

Understanding Place Dependence in Landscape Settings: *Theory, Methods and Implications for Place Making*

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Abstract

This review synthesizes place dependence (PD) as a functional component of place attachment (PA) and sense of place (SOP) within landscape settings. Using a content-analysis approach, we screened titles/abstracts/keywords for “place dependence” across Scopus, Science Direct, and Google Scholar, including cognate terms (place identity, place attachment, sense of place). Fifty-four (54) studies published between 1983 and 2025 met inclusion criteria spanning urban parks, wetlands, traditional streets, coastal corridors, and city-scale public spaces, with very limited African representation. The review finds that place quality (amenities, accessibility, diversity, safety, good upkeep) and place expectation (activities, goals, needs) consistently determine PD, moderated by evaluation, preference, and unwillingness to move. Methods are predominantly quantitative (~70–72%) using 4–6 Likert-type PD items adapted from Williams & Vaske and related instruments; mixed methods are increasing, while qualitative designs remain under-represented. We propose a conceptual framework linking PD principles relating to place quality/expectation and outcomes (connections, experiences, social interactions) to guide place making and place keeping in landscape planning and governance. Practically, PD can inform programming, amenity mixes, and maintenance standards to improve user satisfaction and stewardship. Gaps include African cases, consistent reporting of PD sub-dimensions, and multi-method triangulation. The review recommends mixed-methods protocols and PD-led evaluation prior to design interventions to link theory, policy and place making practice.

Keywords: Content analysis, landscape planning, place attachment, place dependence, place identity, place making, sense of place

INTRODUCTION

Place dependence (PD) is linked to one's realization or fulfillment through place experiences (Jayakody et al. 2024; Nursyamsiah & Setiawan, 2023; Proshansky et al., 1983) and PD has been investigated across disciplines in the social sciences and most recently more attention in the built environment with recent focus from landscape perspective within landscape settings at various scales. The research problem addressed by this study anchors on the importance and need to consider PD in place making research, policy and practice. The author in this article posits that PD alongside other allied concepts have not been given requisite consideration and attention in the planning and design of public open spaces and other landscape settings within urban and rural areas to improve user experiences and satisfaction. The study postulates that place making and keeping of various landscape settings should consider

PD alongside allied concepts to enhance place quality for satisfaction. It puts forward holistic investigation of PD using the principles, aspects of place quality, place satisfaction and outcomes using mixed methods approach to give nuanced understanding of the landscape settings and user characteristics. This is supported by Ozkan and Yilmaz (2019) who posit that recent prominence and importance of PD, PI, PA studies is due to decline of open spaces due to rapid urbanizations, alienations from the environment.

The gap in literature is in terms of adoption of various sub-dimensions in PD research, methods that are not coherent across various studies to holistically address PD issues in place-people relationships. Various aspects are investigated by various researchers even though pioneer foundation studies by Vaske and William (2003);

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Williams & Roggenbuck (1989) have laid the basic research questions that have been modified in its study. The importance of PD across many landscape studies undertaken has not received adequate attention in terms of integrating the findings into policy and practice to inform better place making. Existing studies on PD show that very few have been done within African contexts. The author in this paper opines that findings from PD studies in this paper can better inform findings in its future investigation, better policy and place making practice.

The main objective of this study is to ventilate on various aspects of PD guided by four research questions: 1) what are the components of PD? 2) what is the relationship between PD and other allied concepts? 3) what are the methods employed to investigate PD? and lastly 4) what is the importance of PD in landscape planning and design? This review recommends a conceptual framework for PD as illustrated at the end of the review (Figure 2). The study attempts to reconcile research theory from PD investigation and how to improve place making through embedding the findings into policy and practice. The findings of the article are important in guiding further studies on PD and allied concepts besides highlighting the importance in landscape based planning and design that considers PD in policy and practice. The next section covers the research methods used in the review of PD concept.

THEORY

Definitions and Positioning

PD is people's reliance on functional amenities in terms of the resources that various places provide to them (Jayakody et al. 2024; Nursyamsiah & Setiawan, 2023). Wu et al., 2023; Ozkan & Yilmaz (2019); Zhang and Lei, 2013; Qian et al. 2011; Raymond et al., 2010; Kyle et al., 2004; Jorgensen and Stedman, 2001; Proshansky et al., 1983). This research focused on PD concept with a bias on landscape settings. Landscape values/ functions according to Biedenweg et al. (2019); Gerber and Hess, (2017); Brown and Raymond (2007); Council of Europe (2006) consist of several space functions that include therapeutic, wilderness, heritage, intrinsic, spiritual, biological, learning, life sustaining, recreation, economic and aesthetic values

“Landscape place dependence” according to the author in this article refers to the ability of a given landscape to satisfy the goals and needs of various people based on its resources, facilities and conditions with the aim of achieving functional reliance.

Determinants of PD

Literature reveal that major determinants of PD are place quality and place expectation. Place expectation is influenced by the social and physical attributes (Alrobaee and Al-Kinani (2019); Ujang, 2017). Ujang (2017) attribute the physical and functional attributes of place to be influential in determining dependency to a place. Based on the activities and social interactions, this impacts the level of attachment within it (Ujang, 2017). This diverges from findings by Ozkan and Yimaz (2019) that demonstrated that social attributes had more influence than physical characteristics on place attachment within a square park. Alrobaee and Al-Kinani (2019) supporting Ujang (2017) specifically point out that place quality and place expectation are the major determinants of PD. Earlier foundation study by William and Vaske (2003) showed that PDs functional attachment is linked to the physical characteristics of a place. This may result into frequent visitation in case a place is close enough. Korpela et al., 2008; Zhang and Lei, 2013 support the aspect of visitation by stating that the frequency of visit is one of the main characteristics that indicate whether a place can be considered as a “favorite place”. Importance of various activities in connection to PD is stated by Kyle et al. (2004) who opine that management efforts in places should aim to maintain a diverse experience. This can be in terms of wilderness within hiking trails and settings developed to increase leisure activities. This acts to increase dependence to place.

Alrobaee and Al-Kinani (2019) attribute place qualities to factors such as available amenities, accessibility, diversity and proximity. Ramikissoon et al. (2011) considered place satisfaction as integral to place quality in terms of perceived quality of a place that meets the people's needs from the physical characteristics, services and the social aspects provide by it. Ozkan and Yilmaz (2019) demonstrated that social attributes of the functional dimension of PD contributed more than the physical attributes in fostering attachments to public spaces with a focus on a square park.

When the user needs are met at high levels then PA within the public square park increased. Other studies that have supported importance of place making with the importance of PD include Liu et al. (2023) on importance of physical conditions in meeting individual dependency needs, Bakar et al. (2016) on importance of attractiveness and legibility through landscape elements, Chen et al. (2022) on good qualities of public space amenities in enhancing social cohesion and lastly Ozkan and Yilmaz (2019) on strength of social attributes in shaping PD within landscape settings.

Anton and Lawrence (2016) found out that PD as part of PA affected the various interpretations and evaluations of changes that were proposed for given places. They opine that proposed changes to place were viewed as negative by people who had stronger PD. The concern of change to various realms has been pointed out by Ujang (2017); Bott (2018); K'oyoo (2023); K'oyoo and Breed, (2024). The findings in these studies point out the importance of maintaining the distinctiveness, uniqueness of various places in order to strengthen place meanings and memories. The author in this paper opines that good place making and keeping should consider the attachments through various meanings and memories that result into attachments and SOP. The author in this article opines that PD as part of PA has a significant contribution to SOP. This is exemplified through several studies covered in K'oyoo (2025) that pointed the importance of the concepts that constitute SOP and their impact in place making and keeping.

Relationships of PD to Allied Concepts

Place dependence has been considered a dimension of SOP along with cognate concepts of PI and PA according to Dameria (2020), Qian and Zhu (2014), and Jorgensen and Stedman (2006). It has been studied alongside other cognate concepts like place identity (PI), place attachment (PA), sense of place (SOP), nature bonding, social bonding, and place belonging-ness in different ways among various authors. Qian et al. (2011) investigated SOP at various scales and found out that at the city level, PD is a dimension independent of both PI and PA and that PI at this level had a strong impact on PA. At the lower level of culture center, the study revealed that PD contributes strongly to both PI and PA (Qian et al., 2011). Praytino et al. (2021) consider PD as a dimension of PA.

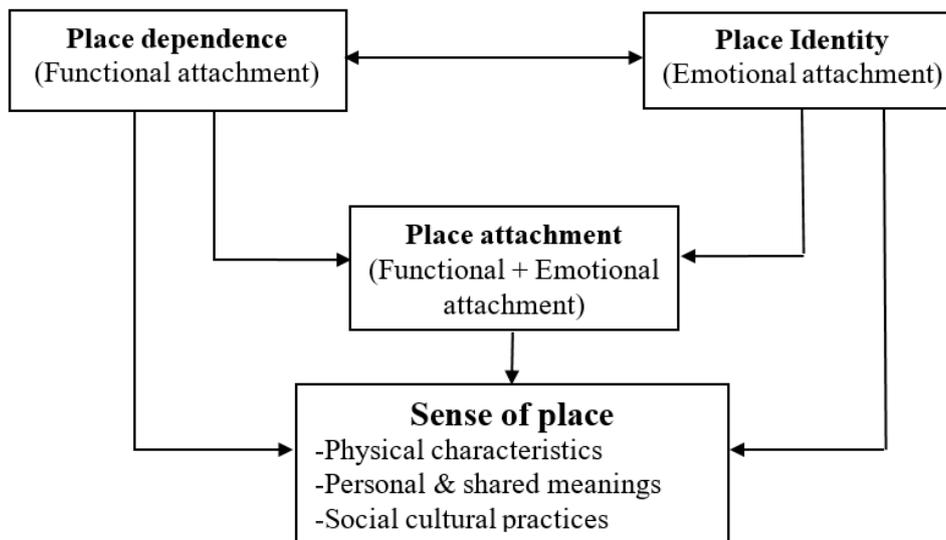
PD is a sub-construct or dimension of PA alongside PI (Huo et al. 2025; Anwar et al. 2024; Jayakody et al. 2024; Nursyamsiah & Setiawan, 2023; Wu et al., 2023; Li et al., 2023; Aguspriyanti, 2022; Su & Hsu, 2019; Anton and Lawrence, 2016; Williams, 2013; Brown and Raymond, 2007; Williams and Vaske, 2003; Kyle et al., 2004; Vaske and Kobrin, 2001). San Su and Chun Hsu (2019) showed that PD directly and significantly affected PI and behavioral intentions amongst visitors to sports events and that it was a variable antecedent to PI. Vaske and Kobrin (2001) showed that PD has a positive effect on PI. Previous study by Hernandez et al. 2007 showed that PI and PD exhibited a recursive relationship. Xie and Wang (2024) showed that both PD and PI positively impacted commitment to the environment. PD and PI are sub dimensions of PA that have been investigated alongside each other in most studies. Based on various studies reviewed in this article, **Figure 1** summarizes the relationship between PD, PI, PA and SOP according to various authors who have converging sub-dimensions (PD and PI) in investigating PA and SOP.

Figure 1 synthesizes PD (functional) and PI (emotional) as sub-dimensions of PA feeding into SOP. Across studies, PD often influences PI via perceived quality/fit and frequency of use, while PI can reinforce PD through meaning-making. This recursive coupling helps explain why amenity upgrades or access changes can shift attachment profiles even without major physical redesigns.

PD Applications and Contexts

Landscape at various scales and settings give an opportunity for PD and other allied concepts to be experienced by the users. Landscape according to the Council of Europe COE (2006) is important for various functions from physical, social, spiritual, ecological and economic at both individual and group levels. The functions/values are a result of the physical and psychological dimensions of the various landscapes (COE, 2006). The UN through SDG goal 11 target 11.7 provides for the need for universal access to safe, inclusive and accessible green and public spaces. All this is within the target for making the world cities and settlements for human beings to be inclusive, safe and sustainable in nature (UN SDG, 2018).

PD has been investigated in various domains: PD within urban wetland park by Su & Hsu (2019),

**FIGURE 1**

Relationship of PD, PI, PA and SOP

Source: Author's analysis (2025).

recreation in natural settings by White et al. (2008); Kyle et al. (2004), public open spaces by Chen et al. (2022), traditional streets by Shamsuddin and Ujang (2008), urban slums (neighborhoods) at city level by Adewale (2020), urban parks by Liu et al. (2020), public open space at city level by Chen et al. (2022), street market by Aguspriyanti (2022), historical districts by Li et al. (2023), historical riverside city by Anwar et al. (2024) and most recently by Bommel et al. (2025) at community level. These studies show the interest among different researchers to investigate PD at various scales within the landscape in a bid to add to the body of knowledge and to give an understanding from different regions and levels of place-people and process relationships in order to inform policy implications in landscape spatial planning and design. PD is important in enhancing socio-cultural, environmental and planning implications within landscape settings at various scales.

RESEARCH METHODS

PD concept in this study was investigated through content analysis. Secondary sources from peer reviewed journal articles in various professions were considered. Sources with cognate concepts of PI, PA and SOP were also included. The sources were from ScienceDirect, Scopus, Google Scholar and Google. The main term for the search was "Place dependence". Other sources that yielded allied concepts of "place identity", "Sense of place",

"place attachment" were also analyzed for their contents on PD. Content analysis of PD within the title, abstract and key words was undertaken for the various sources. All the relevant sources from journals and book chapters in English language from all disciplines and regions were included. The review included a total of 54 studies with recent studies (2015 to 2025) on PA in addition to pioneer foundation studies between 1983 and 2014 that have shaped the PD discourse were included. Consideration and inclusion criteria was based on studies that focused on PD within landscapes at various scales such as parks, streets, wetlands, forests, coastlines among others. The various sources that had PD concept were analyzed thematically for what addressed the research questions in this review.

Coding and Reliability

A standardized coding framework was applied to ensure internal consistency and transparency. Two coders independently analyzed 20 randomly selected studies ($\approx 37\%$ of the corpus) to assess intercoder reliability across key variables: study context/scale, PD instrument and items, method type, determinants, and region. Intercoder agreement achieved a Cohen's $\kappa = 0.72$, indicating substantial reliability. Discrepancies were discussed and reconciled before one coder completed the remaining dataset using the harmonized codebook (Figure 2).

The author acknowledges methodological limitations of this study. First is the possible bias of the sources included based on the stated criteria whether peer reviewed or not that compromises reliability due to lack of validation. Second

limitation is on the relevance of the included sources based on the study situs (landscape settings) based on author analysis. **Table 1** details the criteria for inclusion and exclusion.

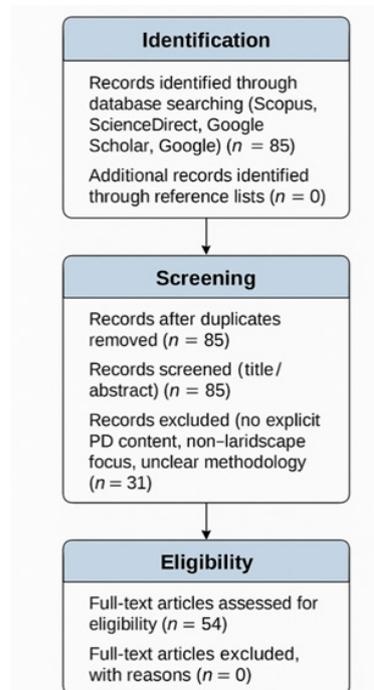


FIGURE 2
 PRISMA Flow Diagram for the Review Process
 Source: Author's analysis, 2025

TABLE1
 Literature review's inclusion and exclusion criteria

Criteria Type	Inclusion Criteria	Exclusion Criteria
Article type	Research articles	Literature reviews
Publication type	Journal articles and conference proceedings that are peer reviewed	Opinion posts, blog posts, theses, dissertations that are not peer reviewed
Data range	Publications between 2010 to 2025, pioneer foundation studies from 1983	Studies earlier than 1983 that just mention, that are not grounded on PD and allied concepts
Thematic relevance	Addressing research aim/questions in terms of components of PD, relationship to allied concepts, importance and methods of investigation	Sources that do not address any of the research domains
Interdisciplinary & settings scope	Contributions from all fields that address PD from a landscape settings perspective	Studies limited to PD within non-landscape settings
Methodological approach	Elaborate methodology description that is sufficient to allow for evaluation of the approach, methods of data collection, analysis	Unclear methodology that has vague, kissing approach, data collection methods, tools and analyses

Source: Author's analysis (2025)

RESULTS

Drawing from the 54 studies that met the inclusion criteria, the results reveal clear trends in methods, scales of investigation, and the operationalisation of place dependence within landscape settings.

Summary of selected studies: Settings, scales and methods of investigations

The 54 studies span parks, wetlands, traditional streets, coastal corridors, and city-scale public spaces, with quantitative designs dominating ($\approx 70\text{--}72\%$), a growing share of mixed methods ($\approx 21\%$), and a small qualitative minority. Most surveys used 4–6 PD items on 5– to 7-point scales,

typically adapted from Williams & Vaske or related instruments. Regional coverage is uneven, with very limited African representation.

Table 2 summarizes selected studies that investigated PD as part of PA within various landscape settings. The various methods of investigation have been summarized that indicate adoption of both qualitative and quantitative methods. The common questions of investigation through surveys have been adopted from pioneer studies by Jorgensen & Stedman (2001); Williams & Vaske (2003); Williams & Roggenbuck (1989) and have been employed by the various authors with minor modifications to suit the various researches.

TABLE 2

PD studies across different scales within the landscape

Author (s)	Context	Method/Approach	PD items/scale
Huo et al. (2025)	-Town level	-Quantitative approach -Survey with 570 questionnaires	-6 items for PD investigation -5-point Likert scale
Anwar et al. (2024)	-Riverside historical city	-Quantitative approach -Survey with 144 respondents	-4 item for PD investigation -5 point Likert scale
Jayakody et al. (2024)	-Region of natural settings, protected area and coastal areas	-Mixed method -Participatory mapping -Interviews 12 participants	-5 item for PD investigation
Li et al. (2023)	-Historical districts	-Quantitative approach -Survey with 620 respondents	-4 items for PD investigation -7 point Likert scale
Wu et al. (2023)	-Wetland park along urban river	-Quantitative approach -Survey with 525 respondents	-4 items for PD investigation -5 point Likert scale
Aguspriyanti (2022)	-Street market	-Qualitative approach -Semi structured interviews -Direct observation	
Chen et al. (2022)	-Public open space at city level	-Quantitative approach -Survey with 501 respondents	-4 items for PD investigation -5 point Likert scale
Liu et al. (2020)	-Parks within 2 cities	-Quantitative approach -Survey- 420 respondents	-5 items for PD investigation -7 point Likert scale
Adewale et al. (2020)	-Urban slums at City level -African context	-Quantitative approach -Survey- 856 respondents	-11 items for PD -5 point Likert scale
Su & Hsu (2019)	-Town level	-Quantitative approach -Convenience sampling -Survey with 1000 respondents	-7-point Likert scale

Author (s)	Context	Method/Approach	PD items/scale
Zhang & Lei (2013)	-Local nearby landscapes	-Both quantitative and qualitative -On site interviews (photo based). -Survey	
White et al. (2008)	-River recreation corridor	-Quantitative approach -Survey with 351 respondents	-4 items for PD investigation -5 point Likert scale
Shamsuddin & Ujang (2008)	-Shopping districts with 3 traditional streets	-Both quantitative and qualitative -On site interviews: 24 street users -systematic observation -Survey (220 respondents)	-5 point Likert scale
Brown & Raymond (2007)	-Coastline	-Quantitative approach -Survey	-5 items for PD investigation -5 point Likert scale
Kyle et al. (2004)	-14 states in eastern USA.	-Quantitative approach -Survey with 1879 respondents -Mailed questionnaires	-4 items for PD investigation -5-point Likert scale

Common questions of PD investigation with modifications among authors (Williams & Vaske (2003), Brown & Raymond (2007).

- Z is the best place for what I like to do
 - No other place can compare to Z
 - I get more satisfaction out of Z than any other place
 - Doing what I do in Z is more important to me than doing it in any other place
 - I would not substitute any other place for doing the things that I do in Z
- “Z” refers to the study setting/location of the study

Source: Author’s analysis (2025)

According to Lewicka (2011) the most popular tools/questions for investigating PD alongside PI was developed by Williams and Vaske (2003) that was used within recreation studies. They have been used, with various modifications, by researchers across disciplines in recent discourses on PI and cognate concepts. Later revisions by authors Kyle et al. (2005) has accommodated additional concept of social bonding alongside PD and PI. The author in this article tactfully adopts the tools by Williams and Vaske (2003) because of the reliability that has been reported of them as summarized within the various studies tabulated in **Table 2**. The 14 studies tabulated below were selected on the basis of their elaborate research methods in investigating PD.

From **Table 2** the review findings show that most studies have investigated PD alongside PI

at various scales. Only one study by Adewale et al. (2020) is within the African context. There is scarcity of PD and allied studies in the African contexts therefore lack of findings that can be used to inform policy and be integrated into practice to improve place making. According to **Figure 3a**, most studies (72%) have however been carried within the quantitative approach through surveys both on-site face to face and online. Mixed methods account for 21% while qualitative investigation account for 7% only. The distribution of methods and study contexts is illustrated in **Figures 3a** and **3b**. **Figure 3a** presents the proportion of methodological approaches adopted in the 54 studies, while summarizes the contexts of investigation—ranging from city or town levels and natural settings to street environments, historical districts, and public

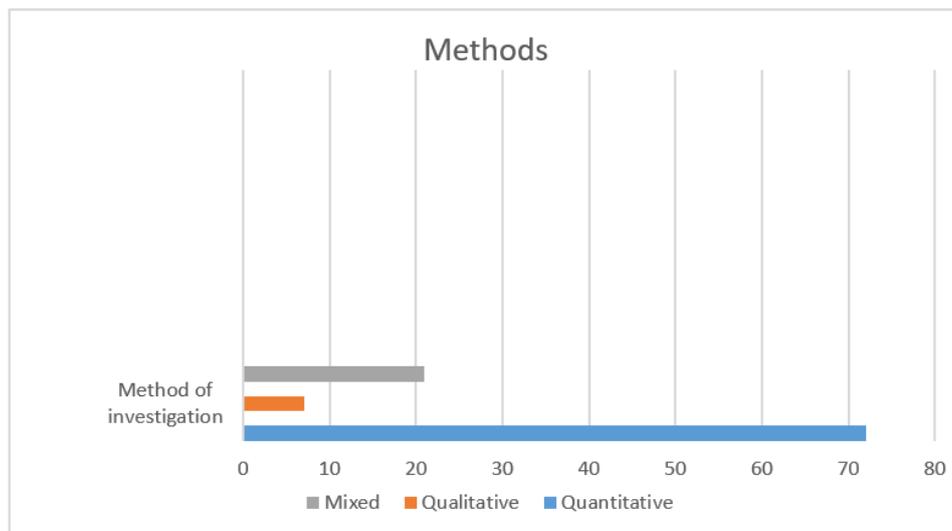


FIGURE 3a
Distribution of methods of PD investigation
Source: Author’s analysis, 2025

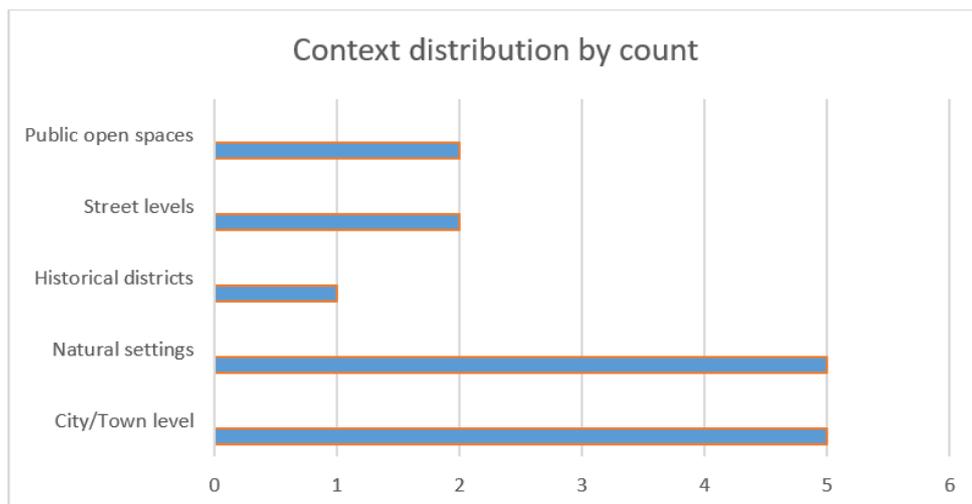


FIGURE 3b
Context distribution by count
Source: Author’s analysis, 2025

open spaces. Together, these figures highlight the methodological concentration in quantitative designs and the spatial diversity of PD research across landscape typologies.

Based on the study contexts, 5 out of the 15 well documented studies were within city/town levels, 5 within landscape natural settings, 1 within historical districts, 2 within street levels and 2 within public open spaces. **Figure 3b** depicts the study contexts by count.

Most of the study constructs and items have been analyzed in a 5 point Likert scale with a few opting for 7 point Likert scale. Jayakody et al. (2024) used the tools by Williams and Vaske (2003) alongside other methods. These authors point out difficulty in translating in spatial terms the available measures of PD and PI that are quantitative and qualitative. These authors used quantitative tools, participatory map based measures and semi-structured interviews. They believe that these combined methods are necessary for place based planning to succeed. The need for mixed method

approach is supported by Wu et al. (2023) in order to attain an understanding that is comprehensive into the nuances that underlay the development of PD in various settings. The author in this article opines that use of quantitative methods alone limits the extensive and elaborate nature that is expected to understand the landscape characteristics, the user characteristics and the experiences that influence PD as a functional component of attachment to landscapes. The author proposes a mixed methods approach to broadly tackle PD research for better findings.

DISCUSSION

Environmental and Behavioral Implications

Environmental implications have been exemplified by Wu et al. (2024) who considered PD and PI within urban wetland and demonstrated that those who showed strong attachments were more likely to be more environmentally responsible. These authors support the adoption of wetland policies based on the landscape experiences of PD and associated PI. Liu et al. (2020) showed that PD positively contributed to perceived restorative-ness within urban parks. According to Wan et al. (2022) PD as part of PA is important in influencing decision making in making decisions regarding pro-environmental behavior. Their study showed that PD indirectly influenced intentions for recycling via PI in the theory of planned behavior. Chen and Liu (2024) considered social and nature bonding besides PD and PI in showing how attachments to place through these factors positively and significantly influenced pro-environmental behavior through relation with nature in various strengths. Other studies that considered PD on environmentally responsible behavior include Chen and Liu (2024); Xie and Wang (2024); Wu et al., 2023; Ramkissoon et al. (2011); White et al. (2008); Vaske and Kobrin (2001).

Socio-cultural and Design Implications

Place making should consider socio-cultural attributes that include memory, identity, analyze the settings where social attributes trump physical attributes in terms of design levers that include amenities, accessibility. Design of the various landscape spaces should consider place quality determinants that include amenities, accessibility, proximity, diversity, aesthetic qualities, safety/security and good place keeping. Landscape

designs should factoring place expectation in terms of activities to include, user lifestyles, goals / objectives of the users that are to be fulfilled through the visitations, meeting user needs and fulfilling the wishes /intentions.

It's important to integrate PD metrics in parks/open space standards in terms of policy to inform place making and keeping practice. Environmental Impact Assessments (EIAs) should include PD, PI assessments during planning phases of urban renewals, reconstructions to improve place making outcomes for better user experiences. All the socio-cultural considerations that influence landscape designs through aspects of place quality and expectations should all aim to foster place connections, unique experiences and improve interactions amongst the on-site users.

Planning and Governance

The importance of planning through PD consideration is demonstrated by Jayakody et al. (2024); Brown et al. (2020); Brown and Raymond (2007) who considered the role of landscape values in creating attachments to places. The landscape values through its physical characteristics according to these authors are critical in revealing the individuals' relationships within the landscapes that inform PD and PI. Liu et al. (2020) explored the relationships between the characteristics of the local landscape, PD and PI. They concluded that local characteristics that were strong and made a place distinctive resulted in stronger PA between the residents and the local place (Liu et al., 2020). Planning implications during place making is investigated by Lee and Blackford (2020) who opine that residents bonds with places through PI and PD are important in place making processes. The design of public spaces is important in increasing PD and PI among residents. It's important to consider PD and PI in place making of public spaces in order to strengthen the ownership of such spaces (Lee & Blackford, 2020). Integrating PD findings in planning and governance through policy and place making practice supports the UN SDG goal 11 target 11.7.

Evidence Gaps and Future PD Research

This review points out the few existing PD studies within the African landscapes. The only study in the African context is by Adewale et al. (2020) within Nigerian urban slums at the city level. This

accounts for a dismal 1.8% of the studies covered in this review. PD theory and implementation in place making and keeping should gain relevance in African contexts where new developments besides urban renewal are taking place in shaping the cities amidst modernization era and global homogenization (K'oyoo, 2023). The reviewed literature attest to the importance of PD in various landscape settings on the need to improve user experiences. The strengths noted in the PD research so far indicate that most studies have adopted with minor modifications the research questions from the pioneer studies that leads to consistency.

Implications for Practice

The author in this review believes that what is most important is how to embed the PD findings into place making practice. There is need to translate how the various determinants can be integrated into planning, design and governance actions within various landscape settings. The practical implications, along with their relevance to place-making and place-keeping, are presented in **Box 1**.

Author's proposed conceptual framework for PD from the review

The author in this article proposes a conceptual framework for PD based on reviewed studies. The framework breaks down PD in terms of its principles that determine ones desired qualities of place and expectations to be fulfilled. The PD outcomes that result from depending on a given place are influenced by the place qualities and place expectations that vary from place to place.

The qualities of a place and the expectations are connected to one another and together act to influence the outcomes achieved in the place as illustrated in **Figure 4**.

The importance of place quality in influencing PD is shown in the study by Chen et al. (2022). Attractive natural elements, variety of amenities, spaces that are sufficient for interactions are important qualities of open spaces that are public. These qualities lead to rich, healthy relationships within the urban landscape settings. Accessible parks that are safe, with adequate spaces for pedestrians in addition to attractive green features are essential components of public open spaces (Chen et al., 2022). This supports earlier findings by Brown et al. (2020); Alrobaee and Al-Kinani (2019); Ujang (2017) and pioneer studies by Stokols and Shumaker (1981) on the role of physical and functional qualities of place on dependency. Stokols and Shumaker (1981) earlier stated that dependency to a place was based on place quality both of the current place and of comparable alternatives. The author in this article opines that this informs the use of place evaluations and preferences by various individuals and later inculcates the dependency and the unwillingness to move or seek other alternatives to fulfill the functional needs. The unique contribution of this study framework is the identification of all aspects that are important for comprehensive investigation of PD from a mixed methods approach that would give a nuanced understanding of the users, perceptions of principles involved in choice of a landscape setting, the various aspects of landscape

Box 1: Implications of PD findings

Place quality:

- Provide attractive landscape elements e.g. paving, fountains, vegetation, structures within landscape spaces to enhance user experiences
- Provide variety of amenities e.g. litter bins, seats, signage to enhance convenience
- Locate public spaces like parks, car-free zones in accessible areas to majority of users for regular visitation.
- Ensure good security within public spaces within the urban landscapes

Place expectation:

- Provide variety of spaces and activities for sufficient interactions to enrich relationships
- Provide landscape spaces that satisfy the needs, objectives of diverse users across different age groups

Landscape governance

- Include residents as members of the public in the management of landscape spaces to foster support.

Source: Author's analysis (2025)

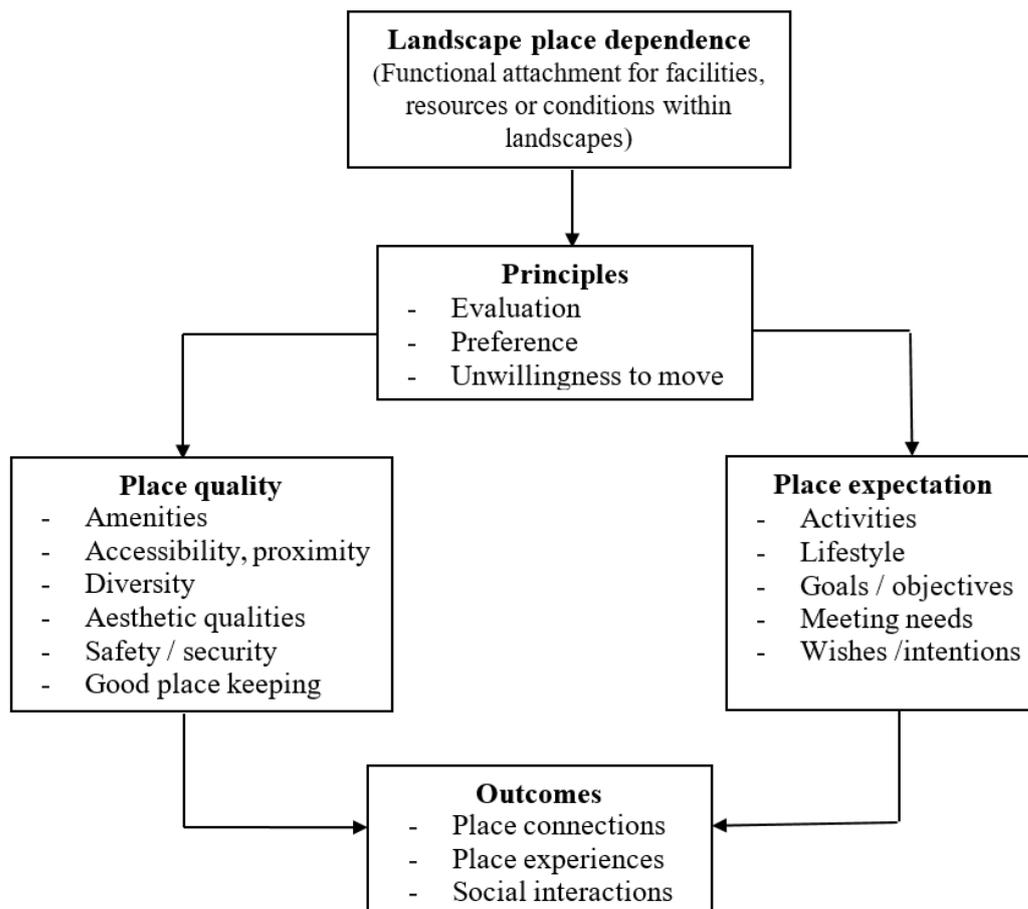


FIGURE 4
 Conceptual framework for landscape PD
 Source: Author’s analysis, 2025

place quality, aspects of satisfaction derived from the landscape and the outcomes of the interaction of the users, and the landscape contexts.

CONCLUSION

There are very few studies conducted on PD within the African context. Various studies adopt various sub-dimensions of PD with various methods of investigation. PD determinants include qualities of place, satisfaction and with the guiding principles being evaluation, preferences and unwillingness to move from one to another. PD outcomes for any place is in terms of place connections, experiences and interactions. PD has been investigated through questions from pioneer foundation studies that have been used with modifications within various landscape settings. Quantitative method with at least 4 questions on a 5 to 7 Likert Scale has been employed by most studies in its investigation.

There is no known PD study that has holistically

investigated it from the principles, aspects of place quality, place expectation and place outcomes as expressed in the proposed conceptual framework (Figure 2) in this review. This review culminates into a conceptual framework for PD (Figure 4) based on the authors understanding and interpretations emanating from the gaps in previous studies. The findings of this review article are important as it ventilates on various aspects of PD that impact socio-cultural, environmental and planning implications. Findings reiterate the importance of embedding PD findings into the governance of the landscape spatial planning and design.

RECOMMENDATIONS

The review recommendations are categorized into research, policy and practice as follows:

Research: Adopt mixed-methods approach in PD investigations. There are few African cases

therefore need for more empirical studies on PD to link theory, policy and place making practice.

Policy: Embed PD metrics in parks/open space standards, Integrate PD, PI assessment in urban renewals Environmental Impact Assessments (EIAs) to improve user satisfaction.

Practice: Program diverse activities/amenities within landscape spaces, improve accessibility/safety and upkeep within landscape settings, use PD led pre-design evaluations to better inform place making practice.

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