.00
Occasionally	20	20.00	43.00
Rarely	17	17.00	60.00
Never	23	23.00	83.00
Not sure	17	17.00	100.00
Total	**100**	**100.00**	

Only 23% of respondents observed frequent inclusivity towards LGBTQ+ individuals at the workplace. An equal 23% stated they never witnessed any inclusivity, indicating polarization in workplace culture. 20% experienced occasional inclusivity, showing some effort exists but inconsistently. 17% rarely observed inclusive practices, and another 17% were unsure, suggesting limited awareness or visibility. Overall, the data reflects a mixed and inconsistent level of LGBTQ+ inclusivity in the engineering industry.

Analysis on Managerial Support to LGBTQ+ Employees at Workplace in Engineering Industry;

Table-5: Managerial Support to LGBTQ+ Employees at Workplace

Factor	Frequency	Percent	Cumulative%
Highly Supportive	19	19.00	19.00
Supportive	13	13.00	32.00
Neutral	21	21.00	53.00
Unsupportive	27	27.00	80.00
Hostile	20	20.00	100.00
Total	100	100.00	

It is noticed from the table, Only 19% of respondents found managers to be highly supportive of LGBTQ+ employees. An additional 13% described managerial support as generally supportive, totalling just 32% positive responses. A significant 21% rated managerial behavior as neutral, indicating a lack of active support or opposition. The highest share (27%) viewed managers as unsupportive, pointing to a

concerning leadership gap. Alarmingly, 20% reported experiencing hostile managerial attitudes toward LGBTQ+ individuals. Combined, 47% of respondents experienced unsupportive or hostile managerial behavior. This highlights a critical issue in leadership attitudes, which could hinder workplace inclusivity. The data underscores the need for targeted training and policy enforcement to improve managerial support for LGBTQ+ employees.

Analysis on Impact of Effectiveness of Initiatives towards LGBTQ+ at Workplace in Engineering Industry:

Table-6: Effectiveness of Initiatives towards LGBTQ+ at Workplace

	Frequency	Percent	Cumulative%
Mandatory diversity and inclusion training	15	15.00	15.00
Strict anti-discrimination policies	21	21.00	36.00
Supportive mentorship and employee resource groups	21	21.00	57.00
Inclusive recruitment and internship programs	19	19.00	76.00
All of the above	24	24.00	100.00
Total	**100**	**100.00**	

15% of respondents acknowledged the effectiveness of mandatory diversity and inclusion training. This suggests limited perceived impact or implementation of such training programs. Strict anti-discrimination policies were seen as effective by 21%, reflecting their importance in workplace inclusion. Supportive mentorship and employee resource groups also garnered 21%, highlighting their role in fostering belonging. Inclusive recruitment and internship programs were noted by 19%, indicating moderate impact on workplace entry points. The responses are fairly distributed, showing that no single initiative dominates in perceived effectiveness. Combined, 61% of responses favored structural and supportive policies over training alone. This points to the need for ongoing, embedded cultural and policy shifts rather than isolated training. Mentorship and anti-discrimination efforts appear as equally valued components of inclusive workplaces. Overall, the data suggests that multi-faceted strategies are required to improve LGBTQ+ inclusion in the engineering industry.

Analysis on Mean Values of Challenges Faced by the LGBTQ+ at Workplace:

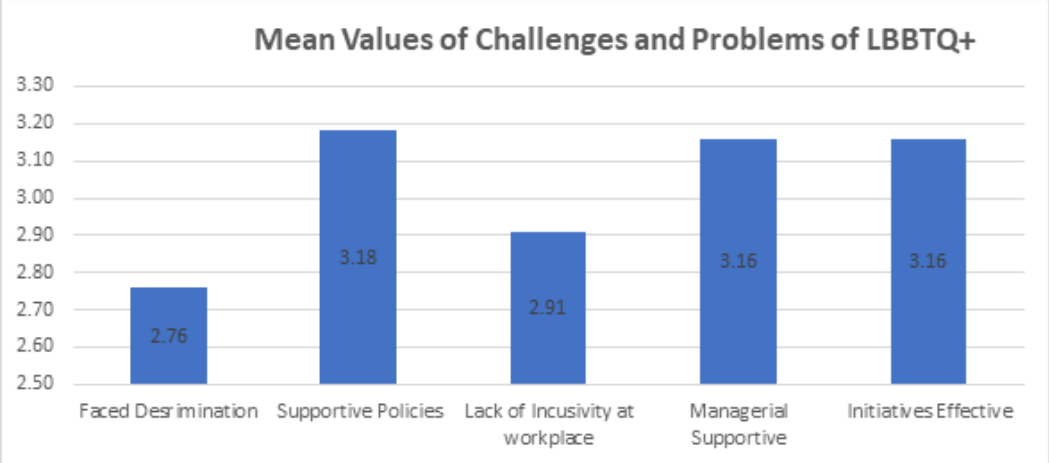
Table-7: Mean values of Challenges Faced by the LGBTQ+ in Indian Engineering Industry

S.N	Particulars	Mean	Standard Deviation
1	Faced Discrimination	2.76	1.379
2	Supportive Policies	3.18	1.438
3	Lack of Incusivity at workplace	2.91	1.429
4	Managerial Supportive	3.16	1.398
5	Initiatives Effective	3.16	1.398

The mean value for "Faced Discrimination" is 2.76, indicating a moderate level of discrimination experienced by LGBTQ+ individuals in the engineering industry. "Lack of Inclusivity at Workplace" has a mean of 2.91, suggesting that inclusivity remains inconsistent and moderately lacking. "Supportive Policies" scored a mean of 3.18, reflecting a perception that policies exist but may not be strongly impactful or visible. Both "Managerial Supportive" and "Initiatives Effective" share a mean of 3.16, showing average ‘effectiveness and support levels’ from management and company initiatives. The relatively high standard deviations, ranging around 1.38 to 1.44 across all factors indicate varying experiences among respondents. These variations suggest that while some workplaces may be progressive, others lag significantly. None of the mean values are high, implying that challenges persist across all evaluated aspects. Overall, the data highlights a need for more consistent, visible, and

impactful inclusion practices across the engineering industry in India.

Graph-1: Mean Values of Talent Acquisition Practices of LGBRTQ+



Analysis on Correlation Between Challenges of LGBTQ+ and Demographic Variables:

Table-8: Correlation Table

Challenges\Demographics		Work Location	Designation	Experience
Faced Discrimination	Correlation	.020	.021	-.080
	Sig.	.847	.837	.428
Supportive Policies	Correlation	-.006	.158	.061
	Sig.	.951	.115	.548
Lack of Incusivity at workplace	Correlation	-.003	-.023	-.005
	Sig.	.975	.817	.959
Managerial Supportive	Correlation	-.006	-.193	-.186
	Sig.	.949	.055	.064
Initiatives Effective	Correlation	-.141	-.047	-.049
	Sig.	.160	.643	.627

Interpretation: The correlation values between LGBTQ+ challenges and demographic variables (work location, designation, experience) are generally weak. For "Faced Discrimination," correlations with work location 0..020, designation 0.021, and experience -0.080 are very low and statistically insignificant ($p > .05$). "Supportive Policies" shows a slightly higher correlation with designation 0.158, but it is not statistically significant ($p = .115$). "Lack of Inclusivity at Workplace" has negligible correlations with all demographics, indicating these factors do not influence perceived inclusivity. "Managerial Supportive" shows a weak negative correlation with designation -0.193 and experience -.186, nearing significance $p = .055$ and .064, suggesting possible trends worth further investigation.

"Initiatives Effective" also shows weak negative correlations with all variables, none of which are significant. All significance Sig. values are above 0.05, indicating no statistically significant relationships across the board. The closest to significance is between designation and managerial support, implying that higher designations might perceive less support. The overall strength of correlations is too low to suggest any meaningful demographic influence on LGBTQ+ challenges. Conclusion: Demographic variables like work location, designation, and experience do not significantly affect perceptions of LGBTQ+ challenges at the workplace, highlighting that these issues are widespread and not limited to specific employee groups.

Analysis on Hypothesis testing

H_0: There is no positive association between Workplace Discrimination and Work Location

H_1: There is a positive association between Workplace Discrimination and Work Location

Table-9: Analysis on ANOVA Between Workplace Discrimination and Work Location

ANOVA					
	Sum of Squares	**df**	**Mean Square**	**F**	**Sig.**
Between Groups	4.550	4	1.137	.540	.707
Within Groups	200.210	95	2.107		
Total	204.760	99			
Dependent: Workplace Discrimination Independent: Work Location					

Interpretation: The table above explore the test result of ANOVA one-way between the tested variables workplace discrimination and workplace location of LGBTQ+ employee's working in engineering industry. The test significance at 5% critical level is arrived as 0.707 this specifies the significance i.e., $p > 0.05$, this confirms the tested dependent variable workplace discrimination is not significant to independent variable. The result can be interpreted as the workplace discrimination against the LGBTQ+ is found similar and the statement defined in null hypothesis is accepted, and overall result can be concluded as the workplace discrimination is similar in every work location considered in present study.

8. CONCLUSION

The study exposes critical systemic barriers faced by LGBTQ+ professionals in India's engineering sector, including discrimination, invisibility, and lack of policy support. A significant portion of respondents 46% reported experiencing workplace discrimination, highlighting persistent bias in core technical domains. Only 17% confirmed the existence of well-implemented LGBTQ+ supportive policies, pointing to institutional gaps. Managerial attitudes are a major concern, i.e., 47% of respondents reported unsupportive or hostile leadership. Inclusivity remains inconsistent, with only 23% observing regular inclusive practices, and an equal percentage experiencing none. Educational barriers, such as lack of mentorship and hostile learning environments, deter LGBTQ+ individuals from entering engineering fields. Recruitment and promotion processes often reflect unconscious bias, affecting equal opportunity and representation. The study's correlation analysis found no significant influence of demographic variables on the challenges faced, suggesting the problems are widespread and systemic. Supportive structures—like mentorship, employee groups, and anti-discrimination policies, are valued more than one-off diversity trainings. Only 24% of respondents felt that multiple inclusion initiatives together had a noticeable positive effect, underscoring the need for integrated strategies. Mental health implications, including stress, dissatisfaction, and attrition, were linked directly to exclusionary practices. The absence of visible LGBTQ+ role models further deepens isolation and discourages openness. Engineering firms that fail to embrace inclusion risk falling behind in global ESG standards and talent retention. Urgent reforms are needed in HR frameworks, leadership training, and communication of policies to foster a safe and equitable work culture. In conclusion, creating inclusive spaces in the engineering industry is vital not just for social justice, but for innovation, performance, and sustainability.

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