

2025

volume 22 | issue 2

ENQ

The ARCC Journal for Architectural Research

Understanding the Spatial Needs of Transgender Individuals: A Literature Review with Reference to Pilgrimage Spaces in Saundatti

Sheetal Lad¹, Kavita Murugkar²

Abstract

This study investigates the spatial requirements of transgender individuals in urban and sacred contexts, with particular reference to pilgrimage sites in Saundatti. It addresses how entrenched heteronormative planning practices contribute to exclusion from public, residential, and religious spaces. The research adopts a literature-based methodology, integrating geospatial mapping, participatory design principles, and intersectional planning frameworks to analyze spatial barriers and identify opportunities for inclusion. The findings highlight how architectural design can mediate issues of accessibility, safety, and cultural belonging, especially in sacred settings shaped by binary traditions. By reframing transgender spatial needs as both an architectural and cultural concern, the study contributes to architectural scholarship through a conceptual framework that informs inclusive design strategies for urban planning and sacred site development

Keyword: Transgender Spatial Inclusion, Participatory Design, Intersectional Planning, Gender-Responsive Architecture, Sacred Space Accessibility

Stable URL: <https://arcc-journal.org/index.php/arccjournal/article/view/1309>
DOI 10.17831/enq:arcc.v22i2.1309

Corresponding Author: Sheetal Lad < lad.heetal28@gmail.com >

¹Ar. Sheetal Lad, lad.heetal28@gmail.com, Bharti Vidyapeeth College of Architecture, Bharti Vidyapeeth (Deemed to be) University, Pune.

²Dr. Kavita Murugkar, murugkar@gmail.com, Bharti Vidyapeeth College of Architecture, Bharti Vidyapeeth (Deemed to be) University, Pune.

Published by the Architectural Research Centers Consortium under the terms of the Attribution-NonCommercial-ShareAlike 4.0 International license.

1. INTRODUCTION

Architecture is more than a reaction to function; it is an expression of identity, culture, and lived experience. For transgender individuals, space is not just a container; it is a space for negotiation, affirmation, and sometimes exclusion. In religious and culturally symbolic spaces like the pilgrimage town of Saundatti, spatial design significantly impacts the visibility, safety, and sense of belonging for marginalized groups. Traditionally, architecture has privileged binary norms and marginalized non-conforming bodies in the arrangements of circulation, privacy, and sacred access. This research combines labor from architectural theory, gender studies, and cultural planning to examine how spatial needs of transgender bodies are marked or erased in public and holy places. It speaks to how built spaces may affirm identity but also perpetuate systemically-directed marginalization. The desire isn't necessarily to critique existing spaces, but to reimagine the architectural process itself as a tool of inclusion, sensibility, and cultural relevance. Inclusivity design within these contexts isn't necessarily a technical problem; it is a spatial and ethical demand that drives architects to create spaces that amplify dignity, agency, and belonging. This article positions architecture as the medium through which spatial equity is negotiated. It evaluates design precedents, sacred site planning, and architectural interventions, situating transgender inclusion as a design methodology rather than a sociological problem.

The spatial realities of transgender individuals are strongly entangled with their wider socio-cultural and health environments. In India, architectural designs like the Transgender Community Development Centre in Vadodara have started meeting basic needs such as safety, privacy, and vocational integration through consciously designed spatial areas: Prospect, Interaction, and Refuge. They demonstrate a growing understanding of how built environment approaches can facilitate identity expression and social reintegration. Yet, gender-diverse individuals remain structurally vulnerable in international urban spaces. Comparative examples from Vadodara and international case studies show how architectural interventions mediate identity, visibility, and belonging (King et al. 2023; Ahuja et al. 2024). In the meantime, public-space research in India, Myanmar, and Sweden shows that transgender individuals frequently shun overcrowded or dimly lit places, facing fear and exclusion, especially a lack of gender-neutral toilets and inadequate inclusive infrastructure (Raheja 2022). All together, these reports put the spatial review amid a complex matrix of health, security, and social inclusion issues, proving that inclusive architecture needs to go beyond aesthetics, to be a strategic instrument for fair spatial justice.

This study pursues the following objectives:

1. To identify the spatial needs of transgender individuals across public, urban, and sacred environments.
2. To examine how these needs manifest in pilgrimage sites, with specific reference to Saundatti.
3. To synthesize global and Indian scholarship on transgender spatial experiences and derive a conceptual framework for inclusive design.
4. To evaluate how participatory, geospatial, and intersectional methods can inform architecture and planning responses for transgender inclusion.

1.1. Social identity

Transgender individuals actively construct identities in spatial environments that are often configured by cisnormative expectations. Architectural designs like gender-separated facilities function both as functional elements and communicate potent social messages regarding inclusion and exclusion. When a changeroom or restroom is unambiguously defined as binary, it supports a normative model of identity that can exclude transgender users (Doderer, 2011, (Doderer 2011)). Beyond physical appearance, spaces also embody symbolic signals; environmental markers of gender diversity, such as welcoming signage or public art, can trigger a sense of safety and legitimacy for transgender users (Farivar and Wang 2022). In theory, "queered spaces" are deliberately reenvisioned spaces that challenge normative dualities and celebrate multiple identities. These are frequently spaces created by adaptive reuse or art interventions, where spatial configuration is reinterpreted to allow for identity expression (Perkins & Will, 2023). Concurrently, phenomenology encourages consideration of how transgender individuals occupy and navigate space, acknowledging that the built environment may foster feelings of belonging or heighten dysphoria and dislocation (Cipollina and Sanchez 2023). To architects, the incorporation of social identity into design requires an awareness of material arrangements and symbolic cues. It involves a positive intervention within spatial semiotics thresholds, texture, and signage to create spatial contexts that validate transgender individuals as valid actors. In recognizing the construction of identity as spatial, design shifts from neutral form-making to an active moment of inclusion.

Social identity is at the center of the lives of transgender individuals, affecting mental health, social relationships, and general well-being. This identity is formed by affirming social situations as well as by the stigma that is met, demonstrating the importance of learning

about these dynamics in creating supportive policies and environments. Transgender identity development and validation are complex processes, both influenced internally through reflection and externally by the environment; healthy identity development is contingent upon supportive social contexts and compassionate relationships. This is supported by research in Iran that indicates gender-affirming practices, from social support to having access to affirming environments, can lead to less harm from societal adversity and enhance coping mechanisms and positive life development among transgender individuals.

1.2. Role of Religion and Culture in Identity Formation:

Nagar & Dasgupta's study of religious cultures and their practices has a central position in deciding how transgender individuals are identified, supported, or excluded in their societies. In India, long-standing religious mythologies and cultural narratives are deeply into popular consciousness and have conditioned institutional recognition through legal tools like the Supreme Court ruling and the Transgender Rights Bill. Yet, this acknowledgment tends to borrow from an almost exclusively Hindu Brahmanical context, empowering yet also limiting transgender identities. Activists such as Laxmi Narayan Tripathi, Living Smile Vidya, and A. Revathi pushed beyond this narrow context, working towards more open-minded views that move beyond Brahmanical standards (Nagar and Dasgupta 2023). In Kenya, transgender lives are informed by the intersection of Christian tradition with pre-colonial cultural heritage. While traditional African societies acknowledged gender fluidity, current interpretation within churches tends to reinforce discrimination. However, there is new work among Christian communities that aims to reclaim religious doctrine as a place of inclusion, documenting how faith can both reinforce exclusion or provide a place for queer affirmation (Ndiinu and Musya 2023). Appreciating this dual religious control is critical for architects and planners who want to create spatial spaces honoring cultural sensitivities as well as confirming multiple gender identities.

2. THE ORIGINS OF TRANS-ARCHITECTURE | TRANSGENDER COMMUNITY

Architectural theory from Vitruvius to modernists such as Le Corbusier has long sought idealized human proportions based on strict binaries. Bianco Vitruvius De Architectura describes the Doric order as being masculine strength, the Ionic as a feminine delicacy, and the Corinthian as a combination of both, mirroring a hybrid state through its complex acanthus capital (Bianco 2023). Such historical constructs then raise the question: where is a transgender person whose self is beyond binary shape, finding resonance within such

normative spatial schema? Lucas Cassidy Crawford provides a remarkable reinterpretation. In *Transgender Architectonics*, he situates the Corinthian order as an early manifestation of Trans-Architecture. Crawford, drawing on Vitruvius's account of Callimachus finding acanthus vines wrapped around a child's treasure box, contends that Corinthian defies binary architectural classification and points toward the hybridity of the body. For Crawford, architecture need not merely imitate idealized static models but be an expressive archive that negotiates bodily and gendered shifts (Crawford 2015). Reflecting this view, recent writers stress that spatial belonging is not a question of material order exclusively but of bodily safety originating from within. Crawford builds upon this, seeing Trans-Architecture as a form challenging the fixed, normative built structure, transforming space as an energetic actor in confirming identity in transit. This section provides the theoretical and historical background that informs this study. The subsections trace the evolution of architectural thinking on gender, the emergence of trans-architecture, and contemporary discussions on spatial needs. By situating these concepts before the methodological and contextual sections, this review establishes the conceptual foundations through which the Saundatti case and subsequent findings are interpreted.

2.1. Importance of Spatial Needs

Acknowledgment and fulfillment of the special spatial requirements of transgender individuals are essential to enhancing inclusive, healthy, and safe societies. Accessible and safe public space not only empowers transgender individuals but also cultivate community belonging and social cohesion, pillars of mental health. Architecturally, this calls for substantively exploring the lived experiences of transgender users to comprehend how they move around cities. By incorporating their perspectives into urban planning, practitioners can construct public spaces that accurately represent social diversity. Bain & Podmore's research, *Urban planning generally functions according to hetero-cis-normative assumptions. Queering these practices, including LGBTQ+ issues in municipal governance and planning, subverts these norms and makes urban spaces more diverse* (Bain and Podmore 2023). These inclusive strategies not only enhance individual well-being but also communal resilience and representation. Intersectionality also increases the need for sensitive design. LGBTQ+ persons with disabilities experience compound marginalizations, ableism, heterosexism, and cissexism that conventional planning tends to miss. Scholars suggest integrating queer-crip theory and disability justice into design processes so that spaces are physically accessible and culturally validating.

Planned spaces that honor varied identities become a refuge and a stage for identity representation. Gorman-Murray et al. underline that secure built spaces facilitate individual and collective change, allowing visibility without fear (Gorman-Murray et al. 2023). Likewise, visual media such as Ruiz's 2023 Relief Maps bring to the surface layered power relations in urban space, charting inclusive design choices. Advocating participatory design with marginalized groups enhances ownership and sustainability. Duplan (2023) illustrates how co-design with diversity creates a sense of belonging and produces built environments that celebrate diversity. Further scholarship suggests that spatial responses should tackle intersecting race, gender, and sexuality needs to advance urban justice (Duplan 2023). In the end, inclusive planning produces quantifiable health and social outcomes. Gorman-Murray et al. (2023) illustrate how usualising queerness in public spaces facilitates LGBTQIA+ well-being and community cohesion (Gorman-Murray et al. 2023). By locating multiple voices, particularly those at intersectional edges, architecture as a means of confirming, securing, and lively public life is facilitated.

2.2. Overview of transgender experiences

Transgender individuals negotiate a difficult terrain of societal systems that often isolate their identities in social, economic, legal, and health fields. These difficulties are inherently rooted in normative systems that favor binary gender systems, thereby creating system-level exclusion from public services, participation in spaces, and equitable opportunities. Although progress has been made in legal recognition and public debate over the last few years, there are still important structural and attitudinal barriers to the complete inclusion of transgender individuals in mainstream civic and social life. To address these inequalities, it is necessary to know about the lived experiences and intersectional issues of transgender individuals. This includes purposeful reflection on whether and how spatial arrangements, institutional policies, and cultural contexts may affirm or reject transgender identity and agency. In the continuing conversations, we have examined these issues in more detail, drawing on recent research and illustrations to nuance and guide the ways we understand structural inequalities and possibilities

Study	Method	Focus	Insights	Limitations
(Bain and Podmore 2023)	Qualitative design	Libraries, community spaces	Spatial strategies using color, flow, and comfort to create safe queer spaces	Limited to the Canadian context; lacks surveys.
(Gelbard 2023)	Policy analysis	Urban public spaces	"Queering planning" framework to challenge cisnorms	Few built examples; Western-centric
(Kynn, Boyke, and Holloway 2023)	Theoretical review	Inclusive restrooms, disabled queer access	Proposes queer-crip design and universal access	Lacks empirical validation
(Jacoby 2015)	Arch. history	Classical architectural typology	Re-reads Corinthian order through a trans lens	Theory-heavy; lacks modern cases
(Karadimitriou et al. 2022)	Lit. review	Trans geographies	Relief Maps for visualizing layered queer experiences	Not yet applied in practice
(McDermott et al. 2024)	Design incubator	Public libraries	Gender-neutral pods, flexible flows, quiet zones	Prototype stage; no evaluation data
(Crockett, Martínez, and Caviedes 2022)	Mixed methods	Queer public/private spaces	Inclusive design improves mental health and identity affirmation	Regional scope (Hawaii); limited generalizability

Table 1: Comparative Analysis of Spatial Design Approaches for Transgender and Queer Inclusion

of spatial and social justice. These insights provide a mainstay for architects, planners, and policy-makers concerned with establishing spaces where transgender individuals can be included, belong, and thrive.

2.2.1. Social and familial challenges

Familial Rejection Transgender individuals often suffer in their families, leading to social isolation, emotional problems, and low self-esteem. In India, a thorough review by Pautunthang (2024) refers to how deep-rooted gender norms feed family exclusion, adding to vulnerability and marginalization (Pautunthang 2024). A Kerala-centered study by Pariseau et al., based on interviews with 150 trans persons as well as (Pariseau et al. 2019) these results highlight the significance of strong support networks capable of reversing isolation through cultivating community, acceptance, and validation. Developing strong social connections is thus critical to making transgender individuals feel safe, valued, and supported in their transition journey. Social Stigma and Discrimination Transgender individuals often suffer from widespread stigma and discrimination, which may manifest itself in social exclusion, verbal abuse, and institutional discrimination. According to a Kumar et al. (2022) study conducted in Chennai, transgender individuals suffer discrimination in healthcare, education, work, and public transport, resulting in ID denial, homelessness, and economic marginalization (Kumar et al. 2022). In Tamil Nadu, almost 42% of participants reported having been verbally or physically harassed in healthcare settings, and more than half of them were denied fair treatment (A. et al. 2018). To break down such systemic obstacles, holistic education, strong anti-discrimination policies, and equitable access to employment, education, and healthcare are essential for empowering transgender individuals and improving their quality of life.

2.2.2. Economic and educational barriers

Limited Employment Opportunities. Trans individuals usually experience extreme barriers in work, which keep them in and out of poverty and at risk. Pautunthang (2024) outlines how educational discrimination starts early, preventing school completion and continued labor force exclusion (Pautunthang 2024). A thematic analysis by Krishna & Sharma (2024) points out systemic transphobia and school barriers as major determinants preventing access to employment even for qualified individuals, and observes that most are driven into informal or insecure work (Krishna and Sharma 2024). Addressing these inequalities requires a multi-faceted approach: equal hiring policy reform, specialized vocational education, and grassroots support networks that are meant to advance transgender individuals at

every point in their professional and academic lives.

Exclusion from Mainstream Society Transgender individuals in India frequently experience extreme spatial and social exclusion, with restricted access to housing, work, public spaces, and basic services. The National Human Rights Commission (Shri L Dattu et al. 2018) states that close to 92 % are still outside formal economic and social systems, while the International Labour Organization (2022) records a 48 % unemployment rate for transgender adults, far higher than the national rate, promoting invisibility in built environments (More 2021). Structural barriers such as documentation restrictions and the absence of gender-neutral infrastructure perpetuate this spatial marginalization. These structural exclusions manifest spatially in restricted access to workplaces, inadequate provision of inclusive housing, and the absence of architectural responses to trans community centers. In order to break exclusion, spatial justice interventions are needed: inclusive zoning, participatory planning, and gender-sensitive infrastructure design to make it possible for transgender individuals to occupy and belong in public and professional spaces.

2.2.3. Healthcare access and discrimination

Barriers to Healthcare Transgender individuals in India and the U.S. experience deep-rooted barriers in accessing healthcare, rooted in healthcare systems structured around a cisgender-binary model. A landmark 2024 study by iHEAR across India revealed that fear of discrimination, such as denial of service, forced outed identity, and unsuitable physical infrastructure, leads many to delay or forego care, exacerbating health issues and mental distress. Likewise, a study in Western Rajasthan (Kaur Ahuja et al., 2024) observed barriers ranging from policy loopholes to provider bias that affect the accessibility of transgender healthcare (Ahuja et al. 2024). Overcoming these inequalities involves provider education, gender-neutral facilities, and policy shifts within institutions to provide competent, respectful care to all patients. Mental Health Disparities Transgender individuals in Iran face increased mental health inequalities, such as depression, anxiety, and suicidal thinking, encouraged by cultural stigma and inadequate social support. Phenomenological interviews by Mohammadi et al. (2023) identified fear of revelation, hopelessness, and suicidal ideation among Iranian young transgender individuals (Mohammadi et al. 2023). A national study by Moradi et al. (2023) discovered that more than 80 % of transgender individuals in Iran reported experiencing depression, while 52 % had suicidal ideation (Moradi et al. 2023). These painful outcomes are further exacerbated by religious pressures and exclusion from society, pointing

to an urgent requirement for culturally responsive mental health services that incorporate supportive social support systems and protective therapeutic environments for transgender individuals.

Legal and Policy Challenges in Inadequate Legal Protections. Transgender individuals remain without adequate legal protections even as burgeoning legislative restrictions arise. Abreu et al. researched the United States, where more than 300 anti-trans bills were proposed in 2022–2024, with over 30 now limiting gender-affirming care for children or punishing providers (Abreu et al. 2022). These regulations in Alabama, Texas, and Tennessee, for example, ban puberty blockers and hormone treatment for adolescents and penalize clinicians with criminal sanctions or loss of licensure. These prohibitions not only hinder access to vital, life-affirming medical care but also perpetuate stigma, legal vulnerability, and mental health hazards for transgender individuals. **Need for Inclusive Legislation** A detailed review by Sharma and Aggarwal (2024) emphasizes the imperative for inclusive legislation protecting transgender individuals from discrimination and guaranteeing their rights in key sectors such as healthcare, education, work, and housing (Sharma and Aggarwal 2024). The strong framework would go beyond fragmented interventions, making gender diversity a part of every policy aspect, from curricular changes and workplace defenses to inclusive zoning and housing regulations. By integrating transgender rights into comprehensive legal frameworks, society can maintain its dignity and encourage engagement in public life. Legislative integration is not only for the benefit of justice but also for spatial and social justice for transgender individuals. In summary, the themes emerging from the historical, cultural, and spatial literature closely parallel the lived conditions observed in Saundatti. The town's pilgrimage infrastructure, its temple thresholds, ritual sequencing, segregated accommodation, and circulation hierarchies, reflect many of the spatial binaries discussed in the literature. This connection demonstrates that Saundatti is not merely a contextual backdrop but an active site where broader patterns of inclusion and exclusion are spatially materialized.

3. PROBLEM STATEMENT

Transgender people routinely navigate nested forms of marginalization, including familial exclusion, economic vulnerability, and institutional discrimination, which limit their access to public services and everyday spatial resources. These systemic conditions restrict full civic participation and highlight the need for both policy reform and spatial interventions that recognize diverse gender identities. Built environments frequently reinforce binary gender norms, leaving transgender

people dependent on informal networks and religious communities for safety and belonging.

Sacred traditions in India have long offered spaces of negotiated inclusion. The emergence of the Kinnar Akhara at the Kumbh Mela demonstrates a visible reclamation of spiritual identity in public religious life, as articulated by Laxmi Narayan Tripathi (Milne 2018). Similarly, studies of Hijra participation in temple rituals reveal experiences that extend beyond marginalization to include recognized roles within sacred practices (Krishnasamy and Asafu-Adjaye 2024). These examples underscore a dual reality: sacred environments can both affirm trans identities and reveal persistent barriers embedded within everyday architectural and urban systems.

This study focuses on the pilgrimage town of Saundatti, where temple precincts, ritual circulation zones, and communal accommodations play a defining role in how transgender pilgrims experience spiritual belonging. Rather than primary fieldwork, this research synthesizes existing accounts to interpret how such spatial structures enable sacred access while simultaneously reflecting broader social exclusion in secular spaces. Understanding these relational dynamics between identity, religion, and space is crucial for architects and planners seeking to develop inclusive sacred and civic environments that recognize and support transgender presence without compromise.

3.1. Gaps in current research

Knowledge of the spatial needs of transgender and more general LGBTQ populations is still a key but underdeveloped field in architecture and urban design. Current literature outlines a number of key gaps at both theoretical and methodological levels, as well as empirically and disciplinarily, preventing us from building inclusive, spatially-justice-oriented design practices. Theoretical and Methodological Deficiencies. One of the major problems is theoretical dissonance. For example, Proudman (2024) describes how frameworks such as diasporisation of queer and queering the diaspora at times contradict each other, confining coherent approaches to spatial identity and belonging in architectural discourse (Proudman 2024). Methodologically, most researches are limited to small, geographically fixed samples, commonly neglecting rural areas or heterogeneous cultural settings. Further, intersectional approaches are also often lacking; the majority of research addresses social categories, like gender, class, and race are addressed in a siloed fashion, instead of analyzing their combined spatial effects.

Empirical Research Gaps Urban bias makes rural LGBTQ experiences completely invisible in spatial scholarship.

Rand & Pacey Research verifies that LGBTQ youth in rural settings have much lower support structures than their urban peers; only about 24% had a school-based support group compared to 42% suburban areas, worsening isolation and reducing mental health outcomes (Rand and Pacey 2022). While community-based programs exist, they remain under-documented and rarely spatially evaluated. Additionally, research often treats community characteristics like social climate and resource access as isolated variables, failing to capture their spatial interrelation and cumulative impact on lived environments. Health and Mental Well-being Disparities in Health research frequently lack macro-level spatial awareness. While inequalities among older LGBTQ adults are reported by Abramovich et al., there is an urgent lack of structural analyses zoning disparities or health facility patterning within spatial research questions. Likewise, mental health issues, substance abuse, and depression are reported but not sufficiently contextualized with the spatial settings of marginalization. For example, homeless rural and suburban LGBTQ youth show increased levels of depression and suicidal thoughts; however, the built environmental factors that increase these (e.g., access to shelter, walkability) are untouched (Abramovich, Pang, and Ross MacKinnon 2023). Crisis and Disaster Response Overlooked. While LGBTQ individuals tend to experience increased vulnerabilities in times of humanitarian crises, spatial planning literature rarely points out how cis-heteronormative emergency models can render queer bodies marginal yet provide few design resolutions. Overlook in Urban Planning Practice in Most mainstream planning does not include LGBTQ spatial requirements. It is critical of existing planning methods for excluding queer populations, which could hold back the development of friendly urban spaces. This exclusion involves architectural licensing and urban policy, where gender diversity is rarely incorporated into fundamental standards such as public toilet design or transit shelters.

3.2. Challenges faced by transgender individuals in spatial contexts

Transgender individuals experience a tangled intermix of spatial obstacles strongly interwoven with systemic discrimination, socioeconomic disadvantage, and identity-based exclusion. These unfold in the main areas. Housing Instability and Homelessness Transgender individuals, particularly racialized ones, bear exceptionally high rates of housing instability. In America, 30% of transgender adults have experienced homelessness at one time or another, against only 3% of their cisgender counterparts (Shelton et al. 2018). A San Francisco Bay Area study reported that with each additional site of discrimination, housing instability risk rose by 25% among trans women of color. Post-Katrina

New Orleans illustrates structural abandonment, wherein trans and gender-diverse folks were subject to multi-layered discrimination within isolated housing regimes (Glick et al. 2019). Community-initiated models such as Brooklyn's Transy House appeared in the 1990s as a counter-response to exclusion and spatial uncertainty. Healthcare Access Marginalizing medical infrastructures creates spatial and cultural barriers for transgender individuals. Most steer clear of clinics out of fear of misgendering or hostility, a type of spatial exclusion strengthened by non-inclusive waiting areas, intake forms, and facility designs. Structural reviews in the United States and India find that discriminatory environments discourage care, leading to delayed treatment and worse health outcomes.

Public Spaces and Safety Trans individuals frequently experience hostility in public spaces: transportation networks, streets, and buildings. Wilcox et al. statistics for Washington, D.C. indicate 70% had been harassed in restrooms, resulting in physical hazards such as dehydration and infection. Technology-facilitated safety devices (e.g., smartphone apps) can be useful; research on TransTime suggests how virtual platforms mediate spatial safety (Wilcox et al. 2023). In a crisis, in Displacement and Disaster Response in emergencies, transgender individuals are disregarded by largely cisgender relief efforts. In New Orleans, the homeless and shelter systems neglected trans identity and race, which multiplied vulnerability after the disaster.

Legal and Socio-Cultural Barriers Legal frameworks and public policies tend to exclude gender-diverse spatial requirements. Even under legal protections, states still criminalize trans presence in public spaces or shelter facilities, keeping trans individuals spatially excluded. Intersectionality and Identity Negotiation, Trans spatial experiences are not monolithic; race, class, and geography multiply disadvantage. National research indicates people of color experience quadrupled poverty and eviction rates. Intersectional youth homelessness is highest among those intersecting racial and gender marginalities. These obstacles take not only physical form but also within constructed form, policy-making, and customary practices. The lack of safe shelter, respectful public toilets, accessible clinics, and equitable disaster relief all demonstrate ingrained spatial exclusion. Architectural scholarship and practice must hence confront intersectional spatial justice, magnifying trans voices in co-design, reorienting infrastructure, and reimagining what sanctuary and shelter mean in sacred and secular spaces.

4. METHODOLOGY

Urban planners and architects have a crucial responsibility to create inclusive spaces that serve the

needs of transgender individuals. By incorporating participatory design practices, inclusive zoning codes, and intersectional planning models, they can assist in designing public spaces that are accessible, safe, and affirming. Participatory planning strategies must center on the life experiences of transgender communities to ensure that their spatial requirements are addressed in the built environment. This study adopts a methodological framework that integrates participatory design, inclusive zoning, and geospatial analysis to evaluate how architecture and planning can concretely address transgender spatial needs.

- **Inclusive design principles, gender-responsive design:** Inclusive design was examined through gender-responsive facilities (e.g., unisex toilets, changing spaces) and non-binary zoning practices. Frameworks such as ADB Fair Shared City and Raheja et al. were analyzed as design benchmarks. The ADB Fair Shared City guidelines emphasize that residential development should be socially inclusive and gender-sensitive, with equal attention given to all genders during programmatic design and zoning (Jabeen 2020). This is supported by Raheja et al., who emphasize participatory, intersectional design practices that engage actively gender-diverse communities in planning researchgate.net.

- **Safety and accessibility:** Safety indicators included lighting, visibility, and signposting, informed by Raheja et al.'s recommendations. Case studies of queer-designated spaces were reviewed to assess how architecture mediates safety and belonging. Early urban queer spaces, such as those cited, illustrate the significance of these spaces to transgender autonomy and social acceptance. These indicators were integrated as evaluation criteria in the research framework.

- **Participatory approaches to community engagement:** Urban planning has to put community participation at its core by actively involving transgender individuals and LGBTQ+ groups in decision-making. De Sainz Molestina et al. (2023) argue that co-designing urban space with queer communities guarantees that public spaces are authentic reflections of their lived lives and spatial requirements (De Sainz Molestina et al. 2023). These approaches provided methodological reference points for structuring participatory engagement in this study. Municipal governance frameworks were assessed for how they incorporate LGBTQ+ participation in zoning, mobility, and service planning.

- **Understanding the intersectionality of various identities,** being aware of the intersectionality between gender, race, class, and other identities, is critical in ensuring that inclusive urban planning captures the richness of the complex lives of transgender

individuals. Doan (2015) asserts that planning needs to transcend the mainstream gay-male paradigm to capture how intersecting marginalizations determine spatial experiences of transgender individuals (Doan 2015). Bain & Podmore (2023) also contend that the incorporation of LGBTQ+ factors into municipal government through zoning, public policy, and budgeting subverts entrenched cis-heteronormativity and advances fair city spaces (Bain and Podmore 2023).

- **Policy and governance zoning regulations:** Zoning reform can help construct more trans-inclusive neighborhoods through mixed-use development and working-class housing. Minneapolis's reversal of single-family zoning, for example, illustrates how trans-inclusive zoning resists segregation and accommodates a range of housing types. Addressing LGBTQ+ needs, such as separate and safe housing and shared amenities through zoning, is how to make gender diversity legitimate at the neighborhood scale. Moreover, queer and trans community organizing and activism directly cause policy reform, and queer spatial needs visibility demonstrate that city government programs effectively "queer" urban planning through community-based organizing.

This study employs a multidisciplinary and intersectional framework to examine the spatial needs of transgender individuals in urban and culturally dominant public spaces. It zeroes in on inclusive design practices, such as gender-neutral toilets and non-binary space arrangements, to enhance access and dignity. This methodological framework positions transgender communities not as passive beneficiaries but as co-creators of architectural and planning knowledge. The methodology also considers the effect of crosscutting identities, class, gender, and race on space experience. It also looks at how policy and zoning regulations can promote inclusive, safe, and affirming urban environments that are sensitive to multiple needs in communities.

4.1. Search Strategy

To source appropriate literature for this review, a systematic search was conducted on scholarly databases like Scopus, Web of Science, Google Scholar, JSTOR, and ScienceDirect. The search was performed using a mix of keywords and Boolean operators such as "transgender spatial needs", "inclusive architecture", "gender-neutral design", "queer spaces", "religious architecture AND transgender inclusion", "urban planning for LGBTQ", and "Saundatti temple transgender". The inclusion criteria comprised peer-reviewed articles, book chapters, and conference proceedings from 2010 to 2024 on architectural, urban planning, and spatial perspectives of transgender individuals. The research was included

if it addressed design principles, participatory planning, cultural or religious spaces, and intersectional identity concerns. The exclusion criteria rejected sources that were not spatial or architectural in focus, non-English language sources, and opinion pieces with no empirical or theoretical grounds. Additional references were discovered by tracking citations and reviewing bibliographies of seminal studies to ensure a broad representation of pertinent scholarship.

4.2. Research design

The research design will integrate quantitative and qualitative approaches to explore the spatial needs of transgender individuals in city contexts. It will seek to give a strong emphasis to participatory design, geospatial mapping, and intersectional examination in addressing differential experiences across transgender groups. This will establish spatial barriers, become more inclusive, and advise urban policy that has a high priority on safety, dignity, and accessibility. Its design is not only to record lived experience but also to enable the co-creation of an affirming and inclusive public space.

Note: This study does not involve original GIS mapping or field-based spatial data collection. All geospatial references are derived from secondary sources and conceptual mapping based on existing documentation of Saundatti. The methodological framework, therefore, synthesizes, rather than generates, spatial data.

- **Participatory design approach:** To ensure authentic representation and applicability in urban planning, transgender individuals and LGBTQ+ communities must be engaged directly in research and design to ensure authentic representation and applicability in urban planning. Workshops and co-design projects documented in De Sainz Molestina et al. (2023) and Bain & Podmore (2023) were adopted as methodological references (De Sainz Molestina et al. 2023; Bain and Podmore 2023). This approach facilitates ownership and empowerment for the transgender group. By using facilitated workshops and focus groups, designers are helped to bring to the forefront spatial requirements like private space, community space, and identity space so that design solutions are both effective and meaningful in satisfying experienced spatial needs.

- **Geospatial analysis:** Utilizing geospatial analysis, this research maps the location of services and infrastructure serving transgender populations to identify spatial disparities and hot spots for action. Service density and accessibility mapping were conducted using GIS to reveal disparities in infrastructure distribution relative to demographics (Callander et al. 2022). By combining sociodemographic information like income, race, and rural–urban residence, this analysis reveals associations

between service availability and neighborhood features, directing focused urban planning and health interventions to enhance equity and access.

- **Intersectional framework:** Using an intersectional lens is crucial to knowing how intersecting identities of gender, race, and class inform the spatial lives of transgender individuals. Relief Maps, as conceptualized by Rodó de Zárate (2023), make sense of these complexities by illustrating social, emotional, and territorial aspects of everyday life, illustrating areas of safety and risk in cities (Rodó-Zárate 2023). This approach allows planners and architects to identify spatial power relations and create spaces that legitimize transgender identities in multiple contexts.

- **Evaluation and policy recommendations:** Setting key performance indicators (KPIs), including inclusive lighting, CCTV coverage, and gender-neutral facilities, is critical. A 2023 Australian model applies equity, access, participation, and rights measures in determining LGBTQIA+ inclusion in urban environments. Policy proposals ought to aim at designing public spaces that are safe, accessible, and visible through inclusive design, community control, and focused resource allocation. Such initiatives can assist planners and local governments in putting spatial justice first and ensuring that urban spaces affirm and accommodate transgender communities. This design is intended to identify barriers and opportunities within pilgrimage contexts such as Saundatti, serving as a transferable model for other culturally sensitive urban and sacred settings.

4.3. Data sources

Data sources consist entirely of secondary materials, including peer-reviewed literature, urban policy reports, existing spatial studies of pilgrimage environments (with reference to Saundatti), and previously published geospatial documentation. These materials were synthesized to identify recurring barriers and design opportunities. Analytical techniques such as conceptual mapping and thematic coding were applied at a secondary level to triangulate insights across sources.

5. KEY FINDINGS

The findings presented below emerge from a conceptual synthesis of the literature and the spatial characteristics of Saundatti. While the study is not based on primary fieldwork, the spatial patterns documented in existing studies on Saundatti—such as gendered temple access, segregated bathing zones, and informal community lodging—align closely with themes identified in the literature. The findings, therefore, represent an integrated interpretation rather than primary on-site observations.

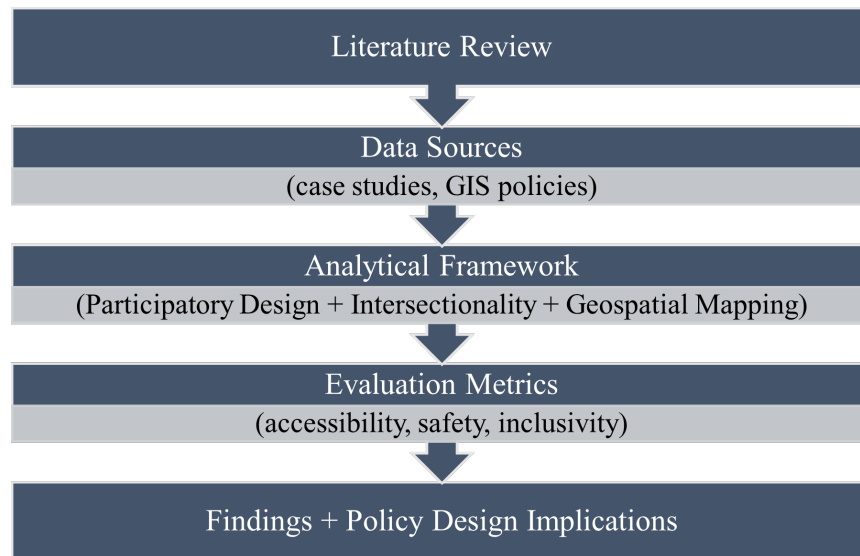


Fig.1. Methodological Framework for Assessing Transgender Spatial Needs

• Identified spatial needs: The research recognizes several basic spatial needs of transgender individuals, including access to gender-neutral toilets, inclusive housing, safe public transport, and sanctified space honoring varied gender expression. Studies included in the literature review reported that interview participants

emphasized the significance of privacy, safety, and entry to shared spaces designed without hierarchical gender dualisms. In pilgrimage environments like Saundatti, the need for reverent housing and non-discriminatory access to ritual space seemed particularly urgent, a fervent desire for spiritual belonging alongside physical

Conceptual Geospatial Representation of Transgender Spatial Access

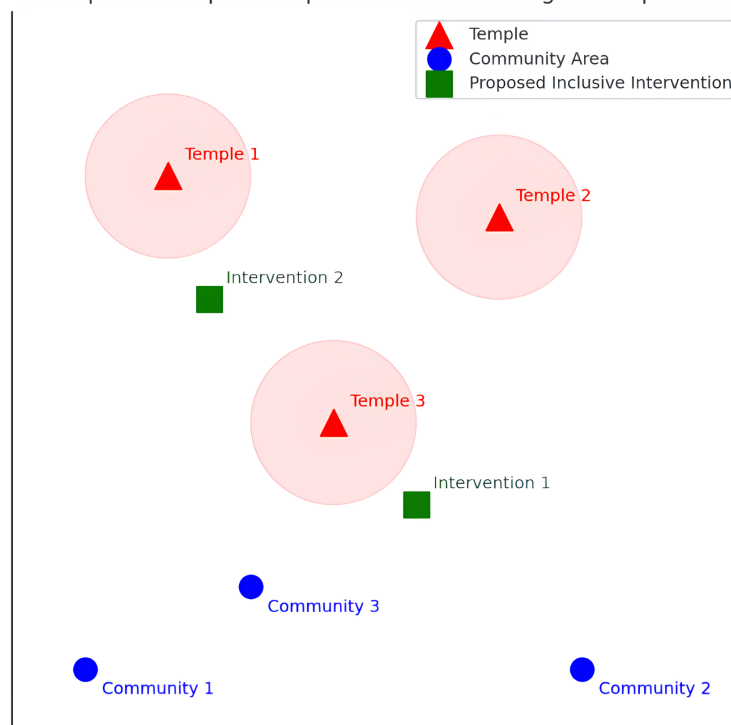


Fig. 2. Transgender Community - Conceptual geospatial representation of Saundatti.

Fig. 2 depicts a conceptual geospatial map of Saundatti with temples having restricted access areas (red), transgender community residential areas (blue), and suggested inclusive intervention in the form of safe shelters and gender-neutral facilities (green). The visual shows spatial exclusion along with possible inclusive design strategies for promoting accessibility and a sense of belonging.

- **Significance of spatial inclusion:** Spatial inclusion is as much a social justice necessity as it is a design problem. The affirmation of transgender individuals within the built environment benefits their mental health, safety, and sense of belonging. Inclusive spatial practice discontinues habitual ways of marginalization and enables marginalized communities to participate in cultural, religious, and civic life more completely. Spatial inclusion also facilitates the visibility and legitimacy of transgender identities, reversing societal stigmatization and expanding cultural acceptance.

- **Implications for architectural and urban planning:** The findings call for a shift in planning and architectural culture. Transgender individuals' everyday lives need to be put at the center by city and cultural planners as they make a transition towards intersectional, inclusive methods. In Saundatti-like locations, this involves re-examining routes of access, communal spaces, wayfinding systems, and sacral spatial hierarchies within sacred areas. Planners must rescript zoning, codes, and policy to include the development of gender-affirming facilities such as mixed-use development, accessible homeless shelters, and community centers responsive to the complex needs of transgender populations.

5.1. Comparative analysis

The following charts synthesize the data through comparative analysis, enabling direct comparison across the primary indicators.

Sr. No.	Ref.	Domain	Region	Key Finding
1	(A. et al. 2018)	Healthcare Access	India (Tamil Nadu)	42% harassed; >50% denied fair treatment
2	(Shri L Dattu et al. 2018; International Labour Organization 2022)	Employment & Economy	India	92% excluded from the formal economy; 48% unemployment
3	(Shelton et al. 2018)	Housing	USA	30% trans adult's homeless vs 3% cisgender peers
4	(Beltran et al. 2019)	Housing Discrimination	USA (Bay Area)	+25% risk of housing instability per discrimination site
5	(Moradi et al. 2023)	Mental Health	Iran	80% depression; 52% suicidal ideation
6	(Abramovich, Pang, and Ross MacKinnon 2023)	Youth Homelessness	Canada (Ontario)	Higher depression among LGBTQ+ homeless youth
7	(Wilcox et al. 2023)	Public Space Safety	USA (Washington, D.C.)	70% harassed in the restrooms

Table 2: Challenges and Barriers Explained by Existing Studies

Fig. 3 illustrates the intensity of reported spatial and social barriers experienced by transgender individuals in major areas between 2018–2024. The graph emphasizes high rates of mental health disparities (80%), public space harassment (70%), and employment exclusion (70%), as well as high healthcare discrimination (50%) and housing instability (30%). This illustration emphasizes the multifaceted challenges informing transgender spatial inclusion.

5.2. Policy implications recommendation

Zoning reforms: City planning bylaws should incorporate gender-sensitive zoning, providing gender-neutral facilities, secure shelter, and accessible infrastructure in both city and pilgrimage settings. These reforms have been found to promote fair participation and withstand cisnormative segregation in local area design (Bain and Podmore, 2023).

Participatory design: Integrating co-design processes with transgender and LGBTQ+ communities ensures that real-life experiences shape spatial interventions. Inclusive design workshops were found to increase authenticity, ownership, and sustainability in urban projects (De Sainz Molestina et al., 2023).

Inclusive governance: Local government governance needs to proactively incorporate LGBTQ+ perspectives in planning committees, budgeting, and policy structures.

Institutional inclusion has been demonstrated to counteract deep-rooted cis-heteronormativity and enhance equitable access to public services (Raheja, 2022).

Safety and accessibility requirements: Policy designs must mandate properly lit pathways, unobscured lines of sight, accessible signage, and community-controlled safe spaces to reduce harassment and spatial exclusion. Research shows that such initiatives drastically enhance security and well-being for gender-diverse users (Wilcox et al., 2023).

6. CONCLUSION

This study has highlighted the urgent need to reframe urban and cultural spaces through transgender-affirming design. It examined how multi-dimensional spatial exclusions—ranging from inaccessible infrastructure and discriminatory amenities to restricted access in religious precincts—can be addressed through architectural and planning interventions. By applying participatory, intersectional, and geospatial approaches, the research illustrates how spatial justice can be operationalized within both everyday urban contexts and culturally specific sites such as Saundatti.

The findings demonstrate that inclusive zoning, gender-neutral facilities, and culturally responsive design can

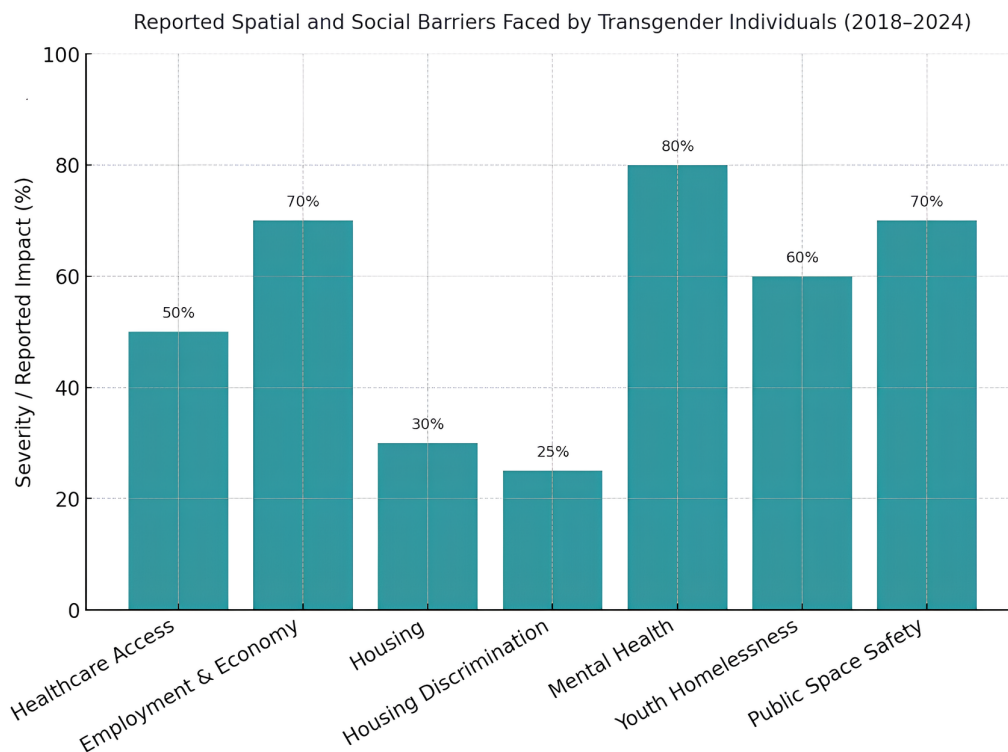


Fig. 3. Spatial and Social Barriers for Transgenders

Ref.	Focus Area	Method	Key Results	Limitations
(Bain and Podmore 2023)	Libraries, community spaces	Qualitative design	Spatial strategies using color, flow, and comfort to create welcoming spaces for gender-diverse users	Canadian context only; no survey data
(Gelbard 2023)	Urban public spaces	Policy analysis	“Queering planning” framework to challenge cisnormativity in city design	Few built examples; Western-centric
(Kynn, Boyke, and Hol-loway 2023)	Inclusive restrooms, disabled queer access	Theoretical review	Proposes queer-crip design integrating universal access	No empirical validation
(Jacoby 2015)	Classical architectural typology	Architectural history	Reinterprets Corinthian order through a transgen-der lens	Theory-heavy; lacks mod-ern applications
(Karadimitriou et al. 2022)	Trans geographies	Literature review	Uses Relief Maps to visu-alize layered queer spatial experiences	Not yet applied in practice
(McDermott et al. 2024)	Public libraries	Design incubator	Introduces gender-neutral pods, flexible spatial flows, and quiet zones	Prototype only; no post-implementation evaluation
(Crockett, Martínez, and Caviedes 2022)	Queer public/private spaces	Mixed methods	Inclusive design has been shown to improve mental health and identity af-firmation.	Regional scope (Hawaii); limited generalizability

Table 3: Limitations of Existing Studies

function as practical tools for embedding diversity within the built environment. In sacred contexts, the study shows how transgender worshippers negotiate and reinterpret spaces shaped by binary traditions, offering insights for rethinking spatial thresholds, circulation, and symbolic markers. These perspectives contribute to architectural discourse by proposing design methodologies that bridge sacred symbolism with contemporary inclusivity.

While this study is primarily literature-based and conceptual, its framework establishes a basis for future empirical research. Field-based participatory workshops, accessibility audits, and comparative analyses of other pilgrimage towns could validate and refine the findings. By embedding inclusivity and diversity as core priorities in architectural practice, planners and designers can help create cities and sacred spaces where transgender identities are not only recognized but actively represented. Within the specific context of Saundatti, the analysis indicates that pilgrimage movement patterns, gendered zones of ritual access, and limited gender-neutral facilities significantly shape transgender pilgrims’ experiences. Integrating inclusive pathways, rethinking darshan queues, and expanding community

lodging can transform Saundatti into a model for sacred-space inclusivity. Future work could build on this foundation by conducting on-site participatory audits with local transgender communities.

Statements & Declarations

Author Contributions: Conceptualization, S.L., K.M.; methodology, S.L., K.M.; software, S.L.; formal analysis, S.L., K.M.; investigation, S.L.; resources, S.L., K.M.; data curation, S.L.; writing—original draft preparation, S.L.; writing—review and editing, K.M.; visualization, K.M.; supervision, K.M.; project administration, K.M. All authors have read and agreed to the published version of the manuscript.

Human Subjects Statement: This study is based on a literature review and secondary data analysis. It did not involve direct participation of human subjects, interviews, or surveys, and therefore did not require Institutional Review Board approval.

Informed Consent Statement: Not applicable.

Funding: This research received no external funding.

Focus of the Study	Country	Method and	Sample Size	Key Results
Experiences of marginalized transit users (Abelson et al. 2023)	USA	Mixed method; Photo-voice + video interviews	N=2 (6% of 35)	General policy for marginalized groups
Travel behaviour & identity intersection (Cubells, Miralles-Guasch, and Marquet 2023)	Spain	Quantitative GPS trip analysis	N=0 (0% of 89)	No NB participants despite the option given
Active transportation & gender identity (Elliott et al. 2022)	USA	Quantitative; cross-sectional	N=58 (1.5% of 3947)	Gender & sexuality intersect in biking preference
Barriers for TG & gender diverse in rural areas (Gandy et al. 2021)	USA	Mixed-methods	N=7 (29.2% of 24)	High travel burden; low access to gender-affirming care
COVID-19 impact on essential transit users (He et al. 2022)	USA	Quantitative survey	N=16 (3% of 495)	COVID worsened transit burdens for NB groups
Challenges for gender minorities on transit (Lubitow, Abelson, and Carpenter 2020)	USA	Qualitative interviews	N=12 (48% of 25)	High harassment; stress, policy inclusion recommended
Unequal mobility & leisure access (Shakibaei and Vorobjovas-Pinta 2024)	Turkey	Qualitative; thematic analysis	N=49 (split not specified)	Fear of violence causes immobility; inclusion policies are needed
Queer mobilities & exclusion (Weintrob et al. 2021)	UK & Israel	Qualitative, feminist analysis	N=4 total (2 UK + 2 Israel)	High fear/violence; conceal identity for safety

Table 4: Methods and Focus of Existing Studies in Different Countries

Data Availability Statement: The study is literature-based. Data supporting the findings are derived from previously published sources, which are fully cited in the reference list. Additional details may be obtained from the corresponding author upon reasonable request.

Use of Generative Artificial Intelligence (AI) and AI-Assisted Technologies: During the preparation of this manuscript, ChatGPT (OpenAI) was used solely to improve language clarity and readability. After using this tool, the authors reviewed and edited the content thoroughly and take full responsibility for the final version of the manuscript.

Conflicts of Interest: The authors declare no conflicts of interest.

REFERENCES

A., Chitra, Sakthimarieswari G. M., Kaleeswaran S.,

Indhira V. R., Mythili Menon Pathiyil, and Shreyavarshini. 2018. "A Cross Sectional Study to Assess the Discrimination Faced by Trans Genders in Health Care Facilities- Chennai, Tamil Nadu." *International Journal Of Community Medicine And Public Health* 5 (2): 662. <https://doi.org/10.18203/2394-6040.ijcmph20180247>.

Abelson, Miriam, Ivis García, Sadika Khan, Amy Lubitow, Nicholas Puczkowskyj, Marisa Zapata, National Institute for Transportation and Communities (NITC), Portland State University, and University of Utah. 2023. "Marginalized Populations' Access to Transit: Journeys from Home and Work to Transit," August. <https://doi.org/10.21949/1503647>.

Abramovich, Alex, Nelson Pang, and Kinnon Ross MacKinnon. 2023. "Investigating the Mental Health Outcomes among LGBTQ+ Youth Experiencing Homelessness in York Region, Ontario." *Children and Youth Services Review* 155. <https://doi.org/10.1016/j.childyouth.2023.107282>.

- Abreu, Roberto L., Jules P. Sostre, Kirsten A. Gonzalez, Gabriel M. Lockett, Em Matsuno, and Della V. Mosley. 2022. "Impact of Gender-Affirming Care Bans on Transgender and Gender Diverse Youth: Parental Figures' Perspective." *Journal of Family Psychology* 36 (5): 643–52. <https://doi.org/10.1037/fam0000987>.
- Ahuja, Tanvi Kaur, Akhil Dhanesh Goel, Manoj Kumar Gupta, Nitin Joshi, Annu Choudhary, Swati Suman, Kajal Taluja, et al. 2024. "Health Care Needs and Barriers to Care among the Transgender Population: A Study from Western Rajasthan." *BMC Health Services Research* 24 (1): 989. <https://doi.org/10.1186/s12913-024-11010-2>.
- Bain, Alison L., and Julie A. Podmore. 2023. "Queer(Ing) Urban Planning and Municipal Governance." *Urban Planning*. <https://doi.org/10.17645/up.v8i2.7012>.
- Beltran, Theo, Amani M. Allen, Jess Lin, Caitlin Turner, Emily J. Ozer, and Erin C. Wilson. 2019. "Intersectional Discrimination Is Associated with Housing Instability among Trans Women Living in the San Francisco Bay Area." *International Journal of Environmental Research and Public Health* 16 (22). <https://doi.org/10.3390/ijerph16224521>.
- Bianco, Lino. 2023. "Architecture, Engineering and Building Science: The Contemporary Relevance of Vitruvius's *De Architectura*." *Sustainability (Switzerland)* 15 (5). <https://doi.org/10.3390/su15054150>.
- Callander, Denton, Byoungjun Kim, Micah Domingo, Loni Philip Tabb, Asa Radix, Liadh Timmins, Amir Baradaran, Michael B. Clark, and Dustin T. Duncan. 2022. "Examining the Geospatial Distribution of Health and Support Services for Transgender, Gender Nonbinary, and Other Gender Diverse People in New York City." *Transgender Health* 7 (4): 369–74. <https://doi.org/10.1089/trgh.2020.0144>.
- Cipollina, Rebecca, and Diana T. Sanchez. 2023. "Racial Identity Safety Cues and Healthcare Provider Expectations." *Stigma and Health* 8 (2): 159–69. <https://doi.org/10.1037/sah0000265>.
- Crawford, Lucas Cassidy. 2015. "Breaking Ground on a Theory of Transgender Architecture." *Seattle Journal for Social Justice* 8 (2): 515–40. <https://proxy.library.kent.edu/login?url=https://search.ebscohost.com/login.aspx?direct=true&AuthType=ip&db=edshol&AN=edshol.hein.journals.sjsj8.26&site=eds-live&scope=site>.
- Crockett, Marcelo A., Vania Martínez, and Patricio Caviedes. 2022. "Barriers and Facilitators to Mental Health Help-Seeking and Experiences with Service Use among LGBT+ University Students in Chile." *International Journal of Environmental Research and Public Health* 19 (24). <https://doi.org/10.3390/ijerph192416520>.
- Cubells, Jerònia, Carme Miralles-Guasch, and Oriol Marquet. 2023. "Gendered Travel Behaviour in Micromobility? Travel Speed and Route Choice through the Lens of Intersecting Identities." *Journal of Transport Geography* 106 (January):103502. <https://doi.org/10.1016/j.jtrangeo.2022.103502>.
- Doan, Petra L. 2015. "Beyond Queer Space: Planning for Diverse and Dispersed LGBTQ Populations." In *Planning and LGBTQ Communities: The Need for Inclusive Queer Spaces*, 251–59. <https://doi.org/10.4324/9781315756721-19>.
- Doderer, Yvonne P. 2011. "LGBTQs in the City, Queering Urban Space." *International Journal of Urban and Regional Research* 35 (2): 431–36. <https://doi.org/10.1111/j.1468-2427.2010.01030.x>.
- Duplan, Karine. 2023. "What Would an Inclusive City for Gender and Sexual Minorities Be Like? You Need to Ask Queer Folx!" *Social Inclusion* 11 (3): 138–49. <https://doi.org/10.17645/si.v11i3.6937>.
- Elliott, Lucas D., Keegan T. Peterson, Emily Dzieniszewski, Oliver W.A. Wilson, and Melissa Bopp. 2022. "The Intersection of Gender Identity, Sexual Orientation, and Active Transportation Behavior: An Exploratory Study." *Journal of Transport & Health* 26 (September):101477. <https://doi.org/10.1016/j.jth.2022.101477>.
- Farivar, Samira, and Fang Wang. 2022. "Effective Influencer Marketing: A Social Identity Perspective." *Journal of Retailing and Consumer Services* 67. <https://doi.org/10.1016/j.jretconser.2022.103026>.
- Gandy, Megan E., Kacie M. Kidd, James Weiss, Judith Leitch, and Xavier Hersom. 2021. "Trans*Forming Access and Care in Rural Areas: A Community-Engaged Approach." *International Journal of Environmental Research and Public Health* 2021, Vol. 18, Page 12700 18 (23): 12700. <https://doi.org/10.3390/IJERPH182312700>.
- Gelbard, Sarah. 2023. "Radical Solidarities in Punk and Queer Refusals of Safety and Inclusion Narratives in Planning." *Urban Planning* 8 (2): 177–86. <https://doi.org/10.17645/up.v8i2.6372>.
- Glick, Jennifer L., Alex Lopez, Miranda Pollock, and Katherine P. Theall. 2019. "'Housing Insecurity Seems to Almost Go Hand in Hand with Being Trans': Housing Stress among Transgender and Gender Non-Conforming Individuals in New Orleans." *Journal of Urban Health* 96 (5): 751–59. <https://doi.org/10.1007/s11524-019-00384-y>.
- Gorman-Murray, Andrew, Evelyne Leeuw, Rebecca Cadorn, Pippa Cattarral, Jason Prior, Alice Vincent,

- and Arne Scheuermann. 2023. "Queering Global Public Places for Health and Wellbeing." *Population Medicine* 5 (Supplement). <https://doi.org/10.18332/popmed/165575>.
- He, Qian, Dana Rowangould, Alex Karner, Matthew Palm, and Seth LaRue. 2022. "Covid-19 Pandemic Impacts on Essential Transit Riders: Findings from a U.S. Survey." *Transportation Research Part D: Transport and Environment* 105 (April):103217. <https://doi.org/10.1016/J.TRD.2022.103217>.
- International Labour Organization. 2022. "World Employment and Social Outlook | Trends 2022." International Labour Organization.
- Jabeen, Huraera. 2020. "Gender-Responsive Urban Planning and Design of Public Open Spaces for Social and Economic Equity: Challenges and Opportunities in Dhaka City, Bangladesh." *Global Journal of Human-Social Science: E Economics* 20 (5).
- Jacoby, Sam. 2015. "Type versus Typology Introduction." *Journal of Architecture*. Routledge. <https://doi.org/10.1080/13602365.2015.1115600>.
- Karadimitriou, Nikos, Giacomo Magnani, Richard Timmerman, Stephen Marshall, and Andy Hudson-Smith. 2022. "Designing an Incubator of Public Spaces Platform: Applying Cybernetic Principles to the Co-Creation of Spaces." *Land Use Policy* 119. <https://doi.org/10.1016/j.landusepol.2022.106187>.
- King, Wesley M., Kristi E. Gamarel, Mariko Iwamoto, Sabrina Suico, Tooru Nemoto, and Don Operario. 2023. "Structural Needs, Substance Use, and Mental Health Among Transgender and Nonbinary Young Adults in the San Francisco Bay Area: Findings from the Phoenix Study." *Journal of Urban Health* 100 (1): 190–203. <https://doi.org/10.1007/s11524-022-00700-z>.
- Krishna, Aishwarya, and Pranami Sharma. 2024. "Challenges Faced by Transgender individuals in Obtaining Employment – A Thematic Analysis." In *Atlantis-Press.Com A Krishna, P Sharma 3rd International Conference on Reinventing Business Practices, 2024*•atlantis-Press.Com, 277:766–75. https://doi.org/10.2991/978-94-6463-374-0_65.
- Krishnasamy, Adrian, and Patience A Asafu-Adjaye. 2024. "Exploring the Social Realities of Hijras in India: Challenges, Resilience, and Pathways to Inclusion." *International Journal of Gender & Women's Studies* 12:1–8. <https://doi.org/10.15640/ijgws.v12a1>.
- Kumar, Gayathri, A Suguna, Deodatt M. Suryawanshi, A Surekha, Divya Rajaseharan, and KalaiPRIYA Gunasekaran. 2022. "Exploring the Discrimination and Stigma Faced by Transgender in Chennai City—A Community-Based Qualitative Study." *Journal of Family Medicine and Primary Care* 11 (11): 7060–63. https://doi.org/10.4103/jfmpc.jfmpc_1037_22.
- Kynn, Jax, Hannah Boyke, and Brendon T. Holloway. 2023. "WE'LL MAKE OUR OWN SPACE: Making LGBTQ+ Spaces Accessible." In *Exploring Sexuality and Disability: A Guide for Human Service Professionals*, 299–317. Taylor and Francis. <https://doi.org/10.4324/9781003308331-24>.
- Lubitow, Amy, Miriam J. Abelson, and Erika Carpenter. 2020. "Transforming Mobility Justice: Gendered Harassment and Violence on Transit." *Journal of Transport Geography* 82 (January):102601. <https://doi.org/10.1016/J.JTRANGE.2019.102601>.
- McDermott, Elizabeth, Rachael Eastham, Elizabeth Hughes, Emily Pattison, Katherine Johnson, Stephanie Davis, Steven Prymachuk, Ceu Mateus, Olu Jenzen, and Felix McNulty. 2024. "Early Mental Health Intervention and Supported Self-Care for LGBTQ+ Young People in the UK: A Mixed-Methods Study." *Health and Social Care Delivery Research* 12 (47): 1–102. <https://doi.org/10.3310/KYWA6382>.
- Milne, Pamela J. 2018. "From the Margins to the Margins." In *Joshua and Judges*, 209–34. <https://doi.org/10.2307/j.ctt22nm61q.19>.
- Mohammadi, Fateme, Seyedeh Zahra Masoumi, Banafsheh Tehranineshat, Khodayar Oshvandi, and Mostafa Bijani. 2023. "Young Transgender Individuals' Lived Experiences of Facing Life's Challenges: A Qualitative Study in Iran." *Frontiers in Public Health* 11. <https://doi.org/10.3389/fpubh.2023.1134237>.
- Moradi, Ghobad, Sevda Riyahifar, Hojat Dehghanbanadaki, Pouria Bahrami, Farima Zakaryaei, Shahnaz Sheibani, Kambiz Mahzari, and Yousef Moradi. 2023. "Prevalence of Mental Disorders and Their Risk Factors Among Iranian Transgender Population: A National Study." *Trends in Psychology*, November, 1–23. <https://doi.org/10.1007/S43076-023-00344-1/METRICS>.
- More, Vasant. 2021. "Problems of Transgender Community in India: A Sociological Study." *Vivek Research Journal* 8 march (special issue): 87–94. [http://vivekresearchjournal.org/current_issue/nmarch2021/15_PROBLEMS_OF_TRANSGENDER_COMMUNITY_IN_INDIA\(1\).pdf](http://vivekresearchjournal.org/current_issue/nmarch2021/15_PROBLEMS_OF_TRANSGENDER_COMMUNITY_IN_INDIA(1).pdf).
- Nagar, Ila, and Debanuj Dasgupta. 2023. "TRANSGENDER RIGHTS AND RELIGIOSITIES IN INDIA NALSA Judgment and Beyond." *GLQ* 29 (3): 329–52. <https://doi.org/10.1215/10642684-10437222>.

- Ndiinu, Lydiah W., and Justus K. Musya. 2023. "Intersection of Culture, Ecclesia, and Transgender Persons Navigating Identity, Beliefs, and Acceptance." *Jumuga Journal of Education, Oral Studies, and Human Sciences (JJEOSHS)* 6 (1): 1–11. <https://doi.org/10.35544/jjeoshs.v6i1.35>.
- Pariseau, Emily M., Lydia Chevalier, Kristin A. Long, Rebekah Clapham, Laura Edwards-Leeper, and Amy C. Tishelman. 2019. "The Relationship Between Family Acceptance-Rejection and Transgender Youth Psychosocial Functioning." *Clinical Practice in Pediatric Psychology* 7 (3): 267–77. <https://doi.org/10.1037/cpp0000291>.
- Pautunthang, N. 2024. "Historical Developments, Challenges, Legal Rights, and Current Status of Transgender Communities in India." *RESEARCH REVIEW International Journal of Multidisciplinary* 9 (4): 32–41. <https://doi.org/10.31305/rrijm.2024.v09.n04.005>.
- Proudman, Freya. 2024. "Exploring Research Gaps and Future Trajectories in Queer Diaspora Studies." *Sexualities* 0 (0): 1–24. <https://doi.org/10.1177/13634607241301885>.
- Raheja, Gaurav. 2022. "Creating Gender-Inclusive Urban Public Spaces: Case Studies from India, Myanmar and Sweden." *Academia.EduA Isha, G RahejaTJDSR, 2022*•academia.Edu.
- Rand, Joseph J., and Megan S. Pacey. 2022. "Exploring the Lived Experiences of Rural LGBTQ + Youth: Navigating Identity and Authenticity within School and Community Contexts." *Journal of Gay and Lesbian Social Services* 34 (1): 21–39. <https://doi.org/10.1080/10538720.2021.1911902>.
- Rodó-Zárate, Maria. 2023. "Intersectionality and the Spatiality of Emotions in Feminist Research." *Professional Geographer* 75 (4): 676–81. <https://doi.org/10.1080/00330124.2022.2075406>.
- Sainz Molestina, Daniela De, Laura Galluzzo, Francesca Rizzo, Davide Spallazzo, and De Sainz Molestina. 2023. "Proceedings of IASDR 2023: Life-Changing Design." In *Proceedings of IASDR 2023: Life-Changing Design*. <https://doi.org/10.21606/iasdr.2023.899>.
- Shakibaei, Shahin, and Oscar Vorobjovas-Pinta. 2024. "Access to Urban Leisure: Investigating Mobility Justice for Transgender and Gender Diverse People on Public Transport." *Leisure Sciences* 46 (5): 639–57. <https://doi.org/10.1080/01490400.2021.2023372>.
- Sharma, Anjali, and Megha Aggarwal. 2024. "Navigating Adversities: A Systematic Literature Review of Challenges Faced by Transgender Individuals." *Asian Research Journal of Arts & Social Sciences* 22 (12): 307–21. <https://doi.org/10.9734/arjass/2024/v22i12616>.
- Shelton, Jama, Jonah DeChants, Kim Bender, Hsun-Ta Hsu, Diane Santa Maria, Robin Petering, Kristin Ferguson, Sarah Narendorf, and Anamika Barman-Adhikari. 2018. "Homelessness and Housing Experiences among LGBTQ Young Adults in Seven U.S. Cities." *Cityscape: A Journal of Policy Development and Research* 20 (3): 2005.
- Shri L Dattu, Justice H, Justice P Shri C Ghose, Justice D Shri Murugesan Member, NHRC Smt Jyotika Kalra Member, NHRC Shri Ambuj Sharma, Shri Dilip Kumar, Ranbir Singh, S Parasuraman, R Venkata Rao, and Ved Kumari. 2018. "NHRC." *Journal of the National Human Rights Commission India*.
- Weintrob, Amos, Luke Hansell, Martin Zebracki, Yvonne Barnard, and Karen Lucas. 2021. "Queer Mobilities: Critical LGBTQ Perspectives of Public Transport Spaces." *Mobilities* 16 (5): 775–91. <https://doi.org/10.1080/17450101.2021.1958249>.
- Wilcox, Lauren, Renee Shelby, Rajesh Veeraraghavan, Oliver L. Haimson, Gabriela Cruz Erickson, Michael Turken, and Rebecca Gulotta. 2023. "Infrastructuring Care: How Trans and Non-Binary People Meet Health and Well-Being Needs through Technology." In *Conference on Human Factors in Computing Systems - Proceedings, 17. Association for Computing Machinery*. <https://doi.org/10.1145/3544548.3581040>.