City branding's influence on social media engagement: the cool factor

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Abstract

Purpose – Consumers interact with city brands in diverse ways. Through city-related social media engagement, consumers actively shape a city's brand meaning and communication strategies. Drawing on city branding aspects, defined as physical attributes, functional attributes and personality traits, this study aims to examine how perceptions of city brand coolness mediate the relationship between city branding aspects and social media engagement in terms of cognitive, emotional and behavioral engagement.

Design/methodology/approach – Data from an online survey conducted in Saudi Arabia of 537 consumers who actively follow their cities on social media platforms was analyzed using covariance-based structural equation modeling.

Findings – The findings reveal that city branding aspects directly influence social media engagement regarding emotion, cognition and behavior. Specifically, perceived city brand coolness mediates the relationship between city branding aspects, namely, physical attributes, functional attributes and personality traits, and cognitive and behavioral engagement on social media.

Originality/value – This study advances the branding literature by investigating the notion of brand coolness, which revolves around consumers using brands as instruments for self-expression. It explores the intricate mediational role of coolness in the relationship between city attributes and city-related social media engagement. The findings guide how city branding aspects influence residents' engagement on social media in relation to their city. Implications for theory and practice related to co-creating city branding within the place branding industry are discussed, and suggestions for future studies are presented.

Keywords City branding, Perceived city brand coolness, Social media engagement, City attributes

Paper type Research paper

Introduction

Cities house over 57% of the global population, which is more than 4 billion people worldwide (World Bank Group, 2025). More than just geographical locations, cities serve as multifaceted brands, tourist destinations, residential areas and economic centers, thereby shaping social and economic landscapes (Pasquinelli *et al.*, 2022). As branded entities, cities often embody rich cultural heritage, iconic landmarks and diverse entertainment options that attract millions of visitors and generate significant tourism-related revenue (Zhao *et al.*, 2025). In their role as places of residence, cities provide essential services such as education, healthcare and public transportation, which contribute to their brand identity by enhancing the quality of life for inhabitants (World Bank Group, 2025).

Consumers, particularly local communities including residents and citizens, interact with city brands in diverse ways, notably through social media platforms where they explore various attributes of a city (Florek *et al.*, 2021; Xie *et al.*, 2025). City brand engagement is not limited to traditional tourism imagery; residents also access social media to gain deeper insights into their cities and

specific locations. The interactions of residents on social media platforms significantly contribute to the evolving city brand and its narrative (Rojíková *et al.*, 2023). For instance, the urban environment inspires individuals to capture photos of their experiences and social media offers an immediate outlet for sharing these moments (Pasquinelli *et al.*, 2022). Sharing experiences goes beyond uploading pictures on social media (Schivinski, 2021). It encompasses broader social media engagement, which includes cognitive (thought-based), emotional (feeling-based) and behavioral (action-based) types of engagement (Hollebeek, 2011).

The engagement with cities on social media is multifaceted, extending beyond recreational content and travel experiences (Reynolds *et al.*, 2024). From an urban administration perspective, effective city branding necessitates stakeholder engagement through the strategic development and communication of key city branding aspects, including physical attributes (e.g. architecture, historical sites), functional attributes (e.g. government services, transport, infrastructure) and personality traits (e.g. preconceived notions of uniqueness, experiential assurances) (Alahmari *et al.*, 2023; Li *et al.*, 2024a, 2024b).

Existing literature has extensively documented city attributes and their importance in shaping their image and attracting stakeholders (e.g. Li *et al.*, 2024a, 2024b; Ma *et al.*, 2021; Priporas *et al.*, 2020; Zhao *et al.*, 2025). Concurrently, the role of social media in amplifying visibility and fostering stakeholder interaction in city branding is widely acknowledged (Ramadhani and Indradjati, 2023; Xie *et al.*, 2025). Studies have explored how cities use digital platforms for identity communication and to foster connections with residents (Priporas *et al.*, 2020). While the identification of city attributes and the general impact of social media are well-established, a significant gap in the literature remains. There is a limited understanding of the precise psychological mechanisms through which these specific city branding aspects translate into the different dimensions of residents' social media engagement (cognitive, emotional and behavioral). Much of the current research describes what attributes are important (e.g. Li *et al.*, 2024a, 2024b; Fona *et al.*, 2025) or that social media is used (Priporas *et al.*, 2020; Xie *et al.*, 2025), but less so on how these attributes effectively stimulate multifaceted engagement on these platforms from a resident perspective.

The present study addresses the abovementioned research gap by proposing and investigating perceived city brand coolness as a key psychological mediating mechanism. City-related social media content has the potential to portray cities as trendy, modern and "cool" destinations (Loureiro *et al.*, 2020). Coolness is perceived as subjective and dynamic; it is a socially constructed positive trait attributed to cultural objects (Warren *et al.*, 2019) and can significantly shape attitudes and behaviors. It is therefore anticipated that cities perceived as cool by their residents are more likely to stimulate social media engagement.

While the influence of brand coolness on perceptions, attitudes and behaviors toward product brands is relatively well-documented (e.g. Aleem *et al.*, 2022; Loureiro *et al.*, 2020; Warren *et al.*, 2019) its application and nuanced effects within the specific context of city branding and resident social media engagement remain significantly underexplored (Akturan and Kuter, 2024; Kock, 2021). The primary contribution of this study is to fill this identified knowledge gap by examining how

perceptions of city brand coolness mediate the relationship between specific city branding aspects (physical attributes, functional attributes and personality traits) and the cognitive, emotional and behavioral facets of social media engagement of residents with their city.

The current research aims to advance marketing and branding literature by extending the concept of brand coolness to the urban context from a resident perspective. It seeks to provide a more granular understanding of the pathways through which city attributes influence distinct forms of social media engagement. Brand coolness, in this context, is conceptualized to represent a strategic psychological factor that enables cities to enhance resident engagement by fostering a positive and appealing experience grounded in these core attributes. By analyzing the direct and indirect relationships, this study contributes to a more comprehensive understanding of city branding strategies in the digital era, specifically emphasizing the role of cultivating brand coolness. Practically, the findings could be used to guide urban administrators and marketers on how to leverage city attributes to foster coolness perceptions and, consequently, deeper and more varied forms of social media engagement among their residents. Suggestions for future studies will also be presented based on the outcomes.

2. Theoretical background and hypothesis development

2.1 City branding aspects: physical attributes, functional attributes and personality traits

City branding is viewed as a strategy for gaining a competitive edge to boost inbound tourism and investment and for community engagement, enhancing local identity and identification by residents with their city (Jain *et al.*, 2022; Fona *et al.*, 2025). The existing scholarly literature illustrates that city branding constitutes a multifaceted process involving the organization and development of urban areas to address the needs of various city stakeholders, particularly its residents (Piehler *et al.*, 2021; Schade *et al.*, 2018). City branding requires formulating diverse strategies to facilitate a city's growth and advancement (Zelenskaya and Elkanova, 2021). Drawing from this concept, the current study adopts a city branding framework comprising three components, that is physical attributes, functional attributes and personality traits (Li *et al.*, 2024a, 2024b).

The physical attributes of a city play an important role in the process of city branding, encompassing distinctive characteristics such as weather, scenery, historical sites and architectural marvels (Li *et al.*, 2024a, 2024b). Physical elements contribute significantly to forming a city's image and authenticity, creating a positive impression on residents and tourists (Priporas *et al.*, 2020). Historical sites hold global significance, fostering a sense of pride and authenticity within a city (Pasquinelli *et al.*, 2022, 2024). They serve as a tangible embodiment of a city's heritage and contribute to its unique identity (Shen *et al.*, 2019). Aesthetically pleasing architecture is an essential component of a city's physical attributes, shaping its brand identity (Jain *et al.*, 2022). These physical characteristics collectively contribute to the authenticity and uniqueness that define the brand of a city.

Functional attributes of a city encompass a wide range of elements, including a clean environment, business

opportunities, innovative enterprises, retail outlets, cafes, transportation networks, cultural activities and government services (Li *et al.*, 2024a, 2024b). Functional aspects are important in differentiating the brand of a city for its stakeholders (Fona *et al.*, 2025), particularly its residents (Jain *et al.*, 2022). They contribute to social sustainability by enhancing the quality of life in the city (Schade *et al.*, 2018). The overall activities within a city, such as business practices and innovative ventures, shape how people perceive the area and the opportunities it offers (Scarborough and Crabbe, 2021). Cities are not merely geographical entities; they serve as economic hubs crucial to the prosperity of a country (Li *et al.*, 2024a, 2024b). In this respect, city branding must consider the social aspects of the lives of residents, including nightlife, cultural events and indoor recreational activities (Reynolds *et al.*, 2024). Functional attributes drive economic opportunities within the entertainment industry and enhance the overall well-being of residents with tangible benefits (Li *et al.*, 2024a, 2024b; Reynolds *et al.*, 2024).

Finally, the personality traits of a city constitute a crucial dimension in city branding, involving social connections, attitudes toward the city brand and resident intentions to live or retire in the city (Li *et al.*, 2024a, 2024b). The personality of a city aligns with the individual and social values of its residents, fostering positive interactions (Pedeliento and Kavaratzis, 2019). Residents derive satisfaction from living in a city that consistently provides essential goods and services (Pedeliento and Kavaratzis, 2019). Ultimately, resident satisfaction, influenced by the performance of physical attributes, functional attributes and personality traits, results in a firm intention to remain and retire in the same city (Li *et al.*, 2024a, 2024b). Social values deriving from informal interactions, such as connecting with neighbors and merchants, are integral to daily urban life (Reynolds *et al.*, 2024). Residents form attachments to their cities as they build social bonds with fellow inhabitants (Pedeliento and Kavaratzis, 2019). These social connections and a sense of belonging further solidify the relationship between residents and their cities.

2.2 City-related social media engagement

Social media communication in city branding is a key determinant in establishing trust and credibility with the target audience (Pasquinelli *et al.*, 2022; Rojíková *et al.*, 2023). This form of communication facilitates faster information sharing and dissemination among city stakeholders (Li *et al.*, 2024a, 2024b). Social media enables two-way communication, allowing the government of the city to gather feedback and engage with residents experiencing the city and enabling residents to participate in the branding plans of the city government (Criado and Villodre, 2020; Piehler *et al.*, 2021). The engagement of residents with the content of the city on social media has great potential for brand building (Alahmari *et al.*, 2023; Krowinska and Dineva, 2025).

Effective use of social media can transform the perception of the brand of a city by fostering engagement and collaboration with its target audience, ultimately leading to a stronger brand (Schivinski *et al.*, 2019). Given that social media has seamlessly integrated into the daily lives of residents, it allows them to share personal experiences, viewpoints, preferences and leisure activities in a city (Stoica *et al.*, 2021; Pezzuti, 2025). Through

city-related social media engagement (hereafter CRSME), individuals actively shape the brand meaning and communication strategies of a city, moving beyond being passive information recipients (Priporas *et al.*, 2020). In the marketing literature, social media engagement encompasses three dimensions: cognitive, emotional and behavioral engagement (Hollebeek *et al.*, 2014), offering a strategic approach to city promotion by influencing the attitudes, perceptions and behaviors of consumers toward the brand (Schivinski, 2021; Krowinska and Dineva, 2025).

Cognitive engagement involves mental activities centered on attention and absorption (Dessart *et al.*, 2016; Hollebeek *et al.*, 2014). In the context of city-related social media engagement, consumers evaluate the branding components of the city, such as personality traits, functional attributes and physical attributes (Li, 2017). To achieve this, CRSME strategies should be captivating, memorable and thought-provoking, encouraging residents to actively process and assess the presented information (Li *et al.*, 2024a, 2024b; Xie *et al.*, 2025). Cognitive engagement on social media is evident when residents pay close attention to posts, comments and replies from various stakeholders about the city (Schivinski, 2021).

Emotional engagement elicits affective responses and attachment to a brand in consumer relationships (Dessart *et al.*, 2016; Hollebeek *et al.*, 2014). This connection can evoke a range of emotions, including love, excitement, curiosity, sadness or anger (Harrigan *et al.*, 2017; Obilo *et al.*, 2020), often expressing aspects of the brand of the city. To maintain a competitive edge, cities must preserve their brand identity while incorporating new elements that captivate residents (Stoica *et al.*, 2021). This can be achieved through emotionally appealing content, such as captivating facts, emotional appeals, emoticons, mentions of holidays and humor (Alahmari *et al.*, 2023). Such content is designed to evoke positive and warm emotions, as well as advocacy and behaviors (Shimul *et al.*, 2025). Furthermore, emotional appeals on social media can stimulate social interaction among residents by prompting questions and discussions about the city (Priporas *et al.*, 2020; Pezzuti, 2025), fostering a more profound sense of community (Xie *et al.*, 2025) and encouraging participation through social media (Priporas *et al.*, 2020). In other words, residents using social media often express their enthusiasm, excitement, dissatisfaction or even disappointment regarding their cities, contributing to emotional engagement (Stoica *et al.*, 2021).

Behavioral engagement on social media refers to the voluntary involvement of residents in city-related activities, including the effort, time and energy they invest (Schivinski, 2021). This type of engagement encompasses various actions, including sharing information through word-of-mouth, writing blog posts, providing reviews and offering feedback on cities (Schivinski *et al.*, 2019; Krowinska and Dineva, 2025). Such spontaneous actions are driven by the need of residents to express their views and display their self-identity, thereby contributing to the brand-building efforts of the city (Priporas *et al.*, 2020). City-focused social media platforms gain credibility and popularity among residents (Pedeliento and Kavaratzis, 2019), inspiring others to partake in activities such as liking, commenting, sharing, tweeting, retweeting and creating user-generated content (UGC) like posts, photos and

videos (Schivinski et al., 2019). These actions are important mechanisms of brand co-creation.

2.3 The mediating role of perceived city brand coolness

Positioned as the key psychological mechanism, this study proposes that the influence of city branding aspects on social media engagement occurs through the perception of city brand coolness. A visual representation of the proposed conceptual model and its relationships is presented in Figure 1. Perceived brand coolness represents the extent to which a brand is perceived as attractive, desirable and appealing to its target audience (Warren et al., 2019). Individuals often aspire to associate with cool brands, as they can represent a desirable lifestyle or image that resonates personally (Aleem et al., 2022; Loureiro et al., 2020). Brand coolness is conceptualized around four sub-dimensions: usefulness, high status, popularity and subculture (Loureiro et al., 2020; Warren et al., 2019). In the current study, a single construct of brand coolness was adopted using formative factors following Loureiro, Jiménez-Barreto and Romero (2020). This approach is commonly employed in branding research when the higher-order construct (in this case, brand coolness) is of primary interest and the effects on individual dimensions are less significant (Schivinski et al., 2020).

The usefulness of a city refers to the support it provides through various projects and services that enhance the comfort and convenience of residents (Alahmari et al., 2023). The government, acting as the brand manager, offers services crucial to the well-being of residents, closely tied to the functional attributes of the city. Residents are drawn to cities that experience a constant influx of tourism activities driven by rapid globalization, making them confident in the lively and robust nature of the city (Pasquinelli et al., 2022). Residents also appreciate the uniqueness of an urban center (Nikhashemi and Delgado-Ballester, 2022), especially when it contributes to their individual and social identities, as reflected in the personality traits of the city (Li, 2017). The literature also supports that residents often evaluate the usefulness of a city based on its competitiveness in physical attributes compared to other cities (Nikhashemi and Delgado-Ballester, 2022).

High status in a city is derived from its historical sites, which gain recognition from society. The influence of globalization has led to the creation of high-status designs and modern architecture in cities, contributing to their physical attributes (Florek et al., 2021). Cities are often perceived as chic, glamorous and sophisticated, generating desirability driven by their personality traits (Alahmari et al., 2023; Li, 2017). The dynamic nature of cool city brands encourages competition among residents to become fashionable and attractive, fostering social bonding (Aleem et al., 2022). A luxurious lifestyle may be a magnet for residents, especially in cities with a high social hierarchy (Reitsamer and Brunner-Sperdin, 2021).

Popularity draws residents in through emblematic facets of urban life. People are drawn to authenticity and markets can enhance the popularity of a city by emphasizing buildings with cultural significance (Pasquinelli et al., 2022). Cities can also promote themselves through cultural events, shopping sprees, live concerts and the voting habits of residents (Alahmari et al., 2023).

Figure 1 The mediating role of city brand coolness on the relationship between city branding aspects and city-related social media engagement
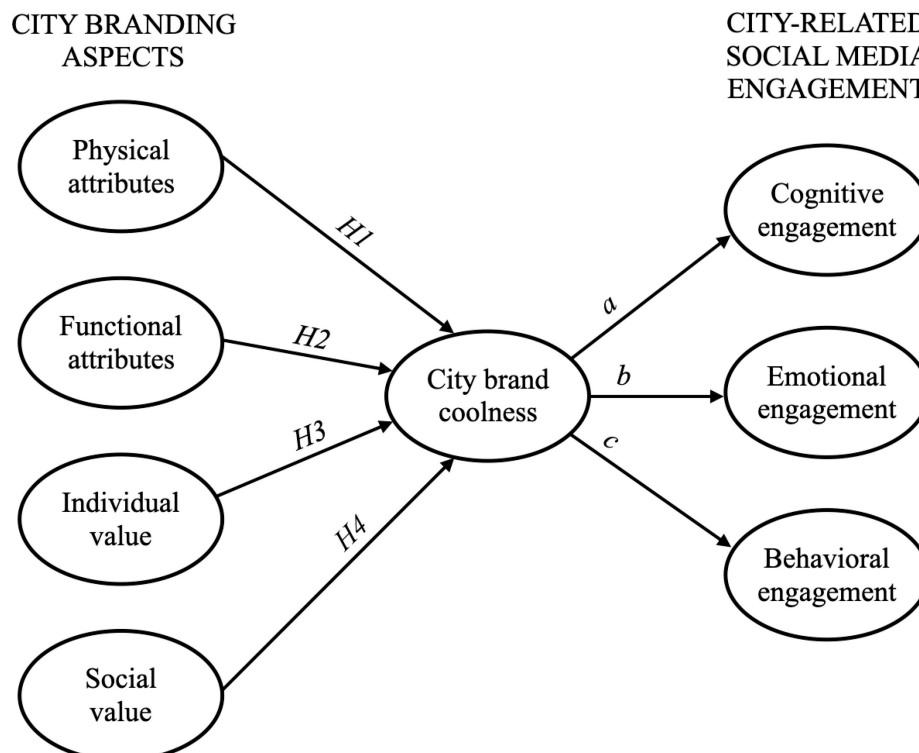
Source: Authors' own work

For example, cities like Rio de Janeiro, Venice and Las Vegas are globally recognized for carnivals and live concert celebrations (Li, 2017).

A subculture within a city sets the residents of that city apart through distinctive elements like music and cycling subcultures. These subcultures maintain the foundational principles of these cities (Florek *et al.*, 2021). For instance, certain cities are associated with music subcultures, such as heavy metal and punk rock, which are deeply rooted in historical heritage (Reynolds *et al.*, 2024). Surfing is another subculture linked to city branding in some areas (Reis *et al.*, 2022). For example, an active surfing subculture that promotes health and environmental awareness is gaining traction in some cities in the USA and Australia. This tradition has been commercially marketed to attract young residents and tourists (Reis *et al.*, 2022).

The physical environment of a city serves as a primary source of tangible brand cues (Li, 2017). The literature supports that authenticity and uniqueness are highly valued and brands that embody such characteristics are often perceived as cool (Warren *et al.*, 2019). This study anticipates that when residents observe physical attributes that they interpret as authentic, aesthetically distinct, or culturally significant, they can form a holistic and favorable judgment about the character of a city. It further argues that subjective judgment of a city's physical attributes manifests as a perception of brand coolness, effectively translating objective physical reality into a powerful, socially constructed perception of the city brand. In turn, associating with a cool brand can enhance self-concept and social standing. When residents perceive their city as cool, they are intrinsically motivated to engage with it online. This motivation drives them to pay closer attention to city-related content (cognitive engagement), feels and expresses pride and belonging (emotional engagement) and actively creates and share content as a public performance of their valued identity (behavioral engagement). In summary, this study conceptualizes perceived coolness as the essential pathway that translates the meaning of physical attributes into the motivation for social media engagement. It is anticipated:

H1. City brand coolness positively mediates the relationship between physical attributes and city-related social media engagement in terms of *(H1a)* cognitive engagement, *(H1b)* emotional engagement and *(H1c)* behavioral engagement.

While a city's functional attributes are crucial for resident quality of life, their influence on CRSME is likely indirect, transmitted through the psychological mechanism of perceived city brand coolness. Functional attributes, such as efficient public services and opportunities for business and leisure, serve as practical cues that provide the foundation for subjective evaluations (Alahmari *et al.*, 2023). It is anticipated that residents will interpret these effective functions as signals of competence and progressiveness (Fona *et al.*, 2025), thus forming a perception of the city as cool (Kock, 2021). The resulting perception of coolness would then act as the primary psychological driver for engagement. As coolness is a desirable social construct, residents are motivated to publicly align with a cool city brand on social media to express and enhance their

own identity (Aleem *et al.*, 2022). Following this logic, functional attributes would provide the stimulus, translating into a perception of coolness that in turn would generate city-related cognitive, emotional and behavioral engagement on social media. It is hypothesized:

H2. City brand coolness positively mediates the relationship between functional attributes and city-related social media engagement in terms of *(H2a)* cognitive engagement, *(H2b)* emotional engagement and *(H2c)* behavioral engagement.

Unlike more tangible city attributes, personality traits operate on a subjective level. This study posits that their effect on CRSME is also mediated by the personal perception of coolness experienced by the resident. This pathway is conceptualized as a chain of effects beginning with a strong person-city alignment, leading to a profound perception of coolness and culminating in acts of personal expression on social media. The personality of a city is the set of human-like characteristics residents associate with it, such as being sophisticated, exciting, or authentic (Kladou and Kehagias, 2014). Based on this, it is anticipated that a match between this perceived personality and the self-concept and values of a resident will create a feeling of psychological resonance (Pedeliento and Kavaratzis, 2019). This sense of fit, i.e. the feeling that a city truly reflects who they are, should drive a profound personal connection of belonging and self-verification, which residents are likely to interpret as a genuine and compelling form of coolness. In turn, this specific type of coolness, one established in personal alignment, is expected to trigger motivation for social media engagement. Residents are motivated to use social media platforms not just to showcase the city, but to tell a story about themselves within that city. This ongoing narrative should trigger cognitive attention to city content that affirms their story, deep emotional pride from this sense of belonging and continuous behavioral acts of sharing that broadcast their unique identity. It is hypothesized:

H3. City brand coolness positively mediates the relationship between individual value and city-related social media engagement in terms of *(H3a)* cognitive engagement, *(H3b)* emotional engagement and *(H3c)* behavioral engagement.

Finally, this study proposes that a demonstrated commitment of cities to social values influences CRSME through the mediating psychological pathway of perceived city brand coolness. This argument is based on the idea that the investment of a city in community must be subjectively interpreted as cool before it can effectively motivate residents to engage and interact online. A city can actively nurture its social values through various initiatives, such as promoting cultural festivals, concerts and community events that provide platforms for residents to connect, share experiences and form social bonds (Priporas *et al.*, 2020; Schivinski *et al.*, 2019). It is anticipated that when a city fosters a strong sense of community and connectedness in this way (Fernandes and Fernandes, 2018), residents interpret this not merely as good governance, but as evidence of a vibrant, inclusive and socially rich

environment. This perception of a thriving collective life, where shared interests and values are celebrated, is expected to manifest as a distinct and powerful form of urban coolness i.e. one based on belonging and shared experience rather than exclusivity. In turn, this specific communitarian coolness is conceptualized to motivate social media engagement uniquely. When coolness stems from shared values and a sense of community, the motivation for CRSME becomes less about individual status and more about collective participation. The perception of a cool, connected city is expected to facilitate and encourage the open exchange of information, ideas and opinions among residents online (Aleem *et al.*, 2022; Schivinski, 2021). Engagement becomes an act of social bonding (Schivinski *et al.*, 2019; Shimul *et al.*, 2025); residents are motivated to share content from community events, discuss local initiatives and interact with fellow residents to reinforce their place within this desirable social setting. This process affirms their connection to both the place and the people within it. It is hypothesized:

H4. City brand coolness positively mediates the relationship between social value and city-related social media engagement in terms of *(H4a)* cognitive engagement, *(H4b)* emotional engagement and *(H4c)* behavioral engagement.

3. Methodology

3.1 Choice of country

The selection of Saudi Arabia as the focal country for this study is grounded in the transformative impact of the Saudi Vision 2030 initiative. Over the past few years, Saudi cities have witnessed unprecedented economic growth rates, spurred by the Vision 2030 agenda (Sarwar *et al.*, 2021). This economic surge has yielded a multitude of positive changes, particularly in terms of enhancing the overall quality of life for residents (Mohiuddin *et al.*, 2023). Simultaneously, this rapid development has been intertwined with technological advancements that have influenced the branding strategies of Saudi cities (Mohiuddin *et al.*, 2023).

Notably, conventional media channels owned by the Saudi government have faced limitations in effectively engaging stakeholders in the branding of Saudi cities amidst the era of digitalization (Aziz *et al.*, 2024). Consequently, social media platforms have emerged as vital tools for information sharing and dissemination among Saudi residents. Social media serve as dynamic conduits for presenting the distinct values, historical significance, natural beauty and cultural legacy of Saudi cities, all through the unique perspectives of the residents themselves (Sarwar *et al.*, 2021).

Recognizing the important role of social media in reshaping public discourse and global perceptions, the Saudi Arabian government has made substantial investments in enhancing its social media presence (Mabkhot *et al.*, 2022). This endeavor forms part of a broader strategic initiative aimed at promoting the economic and social advancements of the country, attracting foreign investments and improving its international image (Aziz *et al.*, 2024). By establishing a robust social media presence, the Saudi government aspires to effectively communicate and engage with a diverse audience, both

domestically and on the global stage (Aziz *et al.*, 2024). While the context of Saudi Arabia presents a unique setting of state-led, rapid development, the underlying social and psychological phenomena under investigation are globally relevant. Cities worldwide are increasingly competing as brands and dealing with the transition from traditional to digital communication. The process by which residents perceive their environment, form subjective judgments like coolness and use social media for identity expression is a fundamental aspect of modern urban life, not exclusive to one nation. Saudi Arabia serves as a critical case, where social media brand-related communication is occurring at an accelerated and highly visible rate due to the focused efforts of Vision 2030.

3.2 Sampling procedures

Prior to the main study, a pilot study was conducted to assess the face validity of the questionnaire items. The pilot study involved a diverse group of Saudi residents who actively follow their cities on social media platforms such as Facebook, Instagram and X. In line with the literature on social media research, feedback from these respondents was carefully collected, analyzed and subsequently integrated into the final survey instrument (Schivinski *et al.*, 2016). In addition, three experienced marketing scholars reviewed the survey to ensure its face validity.

The survey was administered in English. It is worth noting that in Saudi Arabia, English holds a distinctive and integral position in the local linguistic landscape. This usage of English in Saudi Arabia parallels its role in other countries classified under Kachru's Expanding Circle (Alzahrani, 2023). English is extensively used in business and governmental activities and is taught as a compulsory second language in schools from the primary level (Alzahrani, 2023). Consequently, conducting surveys in English facilitates reaching a broader audience, including residents who may not be fluent in Arabic.

The recruitment process for survey participants was conducted through a variety of social media channels and specialized forums in Saudi Arabia. Prospective participants were directed to an online survey hosted on the Qualtrics platform by following a link. This recruitment phase spanned four weeks. Following the guidelines from the literature on conducting studies with social media users (Schivinski *et al.*, 2022), participants who accessed the survey were introduced to the research topic, briefed on research ethics, informed about confidentiality measures and assured of data protection protocols. Screening questions were strategically employed to ensure the quality and relevance of responses. Respondents were initially asked if they had actively used social media within the past six months (Schivinski *et al.*, 2022). Only those who responded affirmatively were permitted to proceed with the task. Subsequently, participants were queried about their active engagement with and following of their respective cities on social media platforms. Specifically, they were asked to specify which platform they used for this engagement. Only individuals who met these criteria were eligible to participate in the study. Ultimately, the final sample for the study comprised 592 participants who met the specified criteria and completed the survey. The study received ethics clearance from the RMIT University in Australia (ID: 24941).

3.3 Measures

The survey captured socio-demographic information about the participants, including gender, age, education and employment status. Following best practices from the literature, the instrument also collected data on their social media habits, such as their average daily time spent on social media, preferred social media platforms and their use of smart devices for accessing social media (Schivinski *et al.*, 2020). The survey asked participants how frequently they received information about their city through social media each day.

The assessment of the physical and functional attributes of cities used separate scales. A 4-item scale was employed to measure the physical aspects, adapted from Merrilees *et al.* (2009), whereas a 5-item scale was used for the functional aspects, based on Shen *et al.* (2019). To evaluate the personality traits of cities, individual (3-item) and social values (4-item) scales were adapted from Hennigs *et al.* (2012). Participants rated the abovementioned items on a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Perceived city brand coolness, following previous research, was assessed using subscales adapted from Loureiro *et al.* (2020). The current study followed previous research, operationalizing brand coolness as a second-order construct in this study (Bagozzi and Batra, 2025; Loureiro and Rodrigues, 2022). The second-order factor of city brand coolness loaded four subscales, that is, usefulness (4 items), high status (4 items), popularity (3 items) and subcultural (4 items). Participants expressed their level of agreement with these items using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Regarding city-related social media engagement, cognitive engagement was assessed using a 5-item scale adapted from Dessart *et al.* (2016), whereas emotional engagement was measured using a 4-item scale adapted from Harrigan *et al.* (2017). Finally, city-related social media behavioral engagement was evaluated with an 11-item scale based on Schivinski *et al.* (2016), which considered engagement levels such as consumption, contribution and creation of city-related social media content. Participants expressed their level of agreement with these items using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The indicators and descriptive statistics for each item can be found in Appendix Table AI.

3.4 Data management and analytic strategy

To prepare the data for statistical analysis, the current study followed three essential steps:

1. checking the data structure,
2. assessing univariate and multivariate normality and
3. identifying univariate and multivariate outliers.

The descriptive analyses were conducted using R system for statistical computing, Version 4.5.0, using psych (Procedures for Psychological, Psychometric and Personality Research Version 2.5.3) (Revelle, 2015). M*plus* Version 8.3 was used to compute the structural models (Muthén and Muthén, 2012).

Cases with missing values were excluded from the final analysis and no data imputation or manipulation of missing values was performed. An additional 55 responses (9.2%) were removed from the analysis. These exclusions were made for two reasons: either the respondents failed to nominate a valid social media channel or they declared not engaging with cities on social media.

To address univariate normality, the skewness and kurtosis were calculated for all the latent variable items (Kline, 2011). The analysis revealed that none of the items had absolute kurtosis values greater than eight or skewness greater than 3, indicating no issues with univariate normality (see Appendix Table A1). Multivariate normality was assessed using Mardia's multivariate skewness test (Mardia, 1970). The result was statistically significant ($p < 0.001$), indicating a violation of the multivariate normality assumption. To handle the non-normal nature of the data, a robust estimation method was employed for the main structural model. The confirmatory factor model (CFA) model was computed using the maximum likelihood robust (MLM) estimator, which provides standard errors and a scaled chi-square statistic that are robust to non-normality (Muthén and Muthén, 2012). For the mediation analysis, a non-parametric, bias-corrected bootstrapping procedure with 5,000 resamples was used, as this approach does not rely on the assumption of normality for testing the significance of indirect effects (Muthén and Muthén, 2012).

Finally, to identify univariate outliers, the recommended procedures from the literature were followed, involving the creation of standardized composite sum scores for all latent variables in the study (Schivinski *et al.*, 2022). A case was considered a univariate outlier if its score deviated by 3.29 standard deviations from a latent variable's z-score (Field, 2017). No cases met this criterion and no data were deleted. Furthermore, it employed Mahalanobis distances and the critical value based on the Chi-square distribution for each data point to examine multivariate outliers (Field, 2017). This analysis revealed no multivariate outliers; consequently, no data points were excluded. The final sample size included 537 participants.

The structural model was specified to examine the relationships among city branding aspects, personality traits, city brand coolness and CRSME. A CFA (measurement model) included all the latent constructs, that is, physical attributes, functional attributes, individual value, social value, cognitive engagement, emotional engagement and behavioral engagement, as well as usefulness, high status, popularity and subcultural subdimensions of brand coolness. For the structural model, brand coolness was specified as a second-order latent variable based on usefulness, high status, popularity and subcultural subdimensions (Bagozzi and Batra, 2025; Loureiro *et al.*, 2020). Age and gender were included as control variables and specified as covariates in the measurement and structural models.

For the mediation analysis, the structural model specified directional and indirect relationships among the constructs. Four exogenous constructs, that is, physical attributes (a_{path1}), functional attributes (a_{path2}), individual value (a_{path3}) and social value (a_{path4}) were regressed on city brand coolness. In turn, city brand coolness regressed on social media engagement: cognitive engagement (b_{path1}), emotional engagement (b_{path2}) and behavioral engagement (b_{path3}). A direct path (c') from the exogenous variables was regressed on the social media engagement dimensions accounting for mediator included in the model. The indirect and total effect

Table 1 Construct reliability and discriminant validity: confirmatory factor analysis

Construct	α	ω	CR	AVE	1	2	3	4	5	6	7	8	9	10	11
Physical attributes (1)	0.83	0.86	0.82	0.54	*0.73*										
Functional attributes (2)	0.73	0.76	0.86	0.56	0.18***	*0.75*									
Individual value (3)	0.76	0.76	0.76	0.51	0.22**	0.70***	*0.71*								
Social value (4)	0.72	0.75	0.81	0.52	0.34***	0.44***	0.44***	*0.72*							
Useful (5)	0.81	0.82	0.82	0.53	0.24***	0.69***	0.71***	0.49***	*0.73*						
High status (6)	0.79	0.81	0.81	0.53	0.30***	0.65***	0.59***	0.56***	0.65***	*0.73*					
Popular (7)	0.78	0.79	0.79	0.55	0.35***	0.43***	0.45***	0.32***	0.52***	0.71***	*0.74*				
Subcultural (8)	0.77	0.79	0.82	0.53	0.28***	0.46***	0.38***	0.58***	0.59***	0.67***	0.47***	*0.73*			
Cognitive engagement (9)	0.80	0.86	0.88	0.60	0.28***	0.47***	0.41***	0.66***	0.53***	0.63***	0.42***	0.63***	*0.77*		
Emotional engagement (10)	0.79	0.82	0.81	0.51	0.32***	0.01	0.11**	0.17***	0.06	0.04	0.08	0.04	0.11	*0.71*	
Behavioral engagement (11)	0.94	0.94	0.94	0.59	0.29***	0.21***	0.17***	0.34***	0.26***	0.38***	0.27***	0.32***	0.38***	0.42***	*0.77*
Age	–	–	–	–	−0.02	0.01	0.03	−0.01	−0.01	0.03	0.03	−0.03	−0.03	0.04	0.05
Gender	–	–	–	–	0.02	0.15**	0.34***	0.01	0.21***	0.12**	0.11**	0.07*	0.02	−0.01	−0.10**

Note(s): α = Cronbach's alpha, ω = McDonald's omega, CR = composite reliability, AVE = average variance extracted. The square root of the AVE values is marked in italic. Significance notation:
*** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$
Source(s): Authors' own work

(*c*) were specified accordingly. Control variables, including age and gender, were regressed on the outcome variables. Finally, the goodness-of-fit (GOF) for both models was assessed using standard indices with their conventional cutoffs, that is, the Comparative Fit Index (CFI; ≥ 0.90), Tucker–Lewis Index (TLI; ≥ 0.90), root mean square error of approximation (RMSEA; ≤ 0.08) and the standardized root mean square residual (SRMR; ≤ 0.08) (Hu and Bentler, 1999; Kline, 2011).

4. Results

4.1 Descriptive statistics

In terms of the gender of the participants, 55.3% were females ($n = 297$). Regarding age distribution, 13.8% ($n = 74$) fell in the 18–24 years range, 50.6% ($n = 272$) were between 25 and 34 years, 25.2% ($n = 135$) were aged 35–44, 9.1% ($n = 49$) were in the 45–54 years bracket and the remaining 1.3% ($n = 7$) were over 55 years old. Regarding the levels of education, 36% ($n = 193$) of respondents had completed at least some college education, 61.6% ($n = 331$) had received higher education, 1.3% ($n = 7$) had post-secondary school education and 0.9% ($n = 5$) had secondary school education. The rest reported having obtained a primary school certificate. Regarding employment status, 70.8% ($n = 380$) were employed full-time, 4.6% ($n = 25$) were employed part-time, 6.1% ($n = 33$) were employed on a contract/temporary basis, 3.2% ($n = 17$) were unemployed. The remainder reported that they were still studying.

4.2 Construct validity and dimensionality

Before validating the structural model, the data underwent an examination for systematic response patterns via the common method bias approach (CMB). CMB was assessed by a confirmatory structural model employing the common latent factor method, as outlined by Podsakoff *et al.* (2003). The findings from this analysis indicated that there were no significant issues with CMB in the data set.

The validation process for the measurement model encompassed a thorough evaluation, considering various factors, including construct internal reliability, convergent validity and discriminant validity. Appendix Table AI provides a comprehensive list of measurement items for each construct, along with their corresponding descriptive statistics. Both Cronbach's alpha (α), McDonald's omega (ω) and composite reliability (CR) were computed for each construct to assess reliability (Table 1). The calculated alpha values ranged from 0.72 to 0.94; the omega values ranged from 0.75 to 0.94; whereas the CR values fell within the same range (0.76–0.93). The alpha, omega and CR values exceeded the recommended threshold of 0.70, affirming the internal consistency of all the scales used in this study (Kline, 2011).

Convergent and discriminant validity were subsequently assessed using CFA. Regarding the GOF for the model, the results indicated that the multi-factor model demonstrated a good fit to the data: $\text{MLM}\chi^2_{(1031)} = 1887.19$, CFI = 0.92, TLI = 0.91, RMSEA = 0.03 (90% confidence interval CI [0.03,0.04] and SRMR = 0.04. The discriminant validity of the first-order constructs was evaluated using the following criteria. First, we examined the standardized factor loading (lambda) of each indicator on its associated latent variable. There was no

evidence of significant cross-loadings and all standardized factor loadings were equal to or higher than the benchmark of 0.70 ($p < 0.001$) (Kline, 2011). Convergent validity was ascertained by computing the average variance extracted (AVE) for each construct (Fornell and Larcker, 1981). In all cases, the constructs exhibited an AVE value exceeding the suggested threshold of 0.50, signifying the robust reliability and validity of the measurement model. Finally, the square roots of the AVE scores for each latent variable were higher than their correlations with other variables (Fornell and Larcker, 1981). All results consistently indicated that the constructs were distinct.

4.3 Structural equation model

The structural equation model, considering all eight latent and two control variables, was used to test the study hypotheses (Table 2). The computations indicated that the multi-factor structural model demonstrated a good fit to the data: $\text{ML}\chi^2_{(1061)} = 2070.62$, CFI = 0.91, TLI = 0.90, RMSEA = 0.04 (90% CI [0.03,0.04]) and SRMR = 0.05. The computations for the indirect effects are reported using the lower and upper 95% bias-corrected (BC) bootstrap confidence interval (CI). Results not crossing zero are considered statistically significant. Direct and total effects are reported using *p*-values, with significant results denoted by thresholds (e.g. $p < 0.05$).

Regarding the effect of physical attributes on the dimensions of social media engagement via city brand coolness (H1a, H1b and H1c), the results revealed varied effects. For cognitive engagement, a significant indirect-only effect was found (H1a), with an $ind.\beta = 0.05$; 95% BC bootstrap CI [0.01, 0.14]. The direct effect ($p = 0.62$) and the total effect ($p = 0.67$) were statistically non-significant. For behavioral engagement, the analysis indicated partial mediation. The direct effect of physical attributes on behavioral engagement was significant ($\beta = 0.15$, $p < 0.05$) and the total effect was also significant ($\beta = 0.20$, $p < 0.001$). More specifically, the indirect effect through city brand coolness (H1c) was also statistically significant ($ind.\beta = 0.04$; 95% BC bootstrap CI [0.01, 0.13]). In contrast, there was no evidence of mediation for emotional engagement. The indirect effect (H1b) was non-significant ($ind.\beta = -0.02$, 95% BC bootstrap CI [−0.08, 0.01]). The relationship was instead characterized by a significant direct effect of physical attributes on emotional engagement ($\beta = 0.30$, $p < 0.001$) and a significant total effect ($\beta = 0.28$, $p < 0.001$). H1a and H1c are supported, but H1b is not.

Regarding the effect of functional attributes on social media engagement via city brand coolness (H2a, H2b and H2c), the analysis identified indirect-only mediation for cognitive engagement. The direct effect of functional attributes on cognitive engagement was statistically non-significant ($p = 0.50$), whereas the total effect was significant ($\beta = 0.18$, $p < 0.05$). More specifically, the indirect effect through city brand coolness (H2a) was significant ($ind.\beta = 0.26$, 95% BC bootstrap CI [0.12, 0.51]). For behavioral engagement, a significant indirect-only effect was found (H2c). The indirect path was significant ($ind.\beta = 0.23$, 95% BC bootstrap CI [0.09, 0.45]), whereas both the direct effect ($p = 0.24$) and the total effect ($p = 0.33$) were statistically non-significant. Finally, for emotional engagement, no statistically significant pathways

Table 2 Structural results

Hypotheses	Estimate	LCI 2.5%	UCI 2.5%
Indirect effects			
H1a: **Physical attributes → City brand coolness → Cognitive engagement**	0.05	0.01	0.14
H1b: **Physical attributes → City brand coolness → Emotional engagement**	−0.02	−0.08	0.01
H1c: **Physical attributes → City brand coolness → Behavioral engagement**	0.04	0.01	0.13
H2a: **Functional attributes → City brand coolness → Cognitive engagement**	0.26	0.12	0.51
H2b: **Functional attributes → City brand coolness → Emotional engagement**	−0.10	−0.28	0.02
H2c: **Functional attributes → City brand coolness → Behavioral engagement**	0.23	0.09	0.45
H3a: **Individual value → City brand coolness → Cognitive engagement**	0.19	0.07	0.41
H3b: **Individual value → City brand coolness → Emotional engagement**	−0.07	−0.25	0.01
H3c: **Individual value → City brand coolness → Behavioral engagement**	0.17	0.06	0.38
H4a: **Social value → City brand coolness → Cognitive engagement**	0.16	0.08	0.31
H4b: **Social value → City brand coolness → Emotional engagement**	−0.06	−0.21	0.01
H4c: **Social value → City brand coolness → Behavioral engagement**	0.14	0.05	0.31

Direct effects	Estimate	*t*-value	*p*-value
a path 1: **Physical attributes → City brand coolness**	0.09	1.89	0.04
a path 2: **Functional attributes → City brand coolness**	0.42	5.46	0.001
a path 3: **Individual value → City brand coolness**	0.31	3.85	0.001
a path 4: **Social value → City brand coolness**	0.26	3.94	0.001
b path 1: **City brand coolness → Cognitive engagement**	0.62	3.52	0.001
b path 2: **City brand coolness → Emotional engagement**	−0.24	−1.35	0.17
b path 3: **City brand coolness → Behavioral engagement**	0.54	3.05	0.001
c' path 1: **Physical attributes → Cognitive engagement**	−0.03	−0.49	0.62
c' path 2: **Physical attributes → Emotional engagement**	0.30	4.68	0.001
c' path 3: **Physical attributes → Behavioral engagement**	0.15	2.51	0.01
c' path 4: **Functional attributes → Cognitive engagement**	−0.08	−0.66	0.50
c' path 5: **Functional attributes → Emotional engagement**	−0.05	−0.47	0.63
c' path 6: **Functional attributes → Behavioral engagement**	−0.13	−1.15	0.24
c' path 7: **Individual value → Cognitive engagement**	−0.21	−1.67	0.09
c' path 8: **Individual value → Emotional engagement**	0.21	1.54	0.12
c' path 9: **Individual value → Behavioral engagement**	−0.18	−1.34	0.17
c' path 10: **Social value → Cognitive engagement**	0.51	6.01	0.001
c' path 11: **Social value → Emotional engagement**	0.15	1.57	0.11
c' path 12: **Social value → Behavioral engagement**	0.09	1.08	0.28
Total effects (c path) and Control variables			
Physical attributes → Cognitive engagement	0.02	0.41	0.67
Physical attributes → Emotional engagement	0.28	4.37	0.001
Physical attributes → Behavioral engagement	0.20	3.45	0.001
Functional attributes → Cognitive engagement	0.18	2.03	0.04
Functional attributes → Emotional engagement	−0.16	−1.64	0.09
Functional attributes → Behavioral engagement	0.09	0.97	0.33
Individual value → Cognitive engagement	−0.01	−0.16	0.81
Individual value → Emotional engagement	0.13	1.17	0.24
Individual value → Behavioral engagement	−0.01	−0.06	0.94
Social value → Cognitive engagement	0.67	10.01	0.001
Social value → Emotional engagement	0.09	1.17	0.24
Social value → Behavioral engagement	0.23	3.30	0.001
Gender → Cognitive engagement	0.01	0.06	0.93
Gender → Emotional engagement	−0.04	−0.74	0.45
Gender → Behavioral engagement	−0.11	−2.35	0.01
Age → Cognitive engagement	−0.02	−0.61	0.54
Age → Emotional engagement	0.01	0.05	0.95
Age → Behavioral engagement	0.04	1.15	0.24

Note(s): LCI – UCI 2.5% denotes lower and upper confidence interval estimates
Source(s): Authors' own work

were identified. The indirect effect (H2b) was non-significant ($ind.\beta = -0.10$, 95% BC bootstrap CI [−0.28, 0.02]), as were the direct ($p = 0.63$) and total effects ($p = 0.09$). H2a and H2c are supported, but H2b is not.

Next, the influence of individual value on social media engagement through city brand coolness was examined. For both cognitive engagement (H3a) and behavioral engagement (H3c), the results revealed a significant indirect-only effect. The indirect path for cognitive engagement was significant ($ind.\beta = 0.19$, 95% BC bootstrap CI [0.07, 0.41]) and the indirect path for behavioral engagement was also significant ($ind.\beta = 0.17$, 95% BC bootstrap CI [0.06, 0.38]). For both cognitive and behavioral engagement types, the respective direct effects ($p = 0.09$; $p = 0.17$) and total effects ($p = 0.81$; $p = 0.94$) were statistically non-significant. Conversely, no significant pathways were found for emotional engagement (H3b). The indirect effect was non-significant ($ind.\beta = -0.07$, 95% BC bootstrap CI [−0.25, 0.01]), as were the corresponding direct ($p = 0.12$) and total effects ($p = 0.24$). H3a and H3c are supported, whereas H3b is not.

Finally, the analysis of social value as a predictor of social media engagement via city brand coolness (H4a, H4b and H4c) also yielded distinct patterns. For cognitive engagement, the results supported partial mediation. The direct effect of social value was significant ($\beta = 0.51$, $p < 0.001$), as was the total effect ($\beta = 0.67$, $p < 0.001$). The indirect effect through city brand coolness (H4a) was statistically significant ($ind.\beta = 0.16$, 95% BC bootstrap CI [0.08, 0.31]). In terms of behavioral engagement, the findings indicated indirect-only mediation. The direct effect was non-significant ($p = 0.28$), whereas the total effect was significant ($\beta = 0.23$, $p < 0.001$). The indirect effect through city brand coolness (H4c) was also significant ($ind.\beta = 0.14$, 95% BC bootstrap CI [0.05, 0.31]). As with the other predictors, there was no evidence of mediation for emotional engagement (H4b). The indirect effect was statistically non-significant ($ind.\beta = -0.06$, 95% BC bootstrap CI [−0.21, 0.01]) and both the direct ($p = 0.11$) and total effects ($p = 0.24$) were also non-significant. H4a and H4c are supported, but H4b is not.

5. Discussion and conclusion

5.1 Theoretical implications

This study contributes to the body of city branding literature in several ways. Social media enables cities to co-create brand value and, more importantly, it empowers individuals to use cities as a medium for self-expression (Schivinski *et al.*, 2020). This dynamic flow of communication holds particular significance in the context of brand coolness, as respondents frequently leverage cities to articulate their identities (Loureiro *et al.*, 2020).

The overall findings validate city brand coolness as a perceptual construct within the domain of place branding. First, this study extends the external validity of the brand coolness construct by demonstrating that diverse city attributes and values, spanning the physical, functional, individual and social, can be synthesized by residents into a coherent perception of coolness. It shows that coolness is not just about a product someone owns (Feng *et al.*, 2024), but also about the place a person inhabits, making it a new and important lens for place branding theory.

Second, this research contributes by specifying a key psychological pathway that explains how city attributes and values translate into online engagement through city brand coolness. While prior research often posits a direct link between city characteristics and resident attitudes (e.g. Alahmari *et al.*, 2023) or discusses social media as a general tool for self-expression (Schivinski *et al.*, 2020), the current findings move beyond this. By demonstrating that the attributes of a city do not automatically generate engagement, this study clarifies that they must first be processed and converted into an identity-relevant perception of coolness. It is this perception that provides the psychological motivation for the cognitive and behavioral aspects of engagement. This adds a critical explanatory mechanism to the branding literature, revealing the process that links the features of a city to the active online participation of its residents.

It is noteworthy that no significant effects were observed for emotional social media engagement. This result challenges the simplistic assumption that a "cool city" is necessarily a "loved city". This finding helps to dissociate the concept of coolness from that of deep, affective attachment (Koskie *et al.*, 2024). The literature on place attachment suggests that strong emotional bonds are typically made through long-term familiarity (Reynolds *et al.*, 2024), personal memories (Chen and Dwyer, 2018) and deep social ties (Reitsamer and Brunner-Sperdin, 2021). Those factors are distinct from the perception of being trendy, desirable or innovative (Aleem *et al.*, 2022). A different explanation could be attributed to the fact that emotional engagement on social media is often influenced by various personal factors, individual experiences and contextual nuances, making it more complex and less directly tied to city brand coolness in this context (Schivinski, 2021). This finding supports the multifaceted nature of emotional engagement on social media (Islam *et al.*, 2018; Schivinski *et al.*, 2020), which may be influenced by a myriad of individual factors and situational contexts, warranting further investigation.

5.2 Managerial implications

The findings from this study provide actionable implications for city governments, brand managers and marketing practitioners. This research offers a strategic framework that moves beyond simply promoting city attributes. The core managerial insight is that practitioners should focus on managing the entire chain of effects revealed by the findings i.e. from leveraging specific city attributes to cultivate a perception of coolness, to activating that perception to drive specific forms of CRSME.

First, this study empirically demonstrated that physical, functional, personality and social attributes are all significant antecedents of perceived city brand coolness. City managers are therefore advised to curate these attributes not as standalone features, but as signals that collectively build a cool perception. For instance, to leverage physical attributes, managers should focus on signaling authenticity, which literature identifies as a key component of coolness (Khoi and Le, 2022). This can be achieved by branding historic or artistic districts as authentic cultural hubs, a tactic that has proven effective in generating positive brand perceptions in cities such as Melbourne, Australia (Jain *et al.*, 2022) and Lublin, Poland (Dudek-Mańkowska and Grochowski, 2019). Similarly, given the strong link found between functional attributes and coolness,

managers should frame efficient services and infrastructure as evidence of a progressive and innovative city. This aligns with research on smart-city branding, where technological competence is marketed as a desirable lifestyle attribute, thereby enhancing the brand image (Rojíková *et al.*, 2023).

To leverage personality traits, managers should focus on how both individual and social values contribute to coolness by tapping into the sense of identity and belonging of residents. On an individual level, this means building an authentic brand personality that enables self-expression and resonates with target residents (Priporas *et al.*, 2020). By cultivating a distinct character, such as soulful or innovative, cities can create a psychological connection, making residents feel the city is an extension of their own identity, much like how consumers align with a determined brand persona (Li *et al.*, 2024a, 2024b; Pezzuti, 2025). On a social level, managers can cultivate a communitarian coolness by fostering a sense of community through platforms for social interaction, like local festivals and community-led projects (Schivinski *et al.*, 2019). This strategy, used effectively by community-centric brands like Wacken Open Air in Germany, builds a strong form of coolness rooted in collective identity and belonging (Akturan and Kuter, 2024; Loureiro and Rodrigues, 2022), which in turn motivates residents to engage.

Furthermore, the results confirmed that a perception of coolness is a strong driver of cognitive and behavioral engagement. This implies that once a cool perception is established, it is an asset that can be actively leveraged. To translate this perception into engagement, practitioners should design city-related campaigns that invite participation. For cognitive engagement, managers can employ interactive digital content, such as gamified apps or virtual tours that encourage residents to actively process information about the city's offerings (Xi and Hamari, 2020; Stein *et al.*, 2025). For behavioral engagement, campaigns centered on UGC (Pezzuti, 2025). Prompting residents to share their own cool city moments with a specific hashtag not only generates authentic marketing content but also directly stimulates the desired online behaviors, a strategy with proven efficacy in building brands online (Schivinski, 2021; Krowinska and Dineva, 2025).

A final, crucial implication arises from the consistent non-significant effect of coolness on emotional engagement. This finding serves as a strategic caution, that is, coolness should not be considered a tool for fostering deep, affective bonds. Managers whose goal is to cultivate resident love for a city should pursue different, more personal strategies. The literature on place attachment suggests these tactics should be rooted in facilitating personal memories, celebrating shared heritage and strengthening social ties, as these factors, rather than trendiness, build lasting emotional connections (Pasquinelli *et al.*, 2024). This distinction is critical for allocating marketing resources effectively, ensuring the right tactics are used to achieve specific engagement goals.

5.3 Limitations and future research

It is important to acknowledge that while the study offers valuable insights into the concept of city brand coolness, its findings should be viewed with certain limitations in mind. Although self-administered online surveys are common in consumer behavior research, they come with notable drawbacks. The study relies on self-reported perceptions rather than actual behaviors, which affects the validity of the findings (Schivinski, 2021). In addition, because the study is cross-sectional, it cannot establish causal relationships or track behavior over time (Rubin and Babbie, 2009; Brown *et al.*, 2024). Important limitations involve the sample characteristics and the method of data collection. First, the sample consists of residents from Saudi Arabian cities and although efforts were made to reach a diverse range of participants, the online recruitment process inherently restricts the types of respondents who could take part in the study (Goodman *et al.*, 2013). Second, the online survey was available in English, which is not the native language for the study participants. This could have potentially biased the responses toward a more educated and affluent sample, therefore, not fully representing the population (Rubin and Babbie, 2009).

A key limitation of this study is its focus on a single national context, namely, Saudi Arabia. The unique environment of rapid, state-led development under the Vision 2030 framework and the specific cultural norms of the country may influence the types of city attributes that residents perceive as cool and how they engage on social media (Aziz *et al.*, 2024). Therefore, while the fundamental psychological pathway of mediation is expected to be robust, the specific findings may not be directly generalizable without further investigation. Future research should aim to test the proposed model in different contexts, such as in Western cities where branding efforts may be more organic or bottom-up. Cross-cultural comparative studies would be particularly valuable to distinguish between the universal drivers of perceived city coolness and those that are culturally specific, thereby building a more comprehensive and globally applicable theory of city branding in the digital age. Despite these limitations, the study provides a valuable contribution to theory and practice. For further understanding of the relationships explored in the current study, future research to extend and replicate the findings in different countries and cultures (Czarnecka and Schivinski, 2021).

This study highlights that the multi-dimensional approach to coolness opens new avenues for future research. The four dimensions of coolness through usefulness, high status, popularity and subculture provide a framework for exploring what makes a city cool and how these dimensions interact and consequently impact residents' perceptions and behaviors from a micro-perspective (Schivinski *et al.*, 2019). The granular operationalization of coolness should provide a basis for developing more tailored strategies to enhance city brand coolness and to understand the mechanisms that contribute to the overall appeal of cities on social media.

Authors' contribution

B.S.: Conceptualization; Data curation; Formal analysis; Methodology; Project administration; Software; Supervision; Validation; Visualization; Writing – original draft; Writing – review and editing. X.(L.)L.: Conceptualization; Project administration; Supervision; Writing – original draft; Writing – review and editing. A.M.A.: Conceptualization; Data curation; Formal analysis; Funding acquisition; Investigation; Resources; Writing – original draft. Q.P.N.: Data curation; Formal analysis; Validation; Visualization; Writing – original draft; Writing – review & editing. B.C.: Writing – original draft;

Writing – review and editing. S.M.C.L.: Conceptualization; Writing – original draft; Writing – review and editing.

References

Akturan, U. and Kuter, D. (2024), "City brand coolness in the eye of the beholder: an extended conceptualization of city brand coolness and its dimensions", *Place Branding and Public Diplomacy*, Vol. 20 No. 3, pp. 293-305, doi: 10.1057/s41254-023-00320-7.

Alahmari, A., Schivinski, B. and Li, X.L. (2023), "Place branding and social media in the sharing economy: a literature review", in Kucharska, W. & Lechman, E. (Eds), *Technology Brands in the Digital Economy*, Routledge, pp. 127-145.

Aleem, A., Loureiro, S.M.C., Schivinski, B. and Aguiar, M. (2022), "What if utilitarian products are regarded as high-status? The moderate role of iconic and popular as two dimensions of brand coolness", *Journal of Marketing Communications*, Vol. 30 No. 4, pp. 508-528, doi: 10.1080/13527266.2022.2152077.

Alzahrani, R.A. (2023), "Attitudes toward Saudi English: decentering the inner-circle", *Journal of Psycholinguistic Research*, Vol. 52 No. 3, pp. 809-829, doi: 10.1007/s10936-022-09925-0.

Aziz, G., Strielkowski, W., Sarwar, S. and Tiwari, A.K. (2024), "Implications of circular economy, digitalization and technological innovation to achieve sustainable environmental goal: pre and post-vision 2030", *Heliyon*, Vol. 10 No. 10, p. e30978, doi: 10.1016/j.heliyon.2024.e30978.

Bagozzi, R.P. and Batra, R. (2025), "Brand coolness: development and validation of a short scale", *Journal of Product & Brand Management*, Vol. 34 No. 4, pp. 575-587, doi: 10.1108/JPBM-05-2024-5146.

Brown, T., Burleigh, T.L., Schivinski, B., Bennett, S., Gorman-Alesi, A., Blinka, L. and Stavropoulos, V. (2024), "Translating the user-avatar bond into depression risk: a preliminary machine learning study", *Journal of Psychiatric Research*, Vol. 170, pp. 328-339, doi: 10.1016/j.jpsychires.2023.12.038.

Chen, N. and Dwyer, L. (2018), "Residents' place satisfaction and place attachment on destination Brand-Building behaviors: conceptual and empirical differentiation", *Journal of Travel Research*, Vol. 57 No. 8, pp. 1026-1041, doi: 10.1177/0047287517729760.

Criado, J.I. and Villodre, J. (2020), "Delivering public services through social media in european local governments. an interpretative framework using semantic algorithms", *Local Government Studies*, Vol. 47 No. 2, pp. 1-23, doi: 10.1080/03003930.2020.1729750.

Czarnecka, B. and Schivinski, B. (2021), "Individualism/collectivism and perceived consumer effectiveness: the moderating role of global–local identities in a post-transitional European economy", *Journal of Consumer Behaviour*, Vol. 21 No. 2, pp. 1-17, doi: 10.1002/cb.1988.

Dessart, L., Veloutsou, C. and Morgan-Thomas, A. (2016), "Capturing consumer engagement: duality, dimensionality and measurement", *Journal of Marketing Management*, Vol. 32 Nos 5-6, pp. 399-426, doi: 10.1080/0267257X.2015.1130738.

Dudek-Mańkowska, S. and Grochowski, M. (2019), "From creative industries to the creative place brand: some reflections on city branding in Poland", *Place Branding and Public Diplomacy*, Vol. 15 No. 4, pp. 274-287, doi: 10.1057/s41254-019-00141-7.

Feng, W., Xu, Y. and Wang, L. (2024), "Innocence versus coolness: the influence of brand personality on consumers' preferences", *Journal of Product & Brand Management*, Vol. 33 No. 1, pp. 14-42, doi: 10.1108/JPBM-10-2022-4177.

Fernandes, T. and Fernandes, F. (2018), "Sharing dissatisfaction online: analyzing the nature and predictors of hotel guests negative reviews", *Journal of Hospitality Marketing & Management*, Vol. 27 No. 2, pp. 127-150, doi: 10.1080/19368623.2017.1337540.

Field, A. (2017), *Discovering Statistics Using IBM SPSS Statistics*, 5th ed., Sage Publications.

Florek, M., Hereźniak, M. and Augustyn, A. (2021), "Measuring the effectiveness of city brand strategy. In search for a universal evaluative framework", *Cities*, Vol. 110, p. 103079, doi: 10.1016/j.cities.2020.103079.

Fona, C., Melewar, T.C., Dennis, C. and Dinnie, K. (2025), "The good place: investigating the social responsibility image of countries and its impact on the attractiveness of highly skilled workers", *Journal of Brand Management*, Vol. 32 No. 3, pp. 238-255, doi: 10.1057/s41262-024-00373-w.

Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50, doi: 10.2307/3151312.

Goodman, J.K., Cryder, C.E. and Cheema, A. (2013), "Data collection in a flat world: the strengths and weaknesses of mechanical turk samples", *Journal of Behavioral Decision Making*, Vol. 26 No. 3, pp. 213-224, doi: 10.1002/bdm.1753.

Harrigan, P., Evers, U., Miles, M. and Daly, T. (2017), "Customer engagement with tourism social media brands", *Tourism Management*, Vol. 59, pp. 597-609, doi: 10.1016/j.tourman.2016.09.015.

Hennigs, N., Wiedmann, K.P., Klarmann, C., Strehlau, S., Godey, B., Pederzoli, D., Neulinger, A., Dave, K., Aiello, G., Donvito, R. and Taro, K. (2012), "What is the value of luxury? A cross-cultural consumer perspective", *Psychology & Marketing*, Vol. 29 No. 12, pp. 1018-1034, doi: 10.1002/mar.20583.

Hollebeek, L. (2011), "Exploring customer brand engagement: definition and themes", *Journal of Strategic Marketing*, Vol. 19 No. 7, pp. 555-573, doi: 10.1080/0965254X.2011.599493.

Hollebeek, L.D., Glynn, M.S. and Brodie, R.J. (2014), "Consumer brand engagement in social media: conceptualization, scale development and validation", *Journal of Interactive Marketing*, Vol. 28 No. 2, pp. 149-165, doi: 10.1016/j.intmar.2013.12.002.

Hu, L.-T. and Bentler, P.M. (1999), "Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives", *Structural Equation Modeling: A Multidisciplinary Journal*, Vol. 6 No. 1, pp. 1-55.

Islam, J.U., Rahman, Z. and Hollebeek, L.D. (2018), "Consumer engagement in online brand communities: a solicitation of congruity theory", *Internet Research*, Vol. 28 No. 1, pp. 23-45, doi: 10.1108/IntR-09-2016-0279.

Jain, V., Shroff, P., Merchant, A. and Bezbaruah, S. (2022), "Introducing bi-directional participatory place branding: a theoretical model with multi-stakeholder perspectives", *Journal of Product & Brand Management*, Vol. 31 No. 1, pp. 73-95, doi: 10.1108/JPBM-05-2020-2921.

Khoi, N.H. and Le, A.N.-H. (2022), "Is coolness important to luxury hotel brand management? The linking and moderating mechanisms between coolness and customer brand engagement", *International Journal of Contemporary Hospitality Management*, Vol. 34 No. 7, pp. 2425-2449, doi: 10.1108/IJCHM-10-2021-1230.

Kladou, S. and Kehagias, J. (2014), "Assessing destination brand equity: an integrated approach", *Journal of Destination Marketing and Management*, Vol. 3 No. 1, pp. 2-10, doi: 10.1016/j.jdmm.2013.11.002.

Kline, R.B. (2011), *Principles and Practice of Structural Equation Modeling*, 3rd ed., The Guilford Press, New York, NY, USA.

Kock, F. (2021), "What makes a city cool? Understanding destination coolness and its implications for tourism", *Tourism Management, Pergamon*, Vol. 86, p. 104317, doi: 10.1016/J.TOURMAN.2021.104317.

Koskie, M.M., Freling, R.E., Locander, W.B. and Freling, T.H. (2024), "The role of brand gratitude in consumer relationships with cool brands", *Journal of Product & Brand Management*, Vol. 33 No. 4, pp. 419-435, doi: 10.1108/JPBM-02-2023-4343.

Krowinska, A. and Dineva, D. (2025), "The role and forms of social media branded content driving active customer engagement behaviours", *Journal of Marketing Management*, Vol. 41 No. 9-10, pp. 1030-1060, doi: 10.1080/0267257X.2025.2544808.

Li, X. (.) (2017), "From Beijing to Rio: rebranding China via the modern Olympic games", *The Journal of International Communication*, Vol. 23 No. 2, pp. 252-271, doi: 10.1080/13216597.2017.1347101.

Li, X., Alahmari, A. and Schivinski, B. (2024a), "Place branding: religion in shaping the three-dimensional essence of a city brand through stakeholder engagement", *Plos One*, Vol. 19 No. 1, p. e0296162, doi: 10.1371/journal.pone.0296162.

Li, X. , Johnston, K.A. and Feng, J. (2024b), "Virtual community engagement: engaging virtual communities for nation branding through sports", *Public Relations Review*, Vol. 50 No. 3, pp. 102440, doi: 10.1016/j.pubrev.2024.102440.

Loureiro, S.M.C., Jiménez-Barreto, J. and Romero, J. (2020), "Enhancing brand coolness through perceived luxury values: insight from luxury fashion brands", *Journal of Retailing and Consumer Services*, Vol. 57, doi: 10.1016/j.jretconser.2020.102211.

Loureiro, S.M.C. and Rodrigues, M. (2022), "Place coolness", *Encyclopedia of Tourism Management and Marketing*, Edward Elgar Publishing, pp. 510-512, doi: 10.4337/9781800377486.place.coolness.

Ma, W., de Jong, M., Hoppe, T. and de Bruijne, M. (2021), "From city promotion via city marketing to city branding: examining urban strategies in 23 Chinese cities", *Cities, Pergamon*, Vol. 116, p. 103269, doi: 10.1016/J.CITIES.2021.103269.

Mardia, K.V. (1970), "Measures of multivariate skewness and kurtosis with applications measures of multivariate skewness and kurtosis with applications", *Biometrika*, Vol. 57 No. 3, pp. 519-530, doi: 10.1093/biomet/57.3.519.

Mabkhot, H., Isa, N.M. and Mabkhot, A. (2022), "The influence of the credibility of social media influencers SMIs on the consumers' purchase intentions: evidence from Saudi Arabia", *Sustainability*, Vol. 14 No. 19, p. 12323, doi: 10.3390/su141912323.

Merrilees, B., Miller, D. and Herington, C. (2009), "Antecedents of residents' city brand attitudes", *Journal of Business Research*, Vol. 62 No. 3, pp. 362-367, doi: 10.1016/j.jbusres.2008.05.011.

Mohiuddin, K., Nasr, O.A., Nadhmi Miladi, M., Fatima, H., Shahwar, S. and Noorulhasan Naveed, Q. (2023), "Potentialities and priorities for higher educational development in Saudi Arabia for the next decade: critical reflections of the vision 2030 framework", *Heliyon*, Vol. 9 No. 5, p. e16368, doi: 10.1016/j.heliyon.2023.e16368.

Muthén, L. and Muthén, B. (2012), *Mplus User's Guide. Seventh Edition*, Muthén & Muthén, Los Angeles, CA.

Nikhashemi, S.R. and Delgado-Ballester, E. (2022), "Branding antecedents of consumer need for uniqueness: a behavioural approach to globalness vs. localness", *Journal of Marketing Communications*, Vol. 28 No. 4, pp. 392-427, doi: 10.1080/13527266.2021.1881807.

Obilo, O.O., Chefor, E. and Saleh, A. (2020), "Revisiting the consumer brand engagement concept", *Journal of Business Research, Elsevier*, Vol. 126, pp. 1-10, doi: 10.1016/j.jbusres.2019.12.023.

Pasquinelli, C., Rovai, S. and Bellini, N. (2024), "Linking place brands and regional innovation: sustainable business strategies leveraging heritage", *Regional Studies*, Vol. 58 No. 10, pp. 1921-1937, doi: 10.1080/00343404.2023.2187046.

Pasquinelli, C., Trunfio, M., Bellini, N. and Rossi, S. (2022), "Reimagining urban destinations: adaptive and transformative city brand attributes and values in the pandemic crisis", *Cities, Pergamon*, Vol. 124, p. 103621, doi: 10.1016/J.CITIES.2022.103621.

Pedeliento, G. and Kavaratzis, M. (2019), "Bridging the gap between culture, identity and image: a structurationist conceptualization of place brands and place branding", *Journal of Product & Brand Management*, Vol. 28 No. 3, pp. 348-363, doi: 10.1108/JPBM-01-2018-1735.

Pezzuti, T. (2025), "Highlighting discrepancies in brand messaging increases social media engagement", *Journal of the Academy of Marketing Science*, Vol. 53 No. 4, pp. 989-1010, doi: 10.1007/s11747-023-00983-x.

Piehler, R., Roessler, A. and Burmann, C. (2021), "The role of leadership and communication in internal city branding", *Journal of Product & Brand Management*, Vol. 30 No. 6, pp. 854-865, doi: 10.1108/JPBM-05-2020-2912.

Podsakoff, P.M., MacKenzie, S.B., Lee, J.-Y. and Podsakoff, N.P. (2003), "Common method biases in behavioral research: a critical review of the literature and recommended remedies", *Journal of Applied Psychology*, Vol. 88 No. 5, pp. 879-903.

Priporas, C.V., Stylos, N. and Kamenidou, I. (2020), "City image, city brand personality and generation Z residents' life satisfaction under economic crisis: predictors of city-related

social media engagement", *Journal of Business Research*, Vol. 119, pp. 453-463, doi: 10.1016/J.JBUSRES.2019.05.019.

Ramadhani, I.S. and Indradjati, P.N. (2023), "Toward contemporary city branding in the digital era: conceptualizing the acceptability of city branding on social media", *Open House International*, Vol. 48 No. 4, pp. 666-682, doi: 10.1108/OHI-08-2022-0213.

Reis, P., Caldeira, A. and Carneiro, M.J. (2022), "Can surf culture foster loyalty towards surf destinations?", *Journal of Sport & Tourism*, Vol. 26 No. 4, pp. 387-407, doi: 10.1080/14775085.2022.2105387.

Reitsamer, B.F. and Brunner-Sperdin, A. (2021), "It's all about the brand: place brand credibility, place attachment and consumer loyalty", *Journal of Brand Management*, Vol. 28 No. 3, pp. 291-301, doi: 10.1057/s41262-020-00229-z.

Revelle, W. (2015), "Package 'psych' - Procedures for psychological, psychometric and personality research", *R Package*, CRAN, pp. 1-358.

Reynolds, L., Peattie, K., Koenig-Lewis, N. and Doering, H. (2024), "There's a time and place: navigating omni-temporality in the place branding process", *Journal of Business Research*, Vol. 170, doi: 10.1016/j.jbusres.2023.114308.

Rojíková, D., Borseková, K., Vitálišová, K. and Vaňová, A. (2023), "Digital transformation of city branding: Comparison of the role of digital communication in branding of selected cities in Europe and Slovakia", *Smart Cities and Digital Transformation: Empowering Communities, Limitless Innovation, Sustainable Development and the Next Generation*, Emerald Publishing Limited, pp. 159-180, doi: 10.1108/978-1-80455-994-920231008.

Rubin, A. and Babbie, E.R. (2009), "Essential research methods for social work", *Cengage Learning*, 2nd ed., Wadsworth Publishing, Belmont, CA.

Sarwar, S., Streimikiene, D., Waheed, R., Dignah, A. and Mikalauskiene, A. (2021), "Does the vision 2030 and value added tax leads to sustainable economic growth: the case of Saudi Arabia?", *Sustainability*, Vol. 13 No. 19, p. 11090, doi: 10.3390/su131911090.

Scarborough, W.J. and Crabbe, R. (2021), "Place brands across U.S. cities and growth in local high-technology sectors", *Journal of Business Research*, Vol. 130, pp. 70-85, doi: 10.1016/J.JBUSRES.2021.02.055.

Schade, M., Piehler, R., Müller, A. and Burmann, C. (2018), "How cities can attract highly skilled workers as residents: the impact of city brand benefits", *Journal of Product & Brand Management*, Vol. 27 No. 7, pp. 847-857, doi: 10.1108/JPBM-10-2017-1605.

Schivinski, B. (2021), "Eliciting brand-related social media engagement: a conditional inference tree framework", *Journal of Business Research, Elsevier*, Vol. 130, pp. 594-602, doi: 10.1016/j.jbusres.2019.08.045.

Schivinski, B., Christodoulides, G. and Dabrowski, D. (2016), "Measuring consumers' engagement with brand-related social-media content: development and validation of a scale that identifies levels of social-media engagement with brands", *Journal of Advertising Research*, Vol. 56 No. 1, pp. 64-80, doi: 10.2501/JAR-2016-004.

Schivinski, B., Langaro, D. and Shaw, C. (2019), "The influence of social media communication on consumer's attitudes and behavioral intentions concerning brandsponsored events", *Event Management*, Vol. 23 No. 6, pp. 835-853, doi: 10.3727/152599518X15403853721268.

Schivinski, B., Langaro, D., Fernandes, T. and Guzmán, F. (2020), "Social media brand engagement in the context of collaborative consumption: the case of AIRBNB", *Journal of Brand Management*, Vol. 27 No. 6, pp. 645-661, doi: 10.1057/s41262-020-00207-5.

Schivinski, B., Pontes, N., Czarnecka, B., Mao, W., De Vita, J. and Stavropoulos, V. (2022), "Effects of social media brand-related content on fashion products buying behaviour – a moderated mediation model", *Journal of Product & Brand Management*, Vol. 31 No. 7, pp. 1047-1062, doi: 10.1108/JPBM-05-2021-3468.

Shen, K., Geng, C. and Su, X. (2019), "Antecedents of residents' pro-tourism behavioral intention: place image, place attachment and attitude", *Frontiers in Psychology*, Vol. 10, doi: 10.3389/fpsyg.2019.02349.

Shimul, S.A., Faroque, A.R. and Quader, E. (2025), "Brand advocacy: a scoping review and future research agenda", *Journal of Product & Brand Management*, doi: 10.1108/JPBM-10-2024-5537.

Stein, F., Guerreiro, J., Loureiro, S.M.C. and Rodrigues, M.B. (2025), "Leveling up coolness: how VR gamification drives experiential values", *Journal of Brand Management*, Vol. 32 No. 5, pp. 438-457, doi: 10.1057/s41262-025-00390-3.

Stoica, I., Kavaratzis, M., Schwabenland, C. and Haag, M. (2021), "Place brand Co-Creation through storytelling: benefits, risks and preconditions", *Tourism and Hospitality*, Vol. 3 No. 1, pp. 15-30, doi: 10.3390/tourhosp3010002.

Warren, C., Batra, R., Loureiro, S.M.C. and Bagozzi, R.P. (2019), "Brand coolness", *Journal of Marketing*, Vol. 83 No. 5, pp. 36-56, doi: 10.1177/0022242919857698.

World Bank Group (2025), "Urban development overview", available at: www.worldbank.org/en/topic/urbandevelopment/overview (accessed 2 February 2025).

Xi, N. and Hamari, J. (2020), "Does gamification affect brand engagement and equity? A study in online brand communities", *Journal of Business Research*, Vol. 109, pp. 449-460, doi: 10.1016/j.jbusres.2019.11.058.

Xie, L., Guan, X., Yeh, S.S. and Huan, T.C. (2025), "Using value co-creation behavior as a mediator to explore the influence of virtual tourism community characteristics on destination brand equity", *Journal of Brand Management*, Vol. 32 No. 1, pp. 1-16, doi: 10.1057/s41262-024-00365-w.

Zelenskaya, E. and Elkanova, E. (2021), "Designing place brand architecture: the potential of a Sub-brands strategy", *Journal of Product & Brand Management*, Vol. 30 No. 1, pp. 167-179, doi: 10.1108/JPBM-08-2019-2551.

Zhao, R., Edelenbos, J. and de Jong, M. (2025), "Between branding and being: how are inclusive city branding and inclusive city practices related?", *Journal of Place Management and Development*, Vol. 18 No. 1, pp. 20-39, doi: 10.1108/JPMD-11-2023-0113.

Appendix

Table AI Descriptive statistics

Constructs and measurements	Mean	SD	Kurtosis	Skewness	Loading
Physical and functional attributes and individual and social values					
(CITY) has pleasant weather	4.00	0.66	−0.70	−0.01	0.72
(CITY) has beautiful scenery	4.10	0.69	−0.29	−0.30	0.71
(CITY) has interesting historical sites	4.11	0.65	−0.37	−0.20	0.76
(CITY) has lovely architecture	4.08	0.63	−0.05	−0.20	0.75
(CITY) has good job opportunities	3.92	0.84	0.61	−0.81	0.73
(CITY) has good transportation	3.99	0.87	0.04	−0.72	0.71
(CITY) has a compelling government	4.12	0.81	1.09	−1.03	0.81
(CITY) is a safe place to live	4.07	0.89	0.49	−0.91	0.79
(CITY) has good cultural events	3.89	0.84	0.71	−0.86	0.72
I am satisfied with living in (CITY)	4.21	0.70	2.85	−1.09	0.75
I do and feel excited about living in (CITY)	4.16	0.72	2.66	−1.10	0.71
I believe living in (CITY) is significant to me	4.12	0.71	0.75	−0.60	0.70
To me, my friends' perceptions of (CITY) are essential	3.94	0.59	0.30	−0.14	0.74
I pay attention to what types of residents live in (CITY)	3.86	0.69	−0.36	−0.07	0.73
It is important to know what others think of people who live in (CITY)	3.92	0.67	0.15	−0.27	0.73
I determine where I live in (CITY) based on other impressions	3.73	0.83	0.25	−0.54	0.71
City brand coolness: useful, high value, popular, subcultural					
(CITY) is useful	4.22	0.64	−0.14	−0.37	0.74
(CITY) is helpful	4.16	0.66	1.33	−0.61	0.70
(CITY) is valuable	4.15	0.65	0.79	−0.49	0.76
(CITY) is extraordinary	4.02	0.76	0.63	−0.61	0.72
(CITY) is chic	4.02	0.75	−0.01	−0.48	0.74
(CITY) is glamorous	4.12	0.76	0.60	−0.71	0.70
(CITY) is sophisticated	3.90	0.82	−0.23	−0.40	0.76
(CITY) is ritzy	3.90	0.72	−0.16	−0.26	0.71
Most people like (CITY)	4.13	0.71	−0.18	−0.44	0.76
(CITY) is trendy	4.11	0.73	0.30	−0.54	0.77
(CITY) is a popular city	4.18	0.71	0.06	−0.56	0.71
(CITY) makes people who live in it different from other people	3.94	0.77	0.11	−0.51	0.71
Living in (CITY) makes me stand apart from others	3.99	0.83	−0.08	−0.58	0.77
Living in (CITY) helps people to stand apart from the crowd	3.83	0.83	−0.22	−0.42	0.74
People who live in (CITY) are unique	3.91	0.81	−0.07	−0.47	0.70
Social media engagement: Cognitive, emotional, behavioral engagement					
I pay a lot of attention to (CITY) on social media	3.57	0.89	−0.56	−0.41	0.80
Things posted on social related to (CITY) grab my attention	3.65	0.91	−0.47	−0.41	0.79
When interacting with (CITY) residents on social media, I forget everything else around me	3.58	0.92	−0.44	−0.35	0.75
Time flies when I am interacting with (CITY) residents on social media	3.51	0.91	−0.59	−0.27	0.74
When interacting with (CITY) residents on social media, it is difficult to detach myself	3.76	0.93	−0.24	−0.61	0.79
When someone criticizes (CITY) on social media, it feels like a personal insult	4.54	0.74	2.04	−1.61	0.73
When I talk about (CITY), I usually say "we" rather than "they"	4.45	0.72	1.33	−1.24	0.70
The successes of (CITY) are my successes	4.48	0.73	1.20	−1.30	0.74
When someone praises (CITY), it feels like a personal compliment	4.53	0.70	2.01	−1.50	0.71
I follow (CITY) on social media	4.06	0.83	0.03	−0.63	0.83
When I am spending time online, I like to read (CITY) posts on social media	4.08	0.83	−0.02	−0.62	0.82
When I am online, I usually click on (CITY) ads	4.08	0.83	−0.11	−0.60	0.78
When I am online, I usually comment on (CITY) posts	4.07	0.88	−0.68	−0.48	0.77
When I am online, I usually join (CITY) profile on social media	4.03	0.85	−0.32	−0.51	0.77
When I am online, I usually like (CITY) residents' pages	3.97	0.91	−0.80	−0.35	0.80
When I am online, I usually like (CITY) posts	4.06	0.87	−0.29	−0.61	0.77
When I am online, I usually share (CITY) posts	4.03	0.83	−0.20	−0.56	0.70
It is common for me to create hashtags about (CITY)	4.02	0.82	−0.18	−0.53	0.74
It is common for me to create posts about (CITY)	3.99	0.88	−0.59	−0.45	0.71
It is common for me to write reviews about (CITY)	4.04	0.84	−0.41	−0.50	0.75

Source(s): Authors' own work

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