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The Role of Public Spaces in Shaping a Sense of Place: Insights from a Systematic Literature Review

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Abstract. This systematic literature review investigates the role of public spaces in shaping a sense of place, a concept encompassing individual perceptions, attachments, and identities tied to specific locations. By synthesizing insights from 47 peer-reviewed studies, the research highlights how public spaces parks, plazas, streets, and communal areas serve as critical venues for fostering social cohesion, cultural identity, and emotional well-being. Key factors influencing the sense of place include design attributes (e.g., accessibility, landscaping, and visual harmony), sensory experiences, cultural relevance, and community participation. The findings emphasize the diverse roles of public spaces in supporting activities such as socializing, leisure, and cultural performances, while addressing the needs of varied demographic and socioeconomic groups. This review provides valuable guidance for urban planners, policymakers, and designers to create inclusive, sustainable, and meaningful public spaces that reflect the unique character of communities and enhance urban vitality.

1. Introduction

The concept of a "sense of place" in public spaces holds growing significance in urban planning, sociology, and psychology, as cities seek to cultivate environments that foster community connection and personal attachment. Public spaces parks, plazas, streets, and other communal areas serve as fundamental elements in shaping this sense of place, which is often defined as an individual's perception, attachment, and identity associated with specific locations [1], [2]. These spaces are not merely physical constructs but are imbued with social, cultural, and symbolic meanings that collectively influence how people relate to and interact within them. As urban areas face increasing challenges related to population density, cultural diversity, and rapid urbanization, understanding the dynamics of public spaces in fostering a sense of place is essential for creating vibrant, inclusive, and resilient communities.

Research has demonstrated that public spaces play an integral role in shaping the social fabric of communities by providing arenas for interaction, expression, and the exchange of ideas [3]. Public open spaces such as community parks are vital urban components that foster social cohesion, encourage outdoor activity, and enhance collective well-being [4]. These communal areas often become hubs of cultural identity and memory, where the experiences of past generations merge with the present, enhancing the emotional connection residents feel toward their cities [5]. Moreover, a well-designed public space can evoke feelings of security, belonging, and personal identity, contributing to the overall well-being of individuals [6], [7].

The sense of place is further influenced by environmental and sensory experiences, as elements such as auditory and visual aesthetics impact people's engagement with their surroundings [8].

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Understanding how sensory dimensions contribute to a sense of place allows urban designers to tailor public spaces that foster comfort, enjoyment, and relaxation [9].

Urban design literature suggests that the concept of sense of place has shifted beyond mere attachment to physical spaces, encompassing a broader appreciation for the cultural, historical, and ecological contexts within which these spaces exist [10]. For example, Shamai and Ilatov [11] argue that location alone is insufficient to create a meaningful sense of place; rather, it is the integration of community values, personal involvement, and historical relevance that transforms a space into a "place." The concept of affordances, where different age groups or cultural backgrounds perceive and utilize the same physical features in unique ways, further illustrates the multiplicity of experiences public spaces offer. As cities continue to evolve, the role of public spaces in fostering a sense of place becomes increasingly significant in maintaining social cohesion and urban vitality [12].

2. Methodology

The systematic literature review (SLR) was guided by four research questions addressing the relationships between activities, physical attributes, satisfaction levels, demographic factors, and sense-of-place formation in open public spaces. A structured search was conducted in Scopus and Google Scholar to ensure comprehensive coverage of peer-reviewed literature. The search was performed in August 2024 and included publications available up to that date. Boolean operators were used to combine two search strings:

String 1: (“public space*” OR “outdoor space*” OR “open space*” OR “communal space*”)

String 2: (“place identity” OR “sense of place” OR “sense of belonging” OR “genius loci” OR “place attachment”).

The search yielded 552 records (Scopus n = 539; Google Scholar n = 13). Prior to screening, 12 duplicate records were removed. Automated database filters were then applied to exclude non-English and non-journal publications, including conference proceedings, book chapters, and review articles (n = 165), and subject-area refinement excluded records outside architecture and urban studies (n = 140). After these removal steps, 235 records remained for title and abstract screening. Title and abstract screening resulted in the exclusion of 147 records that did not align with the conceptual focus on open public spaces and sense-of-place constructs, leaving 88 reports for full-text assessment. Full-text evaluation led to the exclusion of 41 studies for the following reasons: absence of explicit focus on open public spaces (n = 21), unrelated to architecture or urban sectors (n = 5), and unrelated study scope (n = 15). A final set of 47 studies met all eligibility criteria and were included in the qualitative synthesis. The review process followed the PRISMA 2020 framework, and inclusion/exclusion counts at each stage are illustrated in Figure 1.

Screening and data extraction were conducted by the primary author using predefined eligibility criteria applied consistently across all stages. Each of the 47 included articles was treated as a single unit of analysis. Quantitative comparisons therefore reflect aggregated descriptive patterns across studies. Table 1 presents a summary of the 47 selected studies, outlining their authorship, publication year, geographical context, methodological approach, and key findings related to the role of public spaces in shaping sense of place.

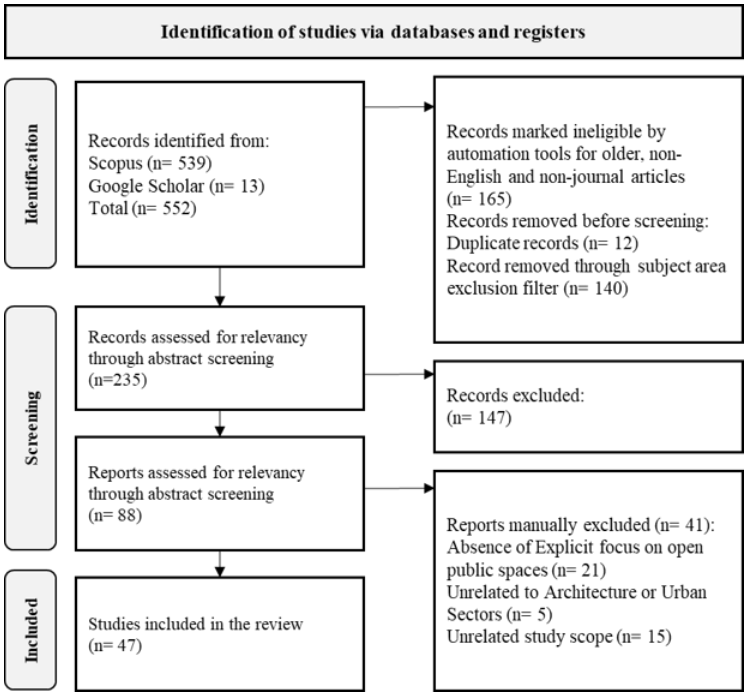


Figure 1 PRISMA flow diagram created by the authors

3. Results and Findings

Publication per country: The geographical distribution of publications demonstrates a marked concentration of research activity within Asia and Oceania, as evidenced in Table 2. Countries such as Indonesia (11%) and Australia (11%) account for a substantial proportion of contributions, followed by India (9%), Iran (6%), and Japan (4%), indicating a relatively cohesive regional engagement in sense-of-place scholarship. While the United States (13%) and the United Kingdom (9%) lead contributions in North America and Europe respectively, the European output appears more fragmented across multiple national contexts. As reflected in Table 2, the pattern suggests that Asia and Oceania exhibit a more consolidated research presence in comparison to the comparatively dispersed European contributions.

Publication by year: The temporal distribution of publications further reveals a dynamic trajectory over the period 2013–2024, as illustrated in Table 3. The data indicate noticeable fluctuations, including a decline around 2021, followed by a significant upward trend culminating in a publication peak in 2024. This pattern, shown in Table 3, suggests a resurgence of academic interest in sense-of-place research within open public spaces, highlighting its increasing relevance in contemporary urban discourse.

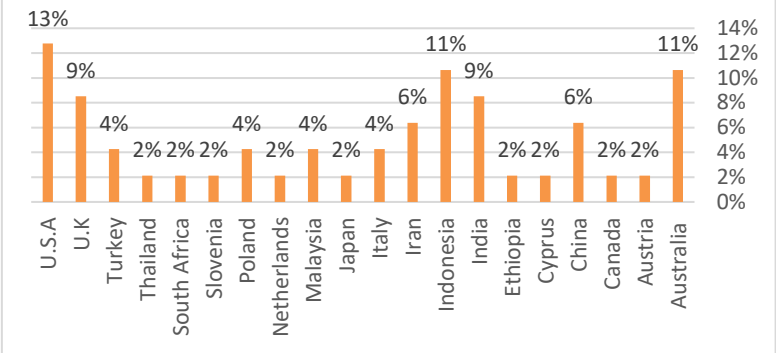


Figure 2 Publication by Country

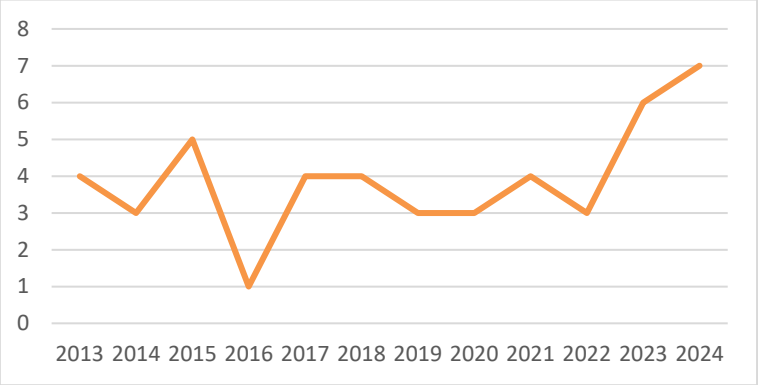


Figure 3 Publication by Year

Table 1 List of Selected Studies and Paper ID

ID	Author	Year	Context	Methods	Paper Finding
1	F. S. Hoseini & M. Mokhtari [13]	2013	Iran	Questionnaire survey & field observation.	Quality of public spaces like Tarbiat Street in Tabriz increases social life and place attachment, fostering community involvement.
2	B. Mohapatra & A. R. Mohamed [14]	2013	India	Structured questionnaire & factor analysis.	Attachment to neighborhood parks in Bhubaneswar enhances community participation in management.
3	C. Rishbeth & M. Powell [15]	2013	United Kingdom	Walking audio recordings & narrative analysis.	Migrants' attachment to places is influenced by memory and continuity in unfamiliar environments.
4	M. Garrido[16]	2013	Philippines	Participant observation & in-depth interviews.	In Metro Manila, segregation between social classes is perpetuated through symbolic practices in public spaces.
5	R. Amirjani & E. Zarghami[17]	2014	Iran	Descriptive analysis & library research.	Designing urban public spaces based on citizen satisfaction enhances place attachment and community engagement.
6	M. Sepe [18]	2014	Italy	PlaceMaker method & case studies.	Preserving place identity through urban design enhances the sustainability of public spaces.
7	J. K. Swim, S. J. Zawadzki, J. L. Cundiff & B. Lord [19]	2014	United States	Survey questionnaire & mediation analysis.	Strong environmental identity fosters community support for the preservation of open spaces.
8	S. Pancholi, T. Yigitcanlar & M. Guaralda [20]	2015	Australia	Case study & site observation.	Public spaces in innovation districts like Kelvin Grove Urban Village help foster a sense of belonging, but are dependent on social and economic flows.
9	D. Mantey [21]	2015	Poland	Survey questionnaire.	Public spaces positively influence place attachment and social relationships in urban housing estates like Zacisze.
10	N. Marshall & K. Bishop [22]	2015	Australia	Literature Review	Placemaking initiatives may create place attachment but require interdisciplinary research to understand their broader impact.
11	B. Karsono, Deni, Nurhaiza & M. Iqbal [23]	2015	Malaysia	Questionnaire survey & interview.	The Malacca Riverfront Promenade fosters place attachment through comfort and security, enhancing social interaction.
12	K. Main & G. F. Sandoval [24]	2015	United States	Case study & interviews.	Immigrants in Los Angeles transform public spaces to reflect their identities, creating spaces of belonging.
13	B. Karsono, S. S. Indira & Deni [25]	2016	Malaysia	Questionnaire survey & observation.	Unique and secure environments in public spaces are critical for fostering strong place attachment.
14	M. Muminovic [26]	2017	Australia	Case study & discourse analysis.	Sustainable urban regeneration in Canberra enhances place identity through public space revitalization.
15	A. Alzahrani, K. Borsi & D. Jarman [27]	2017	United Kingdom	Case study & surveys.	Comparative study of two London squares shows placemaking enhances social value through community engagement.
16	S. Polat & N. Dostoglu [28]	2016	Turkey	Case study & interviews.	Civic consciousness and urban memory are supported by public open spaces, crucial for sustaining urban identity.
17	E. E. Toolis [29]	2017	United States	Theoretical analysis.	Critical placemaking helps reclaim public spaces, fostering dialogue and inclusivity.

18	A. Addas & C. Rishbeth [30]	2018	Saudi Arabia	Case study & interviews.	Migrants and locals in Jeddah use public spaces for socializing and place attachment, with differences based on displacement experiences
19	M. Ziyaee [31]	2018`	Italy	Case study & matrix analysis.	Urban identity is shaped by cultural landscapes, and these should be preserved during urban regeneration.
20	N. Ujang, M. Kozlowski & S. Maulan [32]	2018	Malaysia	Interviews & field observation.	Place attachment strengthens social interaction in public spaces, creating meaningful places.
21	R. Newell & R. Canessa [33]	2018	Canada	Survey questionnaire & regression analysis.	Geovisualizations enhance understanding of place relationships, aiding in community planning.
22	J. Piyapong, R. Riruengrong, I. Wipawee, N. Siriphan & A. Passanan [34]	2019	Thailand	Questionnaire survey & in-depth interviews.	Public spaces in coastal communities strengthen community relations and sense of place.
23	P. J. Ellery & J. Ellery [35]	2019	Australia	Theoretical analysis.	Placemaking strategies foster a stronger sense of community and place.
24	D. G. Özkan & S. Yilmaz [36]	2019	Turkey	Questionnaire survey & factor analysis.	Social and physical factors in Trabzon urban squares significantly increase place attachment.
25	Z. Goosen & E. J. Cilliers [37]	2020	South Africa	Qualitative enquiry & theoretical framework development.	Third places play a key role in enhancing social sustainability and community identity.
26	J. Hardi, L. S. Arifin & Y. B. Dwisusanto [38]	2020	Indonesia	In-depth interviews & grounded theory analysis.	Lack of emotional attachment limits communal space use in low-cost flats in Jakarta.
27	V. Žlender & S. Gemin [39]	2020	Slovenia	Survey questionnaire & structural equation modelling.	Strong sense of place towards peri-urban green spaces promotes sustainable behavior in Ljubljana and Edinburgh.
28	S. Sun & Y. Yu [40]	2021	China	Questionnaire survey & structural equation modelling.	Deji Plaza in Nanjing enhances city image but lacks local identity, affecting placeness negatively.
29	Y. Song, R. Wang, J. Fernandez & D. Li [41]	2021	United States	Online review mining & LDA topic modelling.	Machine learning shows diverse visitor experiences on the Las Vegas Strip, with positive overall perceptions of public spaces.
30	A. Zahid & D. Misirlisoy [42]	2021	Pakistan	Questionnaire survey & Likert scale analysis.	Walled City of Lahore demonstrates strong identity and memory contributing to urban place attachment.
31	K. Solarek & E. Grochowska [43]	2021	Poland	Historical analysis & case study evaluation.	The urban design of Chiba City, Japan, enhances place attachment and emotional value through experiential recognition.
32	T. Zhang, J. Liu, H. Chen & M. K. Ng [44]	2022	China	Questionnaire survey & structural equation modelling.	Communal spaces in high-rise housing in Guangzhou and Hong Kong improve mental health through enhanced sense of place.
33	C. Kim & D. Kwak [45]	2022	Japan	Questionnaire survey & factor analysis.	Urban design projects in Chiba City positively affect emotional values and experiential recognition of place.
34	T. Ashfina, P. Garg & P. S. Chani [46]	2022	India	Questionnaire survey & statistical analysis.	Traditional public spaces in Kerala sustain place identity and foster social cohesion in urban settings.
35	M. Pazhuhan (Panahandeh Khah), H. Azadi, D. Lopez-Carr, J. Barbir, I. Shahzadi & C. Fürst [47]	2023	Iran	Questionnaire survey & descriptive statistical analysis.	Small residential squares in Tehran enhance social sustainability and sense of place more effectively than larger squares.
36	I. Asmal & R. Latief [48]	2023	Indonesia	Socio-spatial analysis & behavioral mapping.	Family communal spaces in coastal settlements in Indonesia strengthen social cohesion and community resilience.
37	S. P. Dash & N. L. Thilagam [49]	2023	India	Qualitative literature review.	Creative placemaking enhances social interaction and emotional connection in public spaces, fostering social cohesion.
38	S. P. Dash & N. L. Thilagam[50]	2023	India	Qualitative literature review.	Creative placemaking fosters social cohesion through community engagement and emotional attachment.

39	P. Pourbahador & M. Brinkhuijsen [51]	2023	Netherlands	Policy analysis & expert interviews.	Municipal strategies in Amsterdam protect the sense of place through heritage management but face challenges from tourism pressures.
40	T. Mukwidigwi, M. Naidu, S. Govender & G. Membele [52]	2023	South Africa	Participatory GIS & semi-structured interviews.	Monuments in Durban and Chatsworth significantly influence identity formation and memory-making in public spaces.
41	G. S. Duden, J. Reiter, C. Bauer, C. Haslinger, M. Mroz & A. Rohmann [53]	2024	Germany	Go-along interviews & thematic analysis.	Urban spaces in Germany influence migrant identity and belonging, depending on inclusivity and familiarity of the space.
42	J. T.-w. Ho [54]	2024	Hong Kong	Action research & semi-structured interviews.	Architectural restoration of a Hakka household in Hong Kong activates place identity through community engagement and restoration efforts.
43	N. Weerasuriya [55]	2024	Australia	Conceptual analysis.	Language plays a crucial role in youth belonging in Australia, especially for multilingual youth navigating cultural identities.
44	H. Ramkissoon, R. Van Der Veen, A. Salaripour, Z. S. Reihani & A. Aflaki [56]	2024	Iran	Online survey & structural equation modelling.	Sensory experiences positively influence place attachment and civic participation in Rasht, Iran.
45	J. Zhang, Z. Zhang & Y. Liang [57]	2024	China	Questionnaire survey & structural equation modeling.	Accessibility significantly impacts place attachment, with satisfaction playing a mediating role in urban open spaces in Jiamusi, China.
46	M. Budruk, K. Andereck & M. Sampson [58]	2024	United States	Quantitative survey & confirmatory factor analysis.	Event recreationists exhibit stronger place attachment than dispersed recreationists, highlighting the social bonding aspect
47	X. Chen, M. H. Marzbali & A. Abdullah [59]	2024	China	Questionnaire survey & PLS-SEM analysis.	Urban park attractiveness enhances perceived safety and strengthens place identity, with time spent as a mediator.

Urban context of Public Spaces: The distribution of study contexts reveals a clear predominance of residential environments within the literature, with 17 studies (36%) categorized under this setting, as shown in Table 2. This concentration underscores the centrality of residential contexts in examining mechanisms of community interaction, social cohesion, and the development of place attachment. Commercial spaces constitute the second most represented category, accounting for 11 studies (23%), reflecting their dual role as economic engines and socially interactive urban nodes. Historical public spaces follow closely with 10 studies (21%), highlighting the scholarly emphasis on their significance in reinforcing cultural identity and sustaining collective memory. The remaining 9 studies (19%), as indicated in Table 2, encompass a range of diverse contexts, including mixed-use and multifunctional open spaces, suggesting that while alternative spatial typologies are acknowledged in the literature, they occupy a comparatively secondary position relative to residential settings.

Table 2 Urban context of Public Spaces

Urban Context of Public Spaces	Paper ID	Number of papers	Percentage
Residential	2,3,9,11,12,18,20,22,26,27,32,33,35,36,37, 38,45	17	36%
Commercial	4,5,8,14,15,21,28,29,39,42,43	11	23%
Historical*	1,6,10,16,17,19,23,30,34,40	10	21%
Others*	7,24,25,26,27,46,47,41,44	9	19%

Physical Attributes in Public Spaces: As illustrated in Table 3, landscaping emerges as the most prominently emphasized physical attribute, representing 26% of the reviewed studies and underscoring its pivotal role in enhancing aesthetic quality, environmental performance, and symbolic meaning. Empirical findings demonstrate that well-integrated greenery not only improves microclimatic conditions but also reinforces cultural identity, thereby strengthening user engagement and satisfaction within public spaces [40]. Accessibility accounts for 13% of the literature, emphasizing the importance of inclusive and well-connected urban environments. Elements such as pedestrian continuity, shaded walkways, and integration with public transportation systems are identified as essential factors in encouraging frequent visitation and facilitating social interaction, as evidenced in the Kuala Lumpur context [32]. Furthermore, fit with context (12%) and visual harmony (11%) collectively highlight the necessity of aligning public space design with local cultural, social, and architectural characteristics to ensure contextual relevance, functional longevity, and sustained usability.

Table 3 Physical Attributes in OPS

Physical Attributes of Public Spaces	Paper ID	Number of papers	Percentage
Furniture	1,3,5,6,8,13,24,28,35,37,39	11	8%
Lighting	5,6,19,11,14,17	6	4%
Cleanliness	6,11,16,18,19,37	6	4%
Shading Areas	1,5,22,27,	4	3%
Visual Harmony	1,3,5,6,10,21,24,28,34,40,33,45,47,42,44	15	11%
Accessibility*	1,4,11,12,19,20,24,25,27,28,29,31,35,37,39,41,42,44,45	19	13%
Facilities	2,7,15,20,22,26,28,29,32,33,34,35,41,44,45,46,44	14	10%
Fit with Context	4,9,13,19,23,27,28,29,30,31,33,34,39,40,41,42,46,	17	12%
Landscaping*	1,5,16,17,19,28,29,35,41,43,2,3,7,12,14,24,27,36,40,45,47,8,6 ,11,13,15,20,23,25,26,30,33,37,38,39,42,44,	37	26%
Acoustical Environment	6,17,25,36,44	5	4%

Activities performed in Public Spaces: As presented in Table 4, walking emerges as a dominant activity within open public spaces, accounting for 20.40% of the reviewed studies. Walking is strongly associated with improvements in urban quality of life, as it enhances accessibility, encourages physical activity, and facilitates social interaction. Empirical evidence suggests that pedestrian-oriented environments contribute to strengthening sense of place by promoting

community engagement, informal encounters, and overall urban vitality [13]. Cycling, represented in 14.20% of the studies, further emphasizes the function of public spaces in advancing sustainability and supporting healthy lifestyles. Research indicates that well-designed cycling infrastructure enhances spatial connectivity and encourages consistent use, effectively integrating mobility and recreational functions within urban public realms [23]. Socializing, identified in 22.40% of the studies, underscores the fundamental role of public spaces in fostering interpersonal relationships, reinforcing social cohesion, and sustaining collective urban life.

Table 4 Activities performed in OPS

Activities Performed in OPS	Paper ID	Number of papers	Percentage
Walking	1,3,4,5,6,9,10,11,18,31,27,21	10	20.40%
Cycling	8,7,6,27,11,21,5	7	14.20%
Socializing*	4,9,10,19,20,21,25,26,32,33,36	11	22.40%
Cultural performances	42,10,6,17,30,22	6	12.24%
Eating	9,7,19,13,4	5	10.20%
Leisure	18,27,33,47,26,22,9,12,17,29	10	20.40%

Overall Satisfaction in Public Spaces: Figure 4 indicates that 57% of users report high satisfaction with open public spaces, reflecting strong emotional connection and functional performance. Moderate satisfaction accounts for 36%, while only 7% report low satisfaction. These results suggest generally positive user perceptions and are consistent with established concepts of place identity, sense of belonging, and place attachment. For instance, Isa et al. [60] highlight that high-quality public spaces not only enhance user satisfaction but also strengthen place identity and belonging. This relationship is mediated by the physical and social qualities of the spaces, which create inclusive and engaging environments. Similarly, Saymanlier et al [61].

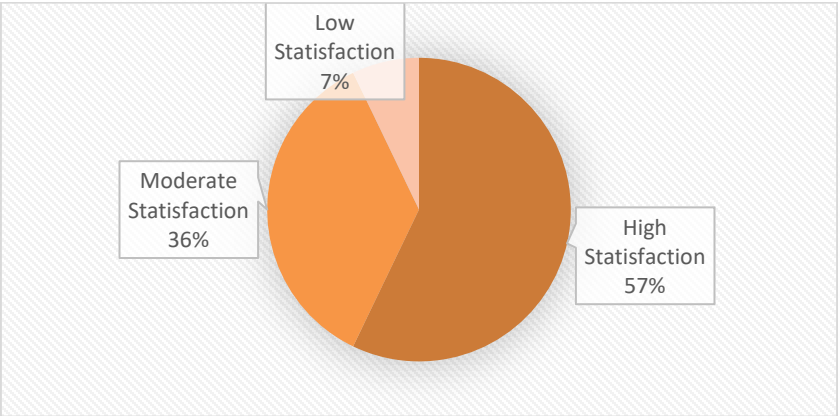


Figure 2 Overall Satisfaction

Impact of the Activities in OPS on the Sense of belonging Satisfaction: As shown in Table 5 presents a cross-tabulation of activities performed in open public spaces and their corresponding satisfaction levels (higher satisfaction, no significant difference, or lower satisfaction). A Chi-square test was conducted to evaluate the association between the type of activity and satisfaction level. A cross-tabulation analysis was conducted to explore the distributional relationship between types of activities performed in open public spaces and reported satisfaction levels. The analysis produced a Chi-square value of $\chi^2 = 21.71$ ($df = 12$, $p = 0.0408$). Given that the unit of analysis in this study is published research articles rather than independent individual respondents, these

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inferential statistics are interpreted as indicative of descriptive patterns rather than definitive causal relationships.

Table 5 The Impact of the Activities in OPS on the Sense of belonging Satisfaction

Activities performed in Open Public Spaces	Rating of Sense Of Belonging		
	High level	Moderate level	Low level
Walking	8	2	--
Cycling	5	2	--
Active Socializing	3	5	3
Passive Socializing (observation)	2	3	5
Cultural performances	1	2	3
Eating	4	--	1
Leisure	2	4	4

Conclusion

This review moves beyond identifying isolated design attributes by synthesizing the mechanisms through which open public spaces contribute to the formation of sense of place. The findings suggest that physical attributes do not operate independently; rather, they function as enabling conditions that structure social practices, which in turn generate meaning, attachment, and identity.

Mechanisms: From Design to Attachment

The synthesis indicates a sequential mechanism linking physical design attributes into social interaction patterns and into emotional attachment. For example, accessibility and pedestrian continuity increase the likelihood of walking and cycling activities. These activities facilitate repeated exposure, informal encounters, and passive observation, which strengthen familiarity and social recognition. Over time, these interactions contribute to emotional bonding and place attachment. Similarly, landscaping and visual harmony enhance environmental comfort and aesthetic coherence. This environmental quality encourages longer duration of stay and social clustering, thereby reinforcing shared experiences and collective memory formation. In this sense, design attributes act as structural affordances that enable social practices, while meaning and attachment emerge from the social processes occurring within these spatial frameworks.

Boundary Conditions and Contextual Variation

The review also highlights important boundary conditions. Cultural context influences how public spaces are interpreted and used. In societies with strong collective traditions, public spaces may serve as platforms for communal rituals and cultural performances, reinforcing identity at a group level. In contrast, in more individualistic or commercially driven contexts, spaces may prioritize consumption-oriented activities, potentially limiting deeper attachment formation. Governance structures and socioeconomic inequality further moderate outcomes. Lower-income groups appear to rely more heavily on public spaces for accessible leisure and social interaction, suggesting that equity in design and maintenance is critical for inclusive sense-of-place formation.

Implications for Urban Design and Management

For practitioners, the findings imply that designing for sense of place requires moving beyond aesthetic enhancement toward facilitating social practice. Urban designers should prioritize:

- Continuous pedestrian networks that promote walking-based interaction
- Flexible furniture and multipurpose facilities supporting active and passive socializing
- Context-sensitive landscaping aligned with cultural identity
- Inclusive accessibility ensuring equitable participation

Management strategies should also consider maintenance quality, lighting, and safety perceptions, as these influence sustained engagement and emotional security. Importantly, attachment cannot be engineered solely through symbolic design elements; it emerges through repeated and meaningful use. Therefore, programming and activation strategies (e.g., cultural events, community participation initiatives) are as critical as spatial configuration.

References

[1] S. Grenni, K. Soini, and L. G. Horlings, "The inner dimension of sustainability transformation: how sense of place and values can support sustainable place-shaping," *Sustain. Sci.*, vol. 15, no. 2, pp. 411–422, Mar. 2020. https://doi.org/10.1007/s11625-019-00743-3.

[2] S. Shamsuddin and N. Ujang, "Making places: The role of attachment in creating the sense of place for traditional streets in Malaysia," *Habitat Int.*, vol. 32, no. 3, pp. 399–409, 2008. https://doi.org/10.1016/j.habitatint.2008.01.004.

[3] F. Gaffikin, M. McEldowney, and K. Sterrett, "Creating shared public space in the contested city: The role of urban design," *J. Urban Des. (Abingdon).*, vol. 15, no. 4, pp. 493–513, 2010. https://doi.org/10.1080/13574809.2010.502338.

[4] S. Qwaider, M. S. Zami, M. Bilal, R. Ashmeel, and M. A. Hassanain, "Spatial Analysis on Urban Justice Delivering the Community Parks: A Case of the Saudi Arabian City of Al-Khobar," *Smart Cities*, vol. 8, no. 6, Dec. 2025. https://doi.org/10.3390/smartcities8060205.

[5] K. Paulsen and A. M. Orum, "Introduction to Cities: How Place and Space Shape Human Experience," 2012. [Online]. Available: https://www.researchgate.net/publication/321134331

[6] M. Farid Azizul, S. Knight-Lenihan, and M. Van Roon, "Sense Shaping Place: Repositioning the Role of Sense of Place in Social-Ecological Systems from a Bioregional Planning Viewpoint."

[7] M. Sharif Zami, S. Qwaider, B. M. Al-Ramadan, and M. A. Hassanain, "A framework to understand the design guidelines of smart and sustainable urban open space," *ESTOA*, vol. 15, no. 29, pp. 202–216, Jan. 2026. https://doi.org/10.18537/est.v015.n029.a13.

[8] P. Chueng and P. Marsden, "Designing Auditory Spaces to Support Sense of Place: The Role of Expectation. Position paper for The Role of Place in On-line Communities Workshop, CSCW2002," 2002. [Online]. Available: http://scom.hud.ac.uk/scompc2/research.htm

[9] F. Cumming and M. Nash, "An Australian perspective of a forest school: shaping a sense of place to support learning," *Journal of Adventure Education and Outdoor Learning*, vol. 15, no. 4, pp. 296–309, Oct. 2015. https://doi.org/10.1080/14729679.2015.1010071.

[10] G. Kyle and G. Chick, "The social construction of a sense of place," *Leis. Sci.*, vol. 29, no. 3, pp. 209–225, May 2007. https://doi.org/10.1080/01490400701257922.

[11] S. Shamai and Z. Ilatov, “MEASURING SENSE OF PLACE: METHODOLOGICAL ASPECTS,” 2005.

[12] H. Kamalipour, “Shaping Public Space in Informal Settlements: A Case Study,” *Sustainability (Switzerland)*, vol. 15, no. 4, Feb. 2023. https://doi.org/10.3390/su15043781.

[13] F. Hoseini and M. Mokhtari, “Enhancing quality of urban spaces by approach of sense of place (Case study: Tarbiat street in Tabriz city),” *World Appl. Sci. J.*, vol. 22, no. 10, pp. 1465–1474, 2013. https://doi.org/10.5829/idosi.wasj.2013.22.10.563.

[14] B. Mohapatra and A. R. Mohamed, “Place attachment and participation in management of neighbourhood green space: A place-based community management,” *International Journal of Sustainable Society*, vol. 5, no. 3, pp. 266–283, 2013. https://doi.org/10.1504/IJSSOC.2013.054715.

[15] C. Rishbeth and M. Powell, “Place Attachment and Memory: Landscapes of Belonging as Experienced Post-migration,” *Landsc. Res.*, vol. 38, no. 2, pp. 160–178, Apr. 2013. https://doi.org/10.1080/01426397.2011.642344.

[16] M. Garrido, “The sense of place behind segregating practices: An ethnographic approach to the symbolic partitioning of metro manila,” *Social Forces*, vol. 91, no. 4, pp. 1343–1362, Jun. 2013. https://doi.org/10.1093/sf/sot039.

[17] R. Amirjani and E. Zarghami, “Designing urban public realms based on indices of citizen satisfaction,” *Research Journal of Applied Sciences, Engineering and Technology*, vol. 7, no. 8, pp. 1662–1668, 2014. https://doi.org/10.19026/rjaset.7.446.

[18] M. Sepe, “Preserving, reconstructing and enhancing the place identity: Identifying principles of urban sustainability with placemaker method,” *International Journal of Sustainable Development and Planning*, vol. 9, no. 2, pp. 277–300, 2014. https://doi.org/10.2495/SDP-V9-N2-277-300.

[19] J. K. Swim, S. J. Zawadzki, J. L. Cundiff, and B. Lord, “Environmental identity and community support for the preservation of open space,” *Human Ecology Review*, vol. 20, no. 2, pp. 133–156, 2014. https://doi.org/10.22459/her.20.02.2014.07.

[20] S. Pancholi, T. Yigitcanlar, and M. Guaralda, “Public space design of knowledge and innovation spaces: Learnings from Kelvin Grove Urban Village, Brisbane,” *Journal of Open Innovation: Technology, Market, and Complexity*, vol. 1, no. 1, Sep. 2015. https://doi.org/10.1186/s40852-015-0015-7.

[21] D. Mantey, “The role of public spaces in creating place attachment (example of Zacisze, Warsaw housing estate),” *Miscellanea Geographica*, vol. 19, no. 3, pp. 36–42, Sep. 2015. https://doi.org/10.1515/mgrsd-2015-0013.

[22] N. Marshall and K. Bishop, “The International Journal of Interdisciplinary Social and Community Studies Is There Any Correlation between Placemaking and Place Attachment?,” 2015. [Online]. Available: www.thesocialsciences.com,

[23] B. Karsono, D. Deni, C. Author, and M. Iqbal, “Recognizing Level of Place Attachment in Malacca Riverfront Promenade,” 2015. [Online]. Available: http://www.aensiweb.com/AEB/

[24] K. Main and G. F. Sandoval, “Placemaking in a translocal receiving community: The relevance of place to identity and agency,” *Urban Studies*, vol. 52, no. 1, pp. 71–86, Jan. 2015. https://doi.org/10.1177/0042098014522720.

[25] B. Karsono, S. Indira, and Deni, "The significance of uniqueness, comfort, security and safety to place attachment," *J. Teknol.*, vol. 78, no. 5, pp. 179–183, May 2016. https://doi.org/10.11113/jt.v78.8278.

[26] M. Muminovic, "Place identity and sustainable urban regeneration: Public space in Canberra City Centre," *International Journal of Sustainable Development and Planning*, vol. 12, no. 4, pp. 734–743, 2017. https://doi.org/10.2495/SDP-V12-N4-734-743.

[27] A. Alzahrani, K. Borsi, and D. Jarman, "Place-making and its implications for social value: A comparison study of two urban squares in London," *International Journal of Sustainable Development and Planning*, vol. 12, no. 4, pp. 752–762, 2017. https://doi.org/10.2495/SDP-V12-N4-752-762.

[28] S. Polat and N. Dostoglu, "Measuring place identity in public open spaces," *Proc. Inst. Civ. Eng. Urban Des. Plan.*, vol. 170, no. 5, pp. 217–230, Oct. 2017. https://doi.org/10.1680/jurdp.15.00031.

[29] E. E. Toolis, "Theorizing Critical Placemaking as a Tool for Reclaiming Public Space," *Am. J. Community Psychol.*, vol. 59, no. 1–2, pp. 184–199, Mar. 2017. https://doi.org/10.1002/ajcp.12118.

[30] A. Addas and C. Rishbeth, "The transnational Gulf City: Saudi and migrant values of public open spaces in Jeddah," *Landsc. Res.*, vol. 43, no. 7, pp. 939–951, Oct. 2018. https://doi.org/10.1080/01426397.2018.1427709.

[31] M. Ziyaee, "Assessment of urban identity through a matrix of cultural landscapes," *Cities*, vol. 74, pp. 21–31, Apr. 2018. https://doi.org/10.1016/j.cities.2017.10.021.

[32] N. Ujang, M. Kozlowski, and S. Maulan, "Linking place attachment and social interaction: towards meaningful public places," *Journal of Place Management and Development*, vol. 11, no. 1, pp. 115–129, 2018. https://doi.org/10.1108/JPMD-01-2017-0012.

[33] R. Newell and R. Canessa, "From sense of place to visualization of place: examining people-place relationships for insight on developing geovisualizations," *Heliyon*, vol. 4, p. 547, 2018. https://doi.org/10.1016/j.heliyon.2018.

[34] J. Piyapong, R. Riruengrong, I. Wipawee, N. Siriphan, and A. Passanan, "Empirical evidence of the roles of public spaces and public activities in the promotion of community relations and sense of place in a coastal community," *Journal of Place Management and Development*, vol. 12, no. 4, pp. 485–507, Sep. 2019. https://doi.org/10.1108/JPMD-09-2018-0065.

[35] P. J. Ellery and J. Ellery, "Strengthening community sense of place through placemaking," *Urban Plan.*, vol. 4, no. 2 Public Space in the New Urban Agenda: Research into Implementation, pp. 237–248, 2019. https://doi.org/10.17645/up.v4i2.2004.

[36] D. G. Özkan and S. Yilmaz, "The effects of physical and social attributes of place on place attachment A case study on Trabzon urban squares," *Archnet-IJAR: International Journal of Architectural Research*, vol. 13, no. 1, pp. 133–150, Mar. 2019. https://doi.org/10.1108/ARCH-11-2018-0010.

[37] Z. Goosen and E. J. Cilliers, "Enhancing Social Sustainability Through the Planning of Third Places: A Theory-Based Framework," *Soc. Indic. Res.*, vol. 150, no. 3, pp. 835–866, Aug. 2020. https://doi.org/10.1007/s11205-020-02350-7.

[38] J. Hardi, L. Sigit Arifin, and Y. Basuki Dwisusanto, "Role of Sense of Place in the Use of Communal Spaces as Places for Social Interaction at an Owned Low-Cost Flats Bendungan Hilir II," 2020. [Online]. Available: http://www.irphouse.com

[39] V. Žlender and S. Gemin, "Testing urban dwellers' sense of place towards leisure and recreational peri-urban green open spaces in two European cities," *Cities*, vol. 98, Mar. 2020. https://doi.org/10.1016/j.cities.2019.102579.

[40] S. Sun and Y. Yu, "Dimension and formation of placeness of commercial public space in city center: A case study of Deji Plaza in Nanjing," *Frontiers of Architectural Research*, vol. 10, no. 2, pp. 229–239, Jun. 2021. https://doi.org/10.1016/j.foar.2020.08.001.

[41] Y. Song, R. Wang, J. Fernandez, and D. Li, "Investigating sense of place of the Las Vegas Strip using online reviews and machine learning approaches," *Landsc. Urban Plan.*, vol. 205, Jan. 2021. https://doi.org/10.1016/j.landurbplan.2020.103956.

[42] A. Zahid and D. Misirlisoy, "Measuring place attachment, identity, and memory in urban spaces: Case of the walled city of lahore, pakistan," *Journal of Architecture and Urbanism*, vol. 45, no. 2, pp. 171–182, Nov. 2021. https://doi.org/10.3846/jau.2021.15183.

[43] K. SOLAREK and E. GROCHOWSKA, "Anali za istrske in mediteranske študije Annali di Studi istriani e mediterranei Annals for Istrian and Mediterranean Studies Series Historia," 2021, [Online]. Available: https://zdjp.si

[44] T. Zhang, J. Liu, H. Chen, and M. K. Ng, "The Associations of Communal Space with Sense of Place and Mental Health in Public Housing: Evidence from Guangzhou and Hong Kong," *Int. J. Environ. Res. Public Health*, vol. 19, no. 23, Dec. 2022. https://doi.org/10.3390/ijerph192316178.

[45] C. Kim and D. Kwak, "Formation of Sense of Place Trough Urban Design Project in Chiba, Japan: Relationships between Change of Emotional Values and Experiential Recognition of Place," *International Review for Spatial Planning and Sustainable Development*, vol. 10, no. 3, pp. 108–127, 2022. https://doi.org/10.14246/irspsd.10.3_108.

[46] T. Ashfina, P. Garg, and P. S. Chani, "The Significance of Traditional Urban Public Spaces in Sustaining Place Identity in the Urban Landscape of Kerala," *Heritage and Society*, vol. 15, no. 1, pp. 75–88, 2022. https://doi.org/10.1080/2159032X.2022.2126268.

[47] M. Pazhuhan (Panahandeh Khah), H. Azadi, D. Lopez-Carr, J. Barbir, I. Shahzadi, and C. Fürst, "Social sustainability of residential squares: Evidence from Narmak neighborhood, Tehran," *Habitat Int.*, vol. 136, Jun. 2023. https://doi.org/10.1016/j.habitatint.2023.102811.

[48] I. Asmal and R. Latief, "The Presence of a Family Communal Space as a Form of Local Wisdom towards Community Cohesion and Resilience in Coastal Settlements," *Sustainability (Switzerland)*, vol. 15, no. 10, May 2023. https://doi.org/10.3390/su15108167.

[49] S. Pragyan DASH and N. Lakshmi THILAGAM, "DEVELOPING A CONCEPTUAL FRAMEWORK OF CREATIVE PLACEMAKING FOR SOCIAL COHESION," vol. 18, no. 1, pp. 5–26, 2023. https://doi.org/10.2307/27197492.

[50] S. P. Dash and N. L. Thilagam, "'CREATIVE PLACEMAKING': A CONCEPTUAL MODEL FOSTERING SOCIAL COHESION IN COMMUNITY SPACES WITHIN RESIDENTIAL ENVIRONMENTS," *Creativity Studies*, vol. 16, no. 2, pp. 541–564, Jun. 2023. https://doi.org/10.3846/cs.2023.16497.

[51] P. Pourbahador and M. Brinkhuijsen, "Municipal strategies for protecting the sense of place through public space management in historic cities: A case study of Amsterdam," *Cities*, vol. 136, May 2023. https://doi.org/10.1016/j.cities.2023.104242.

[52] T. Mukwidigwi, M. Naidu, S. Govender, and G. Membele, "The spatial nexus of monuments, memorability and identity formation in Chatsworth and Durban Central, South Africa," *GeoJournal*, vol. 88, no. 5, pp. 5643–5660, Oct. 2023. https://doi.org/10.1007/s10708-023-10934-2.

[53] G. S. Duden, J. Reiter, C. Bauer, C. Haslinger, M. Mroz, and A. Rohmann, "'Knowing My Way around'–The Role of Urban Spaces for Migrant Identity Content and Sense of Belonging in Germany," *Identity*, 2024. https://doi.org/10.1080/15283488.2024.2330909.

[54] J. T. wai Ho, "Emergent place-identity: place activation through the architectural restoration of a small Hakka household in the Hong Kong countryside," *Built Heritage*, vol. 8, no. 1, Dec. 2024. https://doi.org/10.1186/s43238-024-00117-4.

[55] N. Weerasuriya, "Beyond Place: Youth Belonging and Language in the Third Space," *Journal of Applied Youth Studies*, 2024. https://doi.org/10.1007/s43151-024-00130-5.

[56] H. Ramkissoon, R. Van Der Veen, A. Salaripour, Z. Seif Reihani, and A. Aflaki, "The impact of sensory experiences on place attachment, place loyalty and civic participation: Evidence from Rasht, Iran," *City, Culture and Society*, vol. 38, Sep. 2024. https://doi.org/10.1016/j.ccs.2024.100592.

[57] J. Zhang, Z. Zhang, and Y. Liang, "Exploring the Impact of Accessibility on Place Attachment in Urban Public Open Spaces: A Case Study of Jiamusi City, China," *Buildings*, vol. 14, no. 4, Apr. 2024. https://doi.org/10.3390/buildings14040957.

[58] M. Budruk, K. Andereck, and M. Sampson, "Place Attachment among Dispersed and Event Recreationists on Public Lands," *Soc. Nat. Resour.*, vol. 37, no. 3, pp. 384–401, 2024. https://doi.org/10.1080/08941920.2023.2288195.

[59] X. Chen, M. H. Marzbali, and A. Abdullah, "LANDSCAPE ATTRACTIVENESS AND PLACE IDENTITY: CONSIDERING THE ROLE OF URBAN PARKS," 2024.

[60] M. I. Isa, M. Hedayati Marzbali, and S. N. Saad, "Mediating role of place identity in the relationship between place quality and user satisfaction in waterfronts: a case study of Penang, Malaysia," *Journal of Place Management and Development*, vol. 15, no. 2, pp. 130–148, Apr. 2022. https://doi.org/10.1108/JPMD-08-2020-0083.

[61] A. M. Saymanlier, S. Kurt, and N. Ayiran, "The place attachment experience regarding the disabled people: the typology of coffee shops," *Qual. Quant.*, vol. 52, no. 6, pp. 2577–2596, Nov. 2018. https://doi.org/10.1007/s11135-017-0678-1.