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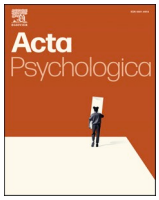

The formation of tourists' behavioral intention in City Walk in Malaysia through the embodiment perspective

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ABSTRACT

This study aims to investigate the formation of tourists' behavioral intentions in the context of City Walk experiences in Malaysia from an embodiment perspective. Guided by Cognitive Appraisal Theory, a quantitative research design was employed using Partial Least Squares Structural Equation Modeling (PLS-SEM). A total of 408 Chinese tourists were selected through purposive sampling and participated via both face-to-face and online surveys, given that China remains Malaysia's largest and continuously growing source of international tourists. The findings reveal that embodied cognition—operationalized through sensory experience, visitor engagement, and authenticity—along with the emotional response of memorable tourism experiences (MTEs), exerts a significant positive influence on behavioral intention. However, no substantial mediating effect was found for MTEs in the relationship between visitor engagement and behavioral intention in the City Walk context. This study contributes a novel conceptual framework grounded in contemporary cognitive theory, offering both theoretical advancements and practical implications for understanding emerging travel trends and promoting the sustainable development of urban tourism in Malaysia.

1. Introduction

Tourism is a significant component of global economic growth and plays a pivotal role in worldwide development. As per the "World Travel Economic Trends Report (2023)," cities are currently the main driving force behind global development. According to the UNWTO, the proportion of the global population residing in urban areas was 54 % in 2015, and it is projected to increase to 60 % by 2030 (UN Tourism Urban Tourism (unwto.org). City tourism may catalyze the growth and progress of several cities, aiding in the achievement of the Sustainable Development Goals by promoting inclusivity, safety, resilience, and sustainability in urban areas.

The 2023 Changsha Xiangshan Tourism Summit of the World Tourism Cities Federation stated that over 80 % of global tourism activities are facilitated by tourist cities. The revival and prosperity of urban tourism will significantly contribute to the recovery and expansion of the urban economy (https://news.sina.cn). Tourism cities are the result of combining tourism functions and city functions, the mutually beneficial integration of tourism and leisure functions, and cities that are used by both locals and tourists. Based on the analysis from the WTTC, travel and tourism are expected to once again play a significant role in driving economic growth. This will result in quicker growth of the Gross Domestic Product (GDP) and the creation of 126 million new jobs globally. The Asia Pacific area is expected to have the highest potential for the development of city tourism in the next ten years.

City Walk, which began in London, UK, as a result of important policy publications in 2004, later became a less popular activity supported by certain interest groups and acquired considerable attention through mass media and various public events (Middleton, 2010) with a variety of contents and functions (Borucka, 2019; Cachón-Zagalaz et al., 2019; Rosenberg, 2012; Southworth, 2005; Ujang & Muslim, 2015),

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provides urban tourists with the opportunity to make well-informed decisions that are in line with their interests and goals. It offers a distinctive tourism experience that comes with a significant price tag, making it particularly appealing to young groups. Previous research has suggested that walking is a primary means of transportation for numerous individuals, and it has been found to have a favorable impact on both mental and physical well-being. Additionally, it provides valuable insights for the development and planning of pedestrian-friendly cities (Sam, Odame, & Amoah-Nuamah, 2023; Southworth, 2005). Previous research on City Walk mostly focused on the characteristics of walking activities, particularly their connection to healthcare, the development of walkability in urban areas, and their economic prospects (Borucka, 2019; Cachón-Zagalaz et al., 2019; Southworth, 2005). However, specific research on walking and tourism is limited (Kim & Hall, 2023), while it reflects a shift in young travelers who embrace a warmer, relaxed, and slower pace of life (Wu, 2024). Thus, the new recognition of City Walks' potential for city tourism is contingent upon an increase in the number of young people who opt for City Walk as a travel choice and then share their experiences online and with their social circle. Previous studies suggest that engaging in a city walk, whether for tourism or recreation, can foster a profound connection with the urban environment and enable individuals to fully experience the essence of tourism and leisure (Wu, 2024).

As a new tourism model of City Walk, the accurate definition in tourism context is limited. The original of the city walk was a solution for city transportation promotion in London, UK. Then it has been transformed into a new travel model with unique routes which are more relevant to the walkability of the city (Köksal, 2012; Middleton, 2010; Svensson, 2021; Ujang & Muslim, 2015). Meanwhile, scholars have suggested walking helps promote mental and physical health. However, walking when a tourist is significantly different from walking for leisure and work (Kim & Hall, 2023). With the raising novel travel style of City Walk, previous studies have tried to explore the attribution of City Walk but yet to be deeper understanding, most of the previous studies focused on the relevant between city walk and environment, health, community, fail to explore the linkage between city walk and individuals in the context of urban tourism and leisure. For instance, City Walk is an untraditional travel model that offers individuals an immersive experience of city life as a kind of gap day from daily life, and is very popular among young groups. It considered that City Walk may adversely affect anxiety levels compared to natural settings (Chen, Yan, & Hu, 2025). Sawyer and Clarke (2025) introduced city walk as a social work pedagogical methodology that opens up local histories and silences to community practitioners. Thus, this study defined city walk as a recreational activity including walking across metropolitan regions to acquire certain experiences while engaging in behaviors that seek diversity, all in a healthy manner. The definition of city walk emphasizes city walk as an activity that contains both the attribution of tourism and recreation for locals and visitors, which could help individuals immerse themselves in cities' history, architecture, daily lives, etc., with multiple experiences physically and mentally by walking through the urban areas.

Embodied cognition has gained increasing attention in tourism studies in recent years. This theoretical framework posits that cognition is deeply rooted in the body's interaction with the environment, providing a foundation for understanding how multisensory, bodily, and immersive experiences are formed across various tourism contexts. Scholars have applied this perspective to diverse areas including industrial tourism (Yanjun, Yingchun, & Danping, 2018), VR tour experiences (Balakrishnan, Dwivedi, Mishra, Malik, & Giannakis, 2024), wine tourism (Esau & Senese, 2022), and even AI adoption in hospitality (Hamdoun & Abdelnaby, 2025). Within tourism and leisure activities, City Walk exemplifies this embodied approach particularly well. As an urban exploration activity, it involves direct physical engagement, authentic encounters, and multisensory stimulation of the urban environment. These active, bodily experiences do not merely serve as passive inputs but fundamentally shape tourists' cognition and emotional responses. Through such embodied interactions, City Walk enhances memorable tourism experiences by making them more vivid, emotionally resonant, and cognitively engaging.

While previous studies indicated that embodied cognition explain the interaction between body and environment, and highly relevant to the cognitional and emotional response (Graduate, 2025; Hamdoun & Abdelnaby, 2025), it cannot provide a holistic understand the interrelation between embodied cognition and behavioral intentions. Therefore, the Cognitive appraisal theory describing the formation of emotions has become accepted by most psychological and cognitive science researchers (Scott, Moyle, Campos, Skavronskaya, & Liu, 2024). It explains how individuals evaluate or appraise their environment cognitively and emotionally, leading to affective outcomes and behavioral intention (Skavronskaya, Moyle, & Scott, 2020; Zheng, Ritchie, & Benckendorff, 2021). In this study, Cognitive appraisal theory explains how sensory experience, visitor engagement, and authenticity are evaluated and internalized, leading to memorable tourism experiences and finally behavioral intentions.

City Walk tourism has expanded rapidly in metropolitan areas, yet its underlying psychological mechanisms, motivational drivers, and influencing factors remain insufficiently understood—particularly within the Malaysian context where empirical research is scarce. Drawing on the growing "turn to the body" in tourism research, this study conceptualizes City Walk as an embodied tourism practice in which bodily engagement, multisensory stimulation, and authentic encounters with the urban environment shape tourists' cognitive and emotional responses. Embodied cognition offers a theoretical lens to explain how these physical interactions and sensory experiences construct meaning and enhance memorable tourism experiences. However, embodied cognition alone does not fully capture how such experiences translate into behavioral intentions. To address this limitation, the study incorporates cognitive appraisal theory (CAT), which explains how individuals cognitively and emotionally evaluate environmental stimuli, leading to affective outcomes and subsequent behaviors. By integrating these two frameworks, this research seeks to reveal the dynamic interplay between bodily engagement, cognitive appraisal, and behavioral intention in the context of City Walk, thereby providing a robust measurement framework and actionable recommendations for destination managers and policymakers.

2. Literature review and hypothesis development

2.1. Embodied cognition theory and cognitive appraisal theory

Embodied cognition represents the research methodology turning to the body perspective, which originated from the education research field by offering educational practitioners, researchers, and policy makers (Shapiro & Stolz, 2019). With its potential to become an interdisciplinary research field (Hegna & Ørbæk, 2024) and the significant shift in focus from primarily visual and symbolic aspects of tourism to emphasizing the role of body in the tourist's experience (Graduate, 2025). The concept of embodiment highlights the significance of physical experiences in shaping the tourism experience. It has gained increasing importance in the field of tourism experience research and is now considered a new paradigm (Yin, Huang, & Wang, 2023). The tourist experience is not solely a psychological perspective, but rather the outcome of the interplay between various interconnected factors, including perception, body, and environment, during the process of tourism (Jun & Daijian, 2018). Tourists can only acquire emotional and cognitive experiences, such as feeling, perception, memory, and imagination, through engaging in embodied experiences (Shao yan & Wei, 2019). However, existing literature has focused on "travel activities", ignoring the cognitive and emotional effects of travel experiences (K. Lee & Lee, 2021), especially with the new travel trend of City Walk.

Cognitive appraisal theory posits that individuals evaluate stimuli (novelty, involvement, interpersonal context, virtual presence) (Scott

et al., 2024; Skavronskaya et al., 2020). It effectively models how cognitive evaluation of sensory, social, or virtual stimuli translates into emotional responses, shaping memory, social bonds, inspiration, and decision-making (Fang, Zhao, & Xiong, 2024; Tiwari, Bajpai, Singh, & Vyas, 2022; Torabi, Hamidi, & Safaie, 2021). As a part of contemporary cognitive theories, cognitive appraisal theory remains a vibrant and versatile theoretical lens in recent tourism research. For instance, Skavronskaya et al. (2020) explore cognitive appraisal's role in the link between novelty, emotion, and MTEs. Previous studies indicated that cognitive appraisal highly relevant to memorable tourism experiences, which lead to individuals' behavioral intention in the context of tourism (Scott et al., 2024; Watson & Spence, 2007). However, the application of cognitive appraisal theory within City Walk in Malaysia is limited, especially when considering the perspective of embodiment.

In this study, sensory experiences, visitor engagement, and authenticity (as embodied stimuli) are evaluated through cognitive appraisal processes—where tourists assess their relevance and goal congruence—ultimately generating emotional responses (memorable tourism experiences) and behavioral intentions. This framework aligns with Cognitive Appraisal Theory (CAT) while embedding evaluation within an embodied cognition perspective (Fig. 1).

2.2. City Walk in a tourism context

Urban tourism often involves the use of walking tours, which are a popular way to explore and experience a city. According to Giddy and Hoogendoorn (2018), walking tours are commonly practiced in urban tourism. Borucka (2019) also highlights that walking in the city is a popular method for encountering urban spaces, understanding their spatial relationships, learning about their history, and identifying the challenges and requirements of the people who use these spaces. Additionally, walking tours can provide insights into the future development of the city. Urban conservation initiatives are crucial for shaping the history and character of a city. They generate interest and involvement from local populations, playing a significant role in its development (Ranawat & Rathore, 2019). Walking and observing neighborhoods offer a comprehensive understanding of the size and rhythm of everyday life in the city (Borucka, 2019). It is highly relevant to fields such as architecture and education (Borucka, 2019), designing, history and memory, walkability and public health, leisure and tourism, and more.

Expanding upon prior research, the significance of a city walk can be classified into two dimensions. Firstly, it entails engaging in bodily ambulatory endeavors inside the urban environment. Furthermore, it includes locations like shopping centers or streets, motivated by objectives such as tourism, amusement, rejuvenation, dining, and, naturally, shopping endeavors (Al Rasyid, 2022; Pratiwi & Iftironi, 2019; Wiyanti & Hanfan, 2022). Within the realm of tourism, city walk offers a favorable transformation for urban explorers, granting them the ability to carefully select experiences that correspond to their interests and requirements. City tours have a twofold purpose: they enlighten tourists about historical and cultural resources and contribute to enhancing the city's image. Additionally, they are now being linked with health care and tourism experiences sustainably.

2.3. Sensory experience

Waking up and taking walks in urban areas are important for investigating and critically connecting with the stories and experiences of the city (Ujang & Muslim, 2015). Walking is considered and analyzed as a socio-technical arrangement that focuses on the physical, material, and technological connections and their importance in everyday urban pedestrian activities (Middleton, 2010). Developing a deeper and more tangible comprehension of daily life and spatial behaviors to establish a fundamental awareness and engagement with our environment through the stimulation of the five senses (Certeau & Rendall, 1984).

Researchers have recognized that our body's five senses establish a crucial link between our internal experiences and exterior surroundings, influencing our future decision-making and behavioral intentions (Panea, Mesías, & Guerrero, 2023). When tourists travel, they encounter different sensory experiences that are unfamiliar to them. These sensory experiences shape the physical sensations that are important for their thinking and behavioral intentions (Kock & Ringberg, 2019) by constructing individuals' cognition, emotion, and embodied interpretations.

A city walk is a leisure activity or tourist excursion that allows visitors to explore the streets, commercial centers, and downtown areas of a city. It offers the opportunity to appreciate architectural landmarks, enjoy the freedom of walking, and engage in various other activities, resulting in memorable and distinctive experiences (Borucka, 2019). According to Wu (2024), a city walk provides an immersive opportunity to fully engage with the urban environment (Wu, 2024). Nevertheless, the tourism context fails to explain the embodied sensations that trigger cognitive emotions and behavior (Kock & Ringberg, 2019). Although there is a growing corpus of literature recognizing the sensory

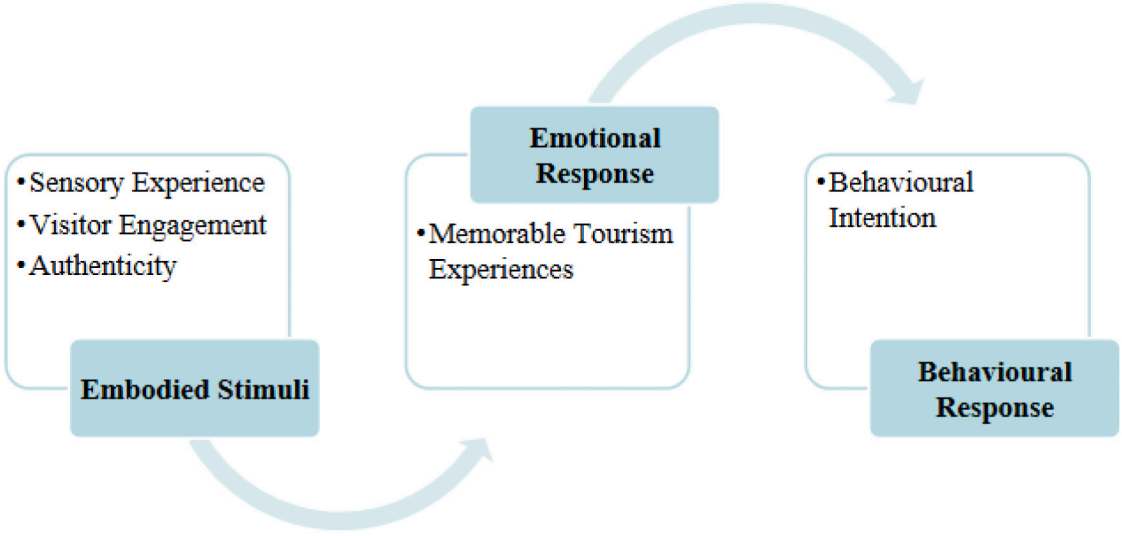

Fig. 1. Conceptual framework. This framework integrates Cognitive Appraisal Theory (CAT) with embodied cognition, positing that embodied stimuli (sensory experiences, visitor engagement, authenticity) undergo goal-directed cognitive appraisal, eliciting emotional responses (memorable tourism experiences) and subsequent behavioral intentions.

experiences of tourists in destinations, research on sensory aspects in tourism and the field of urban walking remains disjointed (Li, Li, Zou, Zhang, & Cao, 2023).

H1. Sensory experience has a positive effect on behavioral intention in the city walk.

2.4. Visitor engagement

According to Sam et al. (2023), walking is a crucial worldwide means of transportation that provides substantial health and environmental advantages, as well as serving important psychological purposes in urban areas. The primary focus of urban mobility in many places is the encouragement of daily walking activity, which aims to solve the problems that come from the prevalent dependence on car-centric lifestyles (Tsiompras & Photis, 2017). Svensson (2021) emphasizes that walking is essential in how humans interact with and encounter heritage, highlighting its inherent aspects of being situated, performative, and transformational. It serves as both a methodological tool that considers the ethnographer's perspective and experiences, as well as a firsthand experience within tourism sites and urban transformations. Creating a tourism destination that is easily accessible on foot can strengthen the attractions and key features that can boost people's emotional connection to the location (Ujang & Muslim, 2015). Hence, immersing oneself in the daily routines of the local community and adopting their customs and traditions will offer tourists a superior tourism experience. This approach is particularly advantageous in the current era of mass tourism, especially when popular destinations are grappling with the issue of overtourism (Perkumienė & Pranskūnienė, 2019). City walks offer visitors the chance to independently explore and admire the local culture, society, history, and architecture (Wu, 2024).

The notion of visitor engagement has been drawn from the wider realm of consumer interaction (Paul & Roy, 2023). It has been investigated with destinations and affects behavioral intention (Rasoolimanesh, Khoo-Lattimore, Md Noor, Jaafar, & Konar, 2021; Rasoolimanesh, Md Noor, Schuberth, & Jaafar, 2019). Engaging in pedestrian exploration and studying urban transformations, the spatial habits of residents, diverse cultural activities, and the promotion of local heritage allow individuals to have a more profound understanding of the size and tempo of daily life in the city (Svensson, 2021). However, prior research has primarily focused on tourist involvement within businesses or online networks, resulting in a lack of investigation into visitor engagement at specific destinations (Zhou & Yu, 2022), especially in the context of distinctive leisure activities like city walks.

H2. Visitor engagement has a positive effect on behavioral intention in the city walk.

2.5. Authentic experience

Authenticity, a long-standing and highly discussed subject in the field of tourist studies, can be classified into three categories: objective, constructive, and existential. Objective authenticity pertains to the genuineness of objects or events as actualities (Paul & Roy, 2023). Constructive authenticity can be interpreted differently by individual tourists, as it is a phenomenon that is shaped by society (Atasoy & Eren, 2023). Existential authenticity pertains to a possible existential condition that is triggered by engaging in tourist activities (N. Wang, 1999). It has been proposed that tourists can have genuine experiences even without being in the vicinity of genuine attractions (Xu, Le, Kwek, & Wang, 2022).

Prior research has demonstrated that authenticity significantly influences tourists' loyalty, satisfaction, and behavioral intention towards their destination (Genc & Gulertekin Genc, 2023; Prayag & Del Chiappa, 2021; Zhou, Chen, & Wu, 2022). For example, Javed and Awan (2023) discovered that existential authenticity had a beneficial influence on the behavioral intentions of tourists. City walk is a recreational activity that aims to experience the genuine aspects of an urban environment, and existential authenticity might be considered a key element in this pursuit. However, based on our current understanding, this exploration has not yet been encouraged or supported.

H3. Authenticity has a positive effect on behavioral intention in the city walk.

2.6. Memorable tourism experiences

A tourism experience is a multifaceted amalgamation of subjective elements that influence a tourist's emotions and attitudes while they are on their visit (Yin et al., 2023). Following the encounter, the tourist retains information about it in their mind (Juliana, Sihombing, & Antonio, 2022), encompassing both favorable and unfavorable aspects (C. Wang, Liu, Wei, & Zhang, 2020). Nevertheless, travelers generally remember only a handful of brief instances from their entire journey (Anaya & Lehto, 2023), which they then share with others and use to influence their future travel choices (Yan & Halpenny, 2023). These memories are referred to as memorable tourism experiences (MTEs).

Academics have highlighted the importance of the relationships between the body's senses, memorable tourism experiences (MTEs), and behavioral objectives. Scientists have noted that sensory experiences can impact mental time estimations (MTEs), which could lead to beneficial behavioral intentions. An exemplary instance can be seen in wine tourism, where individuals acquire memorable experiences by engaging in activities such as viewing, tasting, smelling, touching, and making purchasing decisions (Brochado, Stoleriu, & Lupu, 2021). In addition, the presence of ambient sounds at restaurants, businesses, and concerts can create lasting impressions and influence individuals' behavioral intentions (Carissa, Natalia, Lasini, & Gunadi, 2020; Liu, Wang, Kuo, Chen, & Tsui, 2022). Furthermore, the utilization of advanced technologies can also contribute to these effects (Windasari, Santoso, & Wang, 2022). City Walk is an urban tourism activity that facilitates the exploration of diverse experiences within the city, driven by a variety of travel motivations and experiential demands. It enables participants to immerse themselves in local culture and everyday life, often resulting in rich and meaningful emotional experiences (Z. Wang, Zhang, Ramachandran, & Cheng, 2025; Wu, 2024). According to social media platforms, including "Xiaohongshu" and "TikTok, "as well as travel blogs like "Mafengwo" and "trip.com, "visitors to City Walk may expect a pleasant urban experience characterized by a leisurely and unhurried pace. They will also feel a deep feeling of energy and liveliness from their surroundings by active participation in local activities and pursuing genuine experiences that capture the actual spirit of the city, which will result in a comprehensive comprehension of the genuine environment of the city (Wang et al., 2025; Wu, 2024).

Participating in a city walk can have a dual effect of calming the mind and body, as well as improving focus and concentration by actively monitoring and adjusting to various surroundings (Wu, 2024). Additionally, it can create a memorable travel experience for unconventional excursions. Engaging in a city walk tour and fully immersing oneself in the local culture can provide genuine and unforgettable experiences that can be shared with loved ones and on social media platforms. Previous research has established that tourist engagement and the authenticity of their experience both contribute positively to their memorable tourism experience and their behavioral intention in the context of historic tourism (Rasoolimanesh, Seyf, Hall, & Hatamifar, 2021). Manley, Silk, Chung, Wang, and Bailey (2023) discovered that establishing an emotional and sensory connection with important symbols of both physical and abstract cultural heritage through possible recreational activities is crucial for enhancing the overall experience. Visitor engagement and authentic experiences are significant aspects that impact memorable tourism experiences in city walks and might influence behavioral intentions.

H4. Sensory experience has a positive effect on MTEs in the city walk.

H5. Visitor engagement has a positive effect on MTEs in the city walk.

H6. Authenticity has a positive effect on MTEs on the city walk.

According to cognitive appraisal theory, cognition refers to all processes by which the sensory input is transformed, reduced, elaborated, stored, recovered, and used (Lachman, L. Lachman, & Butterfield, 2015), which lead to emotional response and behaviors by evaluating those stimuli (Skavronskaya et al., 2017). Previous studies considered that the memorable tourism experience is formed from individuals' emotional assessment of real experiences during their travel (Akhshik, Rezapouraghdam, Ozturen, & Ramkissoon, 2022), which is highly relevant to their behavioral intentions. For instance, Windasari et al. (2022) discovered that the sensory inputs enabled by the digital tourism ecosystem during the tourism journey can create memorable digital tourism experiences and influence people's behavioral intentions. Additionally, visitor engagement, authentic experiences could all be the formation of the cognitive appraisals. For example, Yin et al. (2023) indicated that embodied engagement has positive effects on cognitive evaluation and emotion and further led to MTEs. Rasoolimanesh, Seyf, et al. (2021) revealed that visitor engagement, authenticity influence behavioral intention in heritage tourism through MTEs. Therefore, sensory experience, visitor engagement, and authenticity formed the stimuli of cognitive appraisal. MTEs posit that the emotional response and behavioral intention represented the outcome. Despite two decades of research on tourist experiences, scholars have recently begun incorporating the notion of personal memory into the field of tourism (Jorgenson et al., 2019), the elements and mechanisms that have a significant impact on MTE research are still not well understood, particularly in various circumstances within contemporary appraisal perspectives (Yin et al., 2023). Therefore, it is imperative to give more thought to city walks as an emerging pastime for tourists.

H7. MTEs have a positive effect on behavioral intention in city walks.

H8. MTEs mediate the relationship between sensory experience and behavioral intention in city walks.

H9. MTEs mediate the relationship between visitor engagement and behavioral intention in city walks.

H10. MTEs mediate the relationship between authenticity and behavioral intention in city walks.

3. Method

3.1. Instrument

The suggested model was assessed using scales from previous studies, which included quantitative data obtained from a questionnaire comprising two distinct sections: demographic and multiple-item scales. The sensory experience was assessed using a set of 20 questions that cover five dimensions: sight, sounds, taste, smell, and touch (Sthapit, Björk, Coudounaris, & Stone, 2022; Xiang & Qiao, 2022). Visitor engagement was adapted from Babak Taheri, Jafari, and O'Gorman (2014), 8 items with a sample item: "Using guided tours." Kim (2018) identified five elements that contribute to a memorable tourism experience (Kim, 2018), one of which is "using guided tours.", "I really enjoyed this tourism experience." The study used three items to measure behavioral intention (Loureiro, 2014). This study employed a 5-point scale, ranging from 1 to 5.1 = strongly disagree; 5 = strongly agree. The research is strictly following the relevant contents of the approval form and abides by the national laws and relevant regulations while protecting the health, rights, and privacy of the research subjects. Relevant guidelines and regulations influenced the performance of all the methods used.

3.2. Study setting and sample

The current study was conducted on a tourist city walk in Malaysia, a nation abundant in tourism resources that provides a wide array of attractions, including beaches, woods, and hospitality. City tours attract a diverse range of passengers because of their geographical advantages, convenient locations, and abundant tourism services. According to the Ministry of Tourism, Arts and Culture, China continues to be Malaysia's largest source of international tourists. It is projected that Chinese visitors will contribute over RM30 billion in tourism expenditure by 2025. Notably, there has been a significant rise in independent travelers, particularly among the younger demographic. These travelers are increasingly drawn to exploring various urban areas in Malaysia, seeking to immerse themselves in local culture, cuisine, and iconic attractions. Among emerging travel trends, the City Walk experience has gained popularity as a preferred way to engage with Malaysian cities in a more authentic and meaningful manner. Strengthening tourism marketing efforts and enhancing the tourism value chain are essential steps to meet the shifting demands of modern travelers and to remain competitive in the global tourism landscape.

The target population of the study consisted of Chinese tourists in Malaysia's prominent cities, including Kuala Lumpur, Penang, Kuching, Melaka, and Ipoh. These cities are renowned in Malaysia for their extensive historical backgrounds and diverse cultural influences, and are famous and popular on social media platforms among Chinese tourists. After obtaining Chinese tourists statistics from the Ministry of Tourism, Arts and Culture's reports, the minimum sample size was determined by utilizing two tools: G*Power software and the Raosoft Sample Size Calculator. As an additional measure, Krejcie and Morgan's table was used for verification.

A pre-test was conducted with four experts from tourist, leisure, and hospitality sectors together with 35 participants were invited to engage in the pre-testing and pilot testing. Minor revisions were made to improve phrasing, including grammatical corrections, enhancements in the accuracy of Chinese–English translation, and careful attention to the avoidance of multicollinearity. All items were critically examined for their relevance to the designated constructs; no item was deemed inappropriate or eliminated from the instrument.

3.3. Data collection and analysis

The questionnaire survey was administered using a purposive sampling technique, targeting respondents who met the following criteria: (1) had participated in a City Walk activity for recreational purposes in Malaysia within the past six months; (2) were aged 18 years or older; and (3) were capable of articulating their experiences effectively. Data collection was conducted through both online and face-to-face surveys to capture a diverse range of tourists, including those currently in Malaysia as well as those who had returned to their home countries. The survey was carried out between November 10, 2023, and April 15, 2024. A total of 474 valid responses were obtained for analysis.

Data cleaning and descriptive statistical analyses were conducted using IBM SPSS Statistics 26.0, a widely adopted and user-friendly platform for quantitative analysis in the fields of social sciences and behavioral research (Sarstedt & Mooi, 2014). To evaluate the proposed research model, Partial Least Squares Structural Equation Modeling (PLS-SEM) was employed using SmartPLS 4.1, which facilitates the simultaneous analysis of both latent constructs (unobserved variables) and manifest indicators (observed variables) within a comprehensive structural framework (Hair, Risher, Sarstedt, & Ringle, 2019). During the data screening process, a total of 66 responses were excluded due to issues such as uniform response patterns across all items or completion times that deviated significantly from the norm, suggesting potential response bias. Consequently, 408 valid responses—representing 86.08 % of the original sample—were retained for further analysis. The study adopted a two-stage analytical approach incorporating the repeated

indicator method to assess the measurement model, which included both first-order and second-order constructs. In addition, PLSpredict was utilized as the primary technique to assess the predictive relevance and out-of-sample forecasting power of the PLS path model.

4. Result

4.1. Demographic characteristics of the sample

The study utilizes data from 408 out of 474 Chinese visitors, with 36.5 % representing males and 63.5 % representing females. The occupation distribution is primarily composed of students (40.0 %), followed by management (18.4 %) and professional and technical workers (18.1 %). 43.4 % of tourists have already visited the place, and Kuala Lumpur is an extremely appealing city for walking tours, with the highest proportion compared to other cities. Based on the survey findings, city walks are particularly popular among youth groups, with an average age of approximately 32.69 years, who possess a higher level of education, specifically college and above. A significant proportion of Chinese visitors who engage in urban exploration in Malaysia had substantial financial resources, with over half of them earning a monthly income exceeding 7000 CNY.

4.2. Measurement model

The conceptual framework of this study comprises five reflecting constructs: sensory experience, authenticity, visitor engagement, MTEs, and behavioral intention. Sensory experience encompasses the five dimensions of sight, hearing, smell, taste, and touch. As a result, it can be classified as a second-order reflective-reflective construct within this model. The study employed a disjointed two-stage technique. In the initial stage, it is important to assess and confirm the reliability and validity of all reflective constructions. This may be done by examining the lower-order component. The higher-order construction can then be established based on the scores of the corresponding dimensions of sensory experience.

Initially, the loading of items inside each construct was assessed, along with their corresponding loading values. Item VE2 was removed as a result of its value falling below the threshold of 0.4. All the loadings of the other indicators exceeded the required threshold. The Variance Inflation Factor (VIF) for the indicators in the first order, all of which were below 3, ranged from 1.164 to 2.292. The majority of indicators had Cronbach's alpha values exceeding 0.7, except sound (0.676), which is close to 0.7. Given that all CR values (ranging from 0.801 to 0.901) exceeded the threshold of 0.7 and AVE values exceeded 0.5, it can be concluded that the reliability and validity of all constructions were deemed acceptable and established (Table 1).

The utilization of HTMT was employed to verify the discriminant validity of the model and overcome the constraints of the Fornell and Larcker criterion (Radomir & Moisescu, 2020). Discriminant validity was assessed following the evaluation of convergent validity using the conventional Heterotrait-Monotrait Ratio (HTMT). For general research, the HTMT value should be less than 0.85, while in social studies, values between 0.85 and 0.9 are also considered acceptable (Sarstedt, Cheah, Becker, & Ringle, 2019). Therefore, the discriminant validity of the first-order reflective constructs was evaluated using both the Heterotrait-

Table 1
Measurement model.

Constructs	Items	Factor loading (before)	Factor loading (after)	Cronbach's alpha	CR	AVE
Authenticity	AU1	0.778	0.778	0.749	0.856	0.665
	AU2	0.843	0.843			
	AU3	0.823	0.823			
Behavioral intention	BI1	0.850	0.850	0.836	0.901	0.753
	BI2	0.895	0.896			
	BI3	0.857	0.857			
Memorable tourism experiences	MTE1	0.792	0.792	0.852	0.894	0.628
	MTE2	0.806	0.806			
	MTE3	0.815	0.815			
	MTE4	0.793	0.793			
	MTE5	0.755	0.755			
Sight	SSI1	0.785	0.785	0.828	0.880	0.595
	SSI2	0.832	0.832			
	SSI3	0.780	0.780			
	SSI4	0.786	0.786			
	SSI5	0.665	0.665			
Smell	SSM1	0.820	0.820	0.767	0.865	0.680
	SSM2	0.834	0.834			
	SSM3	0.820	0.820			
Sound	SSO1	0.694	0.694	0.676	0.801	0.503
	SSO2	0.661	0.661			
	SSO3	0.760	0.760			
	SSO4	0.717	0.717			
Taste	STA1	0.755	0.755	0.806	0.873	0.633
	STA2	0.786	0.786			
	STA3	0.805	0.805			
	STA4	0.833	0.833			
Touch	STO1	0.715	0.715	0.712	0.822	0.537
	STO2	0.759	0.759			
	STO3	0.677	0.677			
	STO4	0.777	0.777			
Visitor engagement	VE1	0.467	0.464	0.850	0.887	0.534
	VE2	0.265	Delete			
	VE3	0.743	0.744			
	VE4	0.775	0.775			
	VE5	0.806	0.805			
	VE6	0.733	0.735			
	VE7	0.777	0.778			
	VE8	0.760	0.759			

Monotrait Ratio of Correlations (HTMT) and the Heterotrait-Monotrait Ratio of Means (HTMT) as shown in Table 2. Most of the results in HTMT were below 0.850 and 0.900, except for 0.933, which was slightly over 0.900. After verifying with the Fornell and Larcker criterion (Table 3), it was found that all the values satisfied the recommended criteria for cross-loading, thus confirming the presence of discriminant validity.

During the second-order stage, the path coefficients between the second-order constructs and first-order dimensions are all more than 0.8, suggesting that the first-order dimensions significantly contribute to the second-order constructs. The construction's reliability, validity, and value all surpassed the specified level, as shown in Table 4. This indicates that the reliability and validity of the construction were deemed acceptable. Furthermore, the Variance Inflation Factor (VIF) for the second order, all of which were below 3.3, varied from 1.186 to 2.316, suggesting satisfactory validity in the second stage.

4.3. The structural model

The findings indicated that the sensory experience and visitor engagement dimensions have a favorable impact on behavioral intention, as demonstrated in Table 5. Specifically, H1 ($\beta = 0.315$, $p = 0.000$) and H2 ($\beta = 0.212$, $p = 0.000$) were both supported. The study found that authenticity does not have a significant impact on behavioral intention ($\beta = -0.006$; $p = 0.923$). Therefore, hypothesis H3 was rejected. The results of the study showed that H4 ($\beta = 0.309$, $p = 0.000$) and H6 ($\beta = 0.492$, $p = 0.000$) were found to be significant, suggesting that sensory experience and authenticity had a beneficial impact on behavioral intention. Nevertheless, the level of interaction from visitors does not have a notable impact on MTEs. As a result, H5 ($\beta = 0.059$, $p = 0.186$) was disproved. Furthermore, the statistical analysis provided support for hypothesis H7 (with a beta coefficient of 0.140 and a p-value of 0.041). Additionally, it was shown that MTEs have a beneficial impact on behavioral intention, as depicted in Fig. 2.

R^2 (0.309) of behavioral intention assessed the explanatory power of the structural model that memorable tourism accounted for 30.9 % of the variance in behavioral intention; additionally, R^2 (0.576) of MTEs assessed the explanatory power of the structural model that constructs of sensory experience, visitor engagement, and authenticity accounted for 57.6 % of the construct of MTEs. PLSpredict is based on the concepts of separate training and holdout samples for estimating model parameters and evaluating a model's predictive power (Hair, Howard, & Nitzl, 2020). In this study, with $Q^2_{predict} > 0$, between 0.205 and 0.407, and PLS-SEM < LM for half of the indicators, the model has medium predictive power. The mediating effect investigation of the study revealed that MTEs play a partial mediating role between constructs; H8 ($\beta = 0.043$, $p = 0.054$) and H9 ($\beta = 0.008$, $p = 0.354$) were unsignificant, indicating that there are no mediating effects between visitor engagement and behavioral intention, and the mediation role of MTEs between sensory experience and behavioral intention is not significant. Since H1 ($\beta = 0.315$, $p = 0.000$) and H2 ($\beta = 0.212$, $p = 0.000$) were both supported, both hypotheses presented direct-only nonmedication effects (Zhao, Lynch, & Chen, 2010). However, MTEs played a significant role between authenticity and behavioral intention; H10 ($\beta = 0.069$, $p = 0.042$) was supported. Due to H3 ($\beta = -0.006$; $p = 0.923$) not supported, there is an indirect-only mediation effect (Zhao et al., 2010).

5. Discussion and conclusion

5.1. Discussion

As an emerging travel trend closely aligned with the sustainable development of urban tourism—yet still underexplored in academic research- City Walk presents valuable opportunities for theoretical and practical advancement. This study offers a theoretical understanding of the City Walk phenomenon within the context of tourism and leisure in Malaysia by examining the formation of tourists' behavioral intention from a cognitive perspective. Integrating Embodied Cognition Theory and Cognitive Appraisal Theory, the study employs a quantitative research design using PLS-SEM to analyze embodied cognitive variables, including sensory experience, visitor engagement, and authenticity, as well as the emotional response of Memorable Tourism Experiences (MTEs) and the appraisal outcome of behavioral intention.

The findings indicate that sensory experience, authenticity, and visitor engagement have significant and direct positive impacts on behavioral intentions. Nevertheless, only sensory experience and authenticity have a direct positive impact on MTEs, while there is no noteworthy correlation between visitor engagement and MTEs. The findings partially align with previous research. As an illustration, S. Lee and Min (2022) have conveyed that sensory experiences have an impact on the judgment and behavior of humans. According to the study conducted by Wörfel, Frentz, and Tautu (2022), sensory experience has a significant influence on consumer cognition and behavior. Javed and Awan (2023) examine the influence of market mavens on young travelers and the significance of existential authenticity in shaping their future behavioral intention during co-experiences. Nevertheless, there is no observable impact of visitor engagement on MTEs. However, it is worth noting that behavioral intention deviates slightly from the findings of previous studies. Alrawadieh, Prayag, Alrawadieh, and Alsalameen (2019) found that visitor engagement has a beneficial impact on destination loyalty, which is closely related to behavioral intention. In their study, H. Chen and Rahman (2018) asserted that visitor engagement had a beneficial impact on MTEs. The lack of impact of visitor engagement on MTEs may be attributed to the rapid advancement of technology, like social media guidance and big data, which offer visitors multiple routes to access abundant information and facilitate decision-making. Additionally, this could be attributed to the absence of practical and distinctive avenues for visitors to fully engage in the authentic experience of local lifestyles. The process of interaction may be devoid of enjoyment and may lack both creativity and local components.

MTEs serve as mediators between sensory experiences, authenticity, and behavioral intention. However, the role of MTEs in mediating the relationship between sensory experience and behavioral intention is not highly significant. This finding deviates somewhat from previous

Table 2
Discriminant validity (Heterotrait-Monotrait ratio).

	AU	BI	MTEs	Sight	Smell	Sound	Taste	Touch	VE
AU									
BI	0.510								
MTEs	0.884	0.518							
Sight	0.590	0.507	0.635						
Smell	0.633	0.464	0.615	0.620					
Sound	0.560	0.517	0.514	0.818	0.716				
Taste	0.627	0.492	0.647	0.668	0.933	0.736			
Touch	0.756	0.562	0.737	0.768	0.725	0.823	0.804		
VE	0.734	0.489	0.578	0.428	0.494	0.522	0.380	0.608	

Note: AU = authenticity, memorable tourism experiences, VE = visitor engagement, BI = behavioral intention.

Table 3
Fornell-Larcker Criterion.

	AU	BI	MTEs	Sight	Smell	Sound	Taste	Touch	VE
AU	0.815								
BI	0.407	0.868							
MTEs	0.712	0.440	0.792						
Sight	0.469	0.421	0.532	0.772					
Smell	0.488	0.376	0.504	0.494	0.825				
Sound	0.418	0.404	0.400	0.610	0.519	0.709			
Taste	0.494	0.406	0.539	0.544	0.737	0.546	0.796		
Touch	0.556	0.434	0.580	0.590	0.538	0.578	0.616	0.733	
VE	0.587	0.431	0.498	0.359	0.407	0.420	0.324	0.469	0.731

Note: AU = authenticity, MTEs = memorable tourism experiences, VE = visitor engagement, BI = behavioral intention.

Table 4
Construct reliability and correlation matrix.

	Cronbach's alpha	CR	AVE	AU	BI	MTEs	SE	VE
AU	0.749	0.856	0.665					
BI	0.836	0.901	0.753	0.510				
MTEs	0.852	0.894	0.628	0.884	0.518			
SE	0.872	0.907	0.662	0.731	0.588	0.728		
VE	0.850	0.887	0.534	0.734	0.489	0.578	0.562	

Note: AU = authenticity, SE = sensory experience, MTEs = memorable tourism experiences, VE = visitor engagement, BI = behavioral intention.

Table 5
Results of the structural model.

Hypothesis	Path	Original sample (O)	Standard deviation	T statistics	*P* Values
H1	SE→BI	0.315	0.067	4.707	0.000***
H2	VE→BI	0.212	0.059	3.572	0.000***
H3	AU→BI	-0.006	0.066	0.097	0.923
H4	SE→MTEs	0.309	0.046	6.671	0.000***
H5	VE→MTEs	0.059	0.045	1.323	0.186
H6	AU→MTEs	0.492	0.050	9.845	0.000***
H7	MTEs→BI	0.140	0.068	2.046	0.041**
H8	SE→MTES→BI	0.043	0.022	1.927	0.054
H9	VE→MTES→BI	0.008	0.009	0.945	0.345
H10	AU→MTES→BI	0.069	0.034	2.035	0.042**

Note: * means sig < 0.05, ** means sig < 0.01, *** means sig < 0.001, AU = authenticity, SE = sensory experience, MTEs = memorable tourism experiences, VE = visitor engagement, BI = behavioral intention.

research. Prior research suggests that older tourists who have a heightened level of sensory perception and seek genuine experiences are more likely to have positive and memorable tourism experiences. These experiences, in turn, are likely to influence their behavioral intentions, such as engaging in digital tourism, seeking gastronomic experiences, and developing embodied cognition (Huang, Chen, & Xing, 2022; Sthapit, 2019; Windasari et al., 2022). Despite earlier research confirming the role of MTEs as mediators in various scenarios, this study found no evidence of a mediation link between visitor engagement and behavioral intention in City Walk through MTE. This finding is also distinct from other studies. For instance, Melón, Fandos-Herrera, and Sarasa (2021) examined visitor engagement as a precursor to MTEs and their impact on behavioral intention in a case study conducted in Spain. Rasoolimanesh, Seyf, et al. (2021) examined how MTEs mediate the relationship between visitor engagement, authenticity, destination image, and behavioral intention. The youth group chooses to walk to the City Walk to enjoy a cost-effective experience, feel a sense of freedom, and reduce feelings of loneliness (Wu, 2024). By exploring urban spaces, they require less support from external surroundings, and tourists often create their own distinctive experiences without excessive assistance. This may prompt authorities to develop novel approaches to urban pedestrian infrastructure and enhance the visitor experience by creating more captivating and interactive pathways. These new routes would create a unique environment that enables individuals to observe and engage with their surroundings, thereby immersing themselves in the activity. For instance, by integrating AI, big data, social media, and various technical and professional tools, or by incorporating architecture and heritage, like the arts streets in Penang, Malaysia, and heritage sites streets in Melaka, visitors can fully engage with the local culture and enhance their experience of walking through the city.

5.2. *Theoretical contributions*

This study examines city walk as a form of travel in the tourist industry, in contrast to previous studies that mostly focused on the recreational and transit aspects of City Walk. Given the growing popularity of city walk as a travel trend, this study offers a scholarly explanation of city walk in the context of tourism and contributes to academic research by establishing a strong theoretical basis for future research on urban pedestrianism, in the Asian region, particularly in Malaysia.

Firstly, this study provides an embodied perspective of understanding the formation of tourists' behavioral intention in City Walk in Malaysia. Embodied cognition with sensory experience, visitor engagement, and authenticity formed a combined cognitive stimulus to participants, which led to the emotional response. Compared with previous study which purely considered embodied cognition highly relevant to the sensory experience (Balakrishnan et al., 2024; Hamdoun & Abdelnaby, 2025), this study broadens the conventional understanding of embodiment by not only examining how bodily experiences are reflected but also by exploring the connections between the body and the environment, as well as the body and the mind. These connections encompass both psychological and physical experiences, aligning with the contemporary research perspectives of 'turn to the body' and 'being in the world'(Shao yan & Wei, 2019).

Furthermore, the combination of embodied cognition theory and cognitive appraisal theory provides a fresh research perspective through a novel research framework for urban tourism study, especially with the new travel trend of City Walk. Embodied cognition with sensory experience, visitor engagement, and authenticity constructed the cognitive stimuli through the evaluation and justification of tourists during participation in City Walk. The cognitive stimuli then lead to emotional responses such as MTEs, which have effects on behavioral intention (Skavronskaya et al., 2017; Zheng et al., 2021). In addition, the research expands the theoretical utilization of memorable tourism experiences

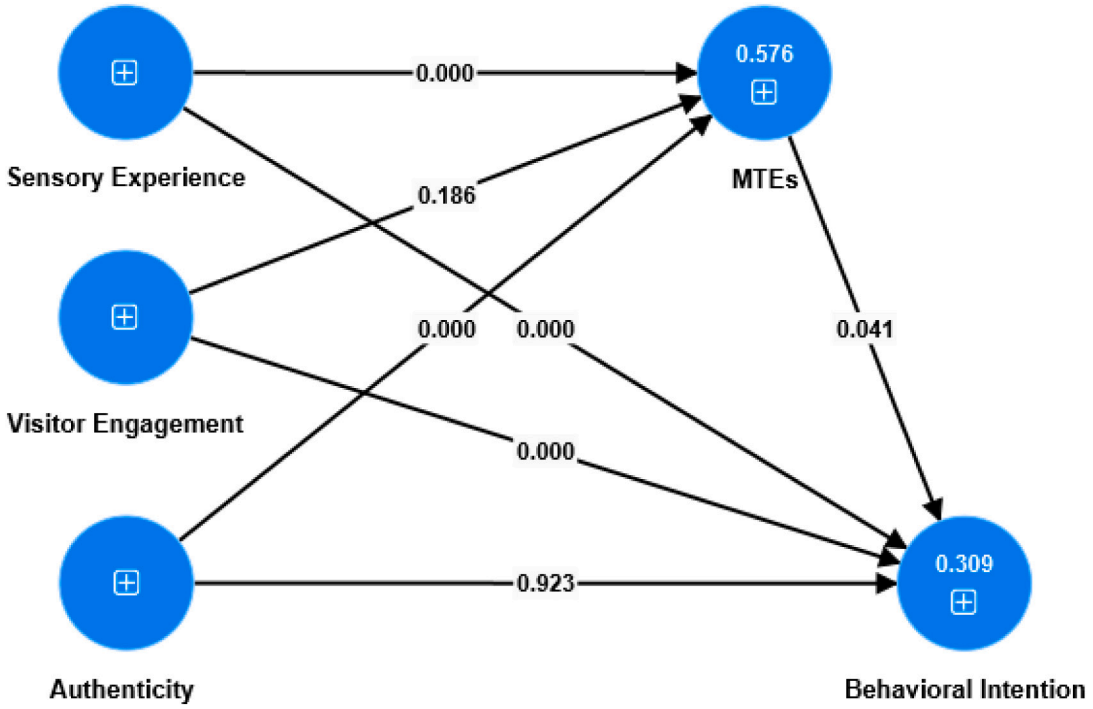

Fig. 2. Results of assessment of structural model.

(MTEs) in the context of city walks. Exploring the development mechanism for MTEs through cognitive appraisal theory helps us better understand the intrinsic motivation of the developing trend of City Walk, which is gaining popularity among modern visitors. Enhancing the theoretical comprehension of City Walk and its changing significance in modern tourism.

5.3. Practical contributions

This study has numerous practical ramifications which contribute to the growth of the city's tourism business and foster a sustainable competitive advantage.

For policymakers, this study presents a comprehensive analysis of the formation of tourists' behavioral intention in City Walk in Malaysia. It helps policymakers understand the significance of constructing embodied cognition for tourists and constructing memorable tourism experiences with more efficient management, measurements, and strategies that face the future urban tourism development trend and demand development of future tourists. For example, emphasizing the diversity experience of the urban with a variety of urban tourism supplies such as food tourism, urban ecotourism, cultural tourism, urban heritage tourism, and urban shopping tour. Therefore, by offering impactful stimuli that foster a sense of embodiment for visitors, such as the art street in Penang, various cultural structures in Kuala Lumpur, and heritage sites in Melaka, cities can create a remarkable and distinct experience that significantly contributes to their attractiveness and competitiveness. Improving the city's walkability for tourism and leisure purposes and constructing a shared urban tourism and recreation space allows visitors to fully engage with the urban environment both physically and psychologically, which provides tourists authentic experiences of Malaysia that unforgettable. The new travel trend of City Walk would lead the urban as a holistic tourism destination in a sustainable way in which provides rich cognition and emotion for participants and promotes the competitiveness and attractiveness of Malaysian tourism.

For urban tourism practitioners, this study indicates both significant and nonsignificant influencing elements of the formation of MTEs and behavioral intention in City Walk in Malaysia. The result may provide tourism practitioners with opportunities to re-innovate or reconstruct their plans or strategies. Strengthening the sensory experience and authentic experience of tourists with diversity tourism activities rooted in Malaysian culture, both intangible and tangible, while the result shows the shortage of visitor engagement in City Walk while traveling in Malaysia. Practitioners could enhance visitors' engagement with the local environment, such as actively engaging with ancient buildings, immersing themselves in local customs, actively participating in local life, and seeking authentic experiences. For example, the experience of traditional Chinese Malaysian culture, Muslin culture, and Indian Malaysian culture in daily life. Additionally, providing more meaningful activities in Malaysian style that tourists could engage in and involve themselves as locals. For instance, an increased availability of resources to enhance tourist engagement, both in terms of content and the establishment of a basis for smart city tourism. Constructing walkable and enjoyable urban tourism destination image and benefit to the sustainable urban tourism development in Malaysia.

5.4. Limitations and directions for future research

This study is subject to several limitations that present avenues for future research. The research adopts a quantitative approach, employing dimensions and measurement items derived from prior studies. However, given that City Walk is an emerging travel trend with limited existing scholarly exploration, a mixed-methods approach could offer a more comprehensive understanding, particularly from a cognitive perspective. Also, diverse methodological approaches—such as experimental designs and semi-structured interviews—combined with theoretical integration enhance the depth and robustness of the findings. Although purposive sampling of Chinese tourists was appropriate—considering that China remains Malaysia's largest tourist source—the shared cultural background may reduce the variability in response. Future research should consider including tourists from other key markets such as Indonesia, Singapore, Thailand, and other countries to account for cultural variability.

Ethics statements

All methods were carried out under relevant guidelines and regulations.

All experimental protocols were approved by Anyang University.

The informed consent was obtained from all subjects and/or their legal guardian(s).

CRediT authorship contribution statement

Wang Zhenbin: Writing – original draft, Methodology, Formal analysis, Data curation, Conceptualization. **Zhang Hui:** Writing – review & editing, Software, Formal analysis, Data curation. **Cao Chaoyi:** Software, Formal analysis, Data curation. **Sridar Ramachandran:** Visualization, Supervision, Methodology, Conceptualization. **Aatif Iqbal:** Validation, Investigation, Formal analysis.

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Declaration of competing interest

All authors disclosed no relevant relationships. All subjects and/or their legal guardian(s) provided consent for the research. All methods were carried out under relevant guidelines and regulations, which were approved by Anyang University.

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Wang Zhenbin: Conceptualization, methodology, formal analysis, writing-original draft.

Zhang Hui: Review, editing, formal analysis.

Cao Chaoyi: Software, data collection.

Sridar Ramachandran: Supervision, methodology, final approval.

Aatif Iqbal: Formal analysis, validation, revision.

Data availability

All data generated or analyzed during this study are included in this published article and its supplementary information files.

References

References

Akhshik, A., Rezapouraghdam, H., Ozturen, A., & Ramkissoon, H. (2022). Memorable tourism experiences and critical outcomes among nature-based visitors: A fuzzy-set qualitative comparative analysis approach. *Current Issues in Tourism*, 1–23. https://doi.org/10.1080/13683500.2022.2106196

Al Rasyid, A. (2022). The influence of city image elements on place attachments in the Braga street area, Bandung City. *International Journal of Future Studies, 5*(2), 65–73. https://endless-journal.com/index.php/endless/65.

Alrawadieh, Z., Prayag, G., Alrawadieh, Z., & Alsalameen, M. (2019). Self-identification with a heritage tourism site, visitors' engagement and destination loyalty: The mediating effects of overall satisfaction. *Service Industries Journal, 39*(7–8), 541–558. https://doi.org/10.1080/02642069.2018.1564284

Anaya, G. J., & Lehto, X. (2023). 'Moments to be had': Understanding the experience of memorable tourism moments. *Tourism Management, 95*, Article 104674. https://doi.org/10.1016/j.tourman.2022.104674

Atasoy, F., & Eren, D. (2023). Serial mediation: Destination image and perceived value in the relationship between perceived authenticity and behavioural intentions. *European Journal of Tourism Research, 33*, 1–33. https://doi.org/10.54055/ejtr.v33i.2528

Balakrishnan, J., Dwivedi, Y. K., Mishra, A., Malik, F. T., & Giannakis, M. (2024). The role of embodiment and ergonomics in immersive VR tours in creating memorable tourism experiences. *International Journal of Contemporary Hospitality Management, 36*(11), 3794–3822. https://doi.org/10.1108/IJCHM-09-2023-1425

Borucka, J. (2019). City walk: A didactic innovative experiment in architectural education. *World Transactions on Engineering and Technology Education, 17*(2), 158–163.

Brochado, A., Stoleriu, O., & Lupu, C. (2021). Wine tourism: A multisensory experience. *Current Issues in Tourism, 24*(5), 597–615. https://doi.org/10.1080/13683500.2019.1649373

Cachón-Zagalaz, J., Lara-Sánchez, A. J., Ubago-Jiménez, J. L., de Mesa, C. G. G., López-Gallego, F. J., & Zagalaz-Sánchez, M. L. (2019). Walk more towards active leisure, tourism, culture, and education. *Sustainability (Switzerland), 11*(11), 1–12. https://doi.org/10.3390/su11113174

Carissa, A., Natalia, J., Lasini, M., & Gunadi, W. (2020). Understanding the role of sensory, emotional, social and memorable experiences in behavioural intention of Indonesia's music concert industry. *International Journal of Scientific and Technology Research, 9*(1), 370–381.

Certeau, M.d., & Rendall, S. (1984). *The practice of everyday lifes. 1* p. 266).

Chen, H., & Rahman, I. (2018). Cultural tourism: An analysis of engagement, cultural contact, memorable tourism experience and destination loyalty. *Tourism Management Perspectives, 26*, 153–163. https://doi.org/10.1016/J.TMP.2017.10.006

Chen, L., Yan, R., & Hu, Y. (2025). City walk or nature walk? Evidence-based psychological and physiological outcomes – A systematic review and meta-analysis. *Urban Forestry & Urban Greening, 106*(February), 128726. https://doi.org/10.1016/j.ufug.2025.128726

Esau, D., & Senese, D. M. (2022). The sensory experience of wine tourism: Creating memorable associations with a wine destination. *Food Quality and Preference, 101*. https://doi.org/10.1016/j.foodqual.2022.104635

Fang, D., Zhao, Z., & Xiong, C. (2024). What leads to an immersive night tourism experience? The relevance of multi-sensory stimuli, emotional involvement, and delight. *Asia Pacific Journal of Tourism Research, 29*(1), 31–46. https://doi.org/10.1080/10941665.2024.2308853

Genc, V., & Gulertekin Genc, S. (2023). The effect of perceived authenticity in cultural heritage sites on tourist satisfaction: The moderating role of aesthetic experience. *Journal of Hospitality and Tourism Insights, 6*(2), 530–548. https://doi.org/10.1108/JHTI-08-2021-0218

Giddy, J. K., & Hoogendoorn, G. (2018). Ethical concerns around inner city walking tours. *Urban Geography, 39*(9), 1293–1299. https://doi.org/10.1080/02723638.2018.1446884

Graduate, M. I. C. Y. (2025). Rethinking embodiment in tourism research. *Annals of Tourism Research, 110*, Article 103892. https://doi.org/10.1016/j.annals.2024.103892

Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research, 109* (November 2019), 101–110. https://doi.org/10.1016/j.jbusres.2019.11.069

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review, 31*(1), 2–24. https://doi.org/10.1108/EBR-11-2018-0203

Hamdoun, H. A. B., & Abdelnaby, W. M. (2025). An embodied cognition approach to AI adoption in hospitality: Integrating sensorial perception, emotional activation, and behavioral outcomes. *Journal of the Association of Arab Universities for Tourism and Hospitality, 28*(2), 231–255. https://doi.org/10.21608/jaauth.2025.385010.1682

Hegna, H. M., & Ørbæk, T. (2024). Traces of embodied teaching and learning: A review of empirical studies in higher education. *Teaching in Higher Education, 29*(2), 420–441. https://doi.org/10.1080/13562517.2021.1989582

Huang, J., Chen, Y., & Xing, D. (2022). Exploring memorable tourism experiences of senior tourists: An embodied cognitive perspective. *Journal of Vacation Marketing*. https://doi.org/10.1177/13567667221139281

Javed, M., & Awan, T. M. (2023). The young tourist's co-creation nexus: Market mavens and existential authenticity as driving forces of intentions to revisit and recommend. *Journal of Hospitality and Tourism Insights, 6*(2), 716–734. https://doi.org/10.1108/JHTI-12-2020-0240

Jorgenson, J., Nickerson, N., Dalenberg, D., Angle, J., Metcalf, E., & Freimund, W. (2019). Measuring visitor experiences: Creating and testing the tourism autobiographical memory scale. *Journal of Travel Research, 58*(4), 566–578. https://doi.org/10.1177/0047287518764344

Juliana, Sihombing, S. O., & Antonio, F. (2022). What drives memorable rural tourism experience: Evidence from Indonesian travelers. *International Journal of Sustainable Development and Planning, 17*(8), 2401–2411. https://doi.org/10.18280/ijsdp.170807

Jun, W., & Daijian, T. (2018). A new tourism experience research perspective: Embodied theory. *Tourism Tribune, 33*(1), 118–125.

Kim, J. H. (2018). The impact of memorable tourism experiences on loyalty behaviors: The mediating effects of destination image and satisfaction. *Journal of Travel Research, 57*(7), 856–870. https://doi.org/10.1177/0047287517721369

Kim, M. J., & Hall, C. M. (2023). Is tourist walkability and well-being different? *Current Issues in Tourism, 26*(2), 171–176. https://doi.org/10.1080/13683500.2021.2017409

Kock, F., & Ringberg, T. (2019). Embodied cognition effects on tourist behavior. *Annals of Tourism Research, 78*, Article 102725.

Köksal, I. (2012). Walking in the City of London. *Social Movement Studies, 11*(3–4), 446–453. https://doi.org/10.1080/14742837.2012.704356

Lachman, R., L. Lachman, J., & Butterfield, E. C. (2015). *Cognitive psychology and information processing:An introduction*. Psychology Press.

Lee, K., & Lee, S. (2021). Cognitive appraisal theory, memorable tourism experiences, and family cohesion in rural travel. *Journal of Travel & Tourism Marketing, 38*(4), 399–412. https://doi.org/10.1080/10548408.2021.1921094

Lee, S., & Min, D. (2022). Sensory stimuli to sustainable socialwellbeing: A multimodal approach based on warm scent. *Behavioral Science, 12*(5), Article 146. https://doi.org/10.3390/bs12050146

Li, H., Li, M., Zou, H., Zhang, Y., & Cao, J. (2023). Urban sensory map: How do tourists "sense" a destination spatially? *Tourism Management, 97*, Article 104723. https://doi.org/10.1016/j.tourman.2023.104723

Liu, C. R., Wang, Y. C., Kuo, T. M., Chen, H., & Tsui, C. H. (2022). Memorable dining experiences with five senses: Conceptualization and scale development. *Journal of Hospitality and Tourism Management, 53*, 198–207. https://doi.org/10.1016/j.jhtm.2022.11.001

Loureiro, S. M. C. (2014). The role of the rural tourism experience economy in place attachment and behavioral intentions. *International Journal of Hospitality Management, 40*, 1–9. https://doi.org/10.1016/j.ijhm.2014.02.010

Manley, A., Silk, M., Chung, C., Wang, Y. W., & Bailey, R. (2023). Chinese perceptions of overseas cultural heritage: Emotive existential authenticity, exoticism and experiential tourism. *Leisure Sciences, 45*(3), 240–261. https://doi.org/10.1080/01490400.2020.1817200

Melón, M. P. A., Fandos-Herrera, C., & Sarasa, R. G. (2021). Analysis of antecedents and consequences of memorable tourist experiences (MTEs): A Spanish case study. *Journal of Vacation Marketing, 27*(3), 346–360. https://doi.org/10.1177/1356766720987879

Middleton, J. (2010). Sense and the city: Exploring the embodied geographies of urban walking. *Social and Cultural Geography, 11*(6), 575–596. https://doi.org/10.1080/14649365.2010.497913

Panea, B., Mesías, F. J., & Guerrero, L. (2023). Sensory complexity: From sensory measurement to consumption behavior. *Foods, 12*(1), 29. https://doi.org/10.3390/foods12010029

Paul, I., & Roy, G. (2023). Tourist's engagement in eco-tourism: A review and research agenda. *Journal of Hospitality and Tourism Management, 54*, 316–328. https://doi.org/10.1016/j.jhtm.2023.01.002

Perkumienė, D., & Pranskūnienė, R. (2019). Overtourism: Between the right to travel and residents' rights. *Sustainability, 11*(7), Article 2138. https://doi.org/10.3390/su11072138

Pratiwi, Y., & Iftironi, M. (2019). Function and accessibility mapping of Citywalk in Slamet Riyadi street, Surakarta City, Central Java. *MATEC Web of Conferences, 280*, Article 03019. https://doi.org/10.1051/matecconf/201928003019

Prayag, G., & Del Chiappa, G. (2021). Nostalgic feelings: Motivation, positive and negative emotions, and authenticity at heritage sites. *Journal of Heritage Tourism, 18*(3), 349–364. https://doi.org/10.1080/1743873X.2021.1874000

Radomir, L., & Moisescu, O. I. (2020). Discriminant validity of the customer-based corporate reputation scale: Some causes for concern. *The Journal of Product and Brand Management, 29*(4), 457–469. https://doi.org/10.1108/JPBM-11-2018-2115

Ranawat, B., & Rathore, A. S. (2019). Scope of heritage walk as a tourism product in Udaipur. *International Journal of Management Studies, VI*(1(7)), 48. https://doi.org/10.18843/ijms/v6i1(7)/06

Rasoolimanesh, S. M., Khoo-Lattimore, C., Md Noor, S., Jaafar, M., & Konar, R. (2021). Tourist engagement and loyalty: gender matters? *Current Issues in Tourism, 24*(6), 871–885. https://doi.org/10.1080/13683500.2020.1765321

Rasoolimanesh, S. M., Md Noor, S., Schuberth, F., & Jaafar, M. (2019). Investigating the effects of tourist engagement on satisfaction and loyalty. *The Service Industries Journal, 39*(7–8), 559–574. https://doi.org/10.1080/02642069.2019.1570152

Rasoolimanesh, S. M., Seyf, S., Hall, C. M., & Hatamifar, P. (2021). Understanding memorable tourism experiences and behavioural intentions of heritage tourists. *Journal of Destination Marketing and Management, 21*, Article 100621. https://doi.org/10.1016/j.jdmm.2021.100621

Rosenberg, E. (2012). Walking in the city: Memory and place. *The Journal of Architecture, 17*(1), 131–149. https://doi.org/10.1080/13602365.2012.659914

Sam, E. F., Odame, P. K., & Amoah-Nuamah, J. (2023). Predictors of distractive activities to walking in Accra, Ghana. *Urban Planning And Transport Research, 11*(1), Article 2220574. https://doi.org/10.1080/21650020.2023.2220574

Sarstedt, M., .J.,.J.F.H., Cheah, J. H., Becker, J. M., & Ringle, C. M. (2019). How to specify, estimate, and validate higher-order constructs in PLS-SEM. *Australasian Marketing Journal, 27*(3), 197–211. https://doi.org/10.1016/j.ausmj.2019.05.003

Sarstedt, M., & Mooi, E. (2014). *The concise guide to market research: The process, data, and methods using IBM SPSS statistics*. Springer.

Sawyer, L., & Clarke, K. (2025). Local memory, City walking, and exploring walking social work pedagogies in Fresno, California and Gothenburg, Sweden. *Journal of Teaching in Social Work, 45*(1), 105–124. https://doi.org/10.1080/08841233.2024.2433778

Scott, N., Moyle, B., Campos, A. C., Skavronskaya, L., & Liu, B. (2024). The cognitive wave major concepts. *Tourism Social Science Series, 27*(June), 21–30. https://doi.org/10.1108/S1571-504320240000027003

Shao yan, C., & Wei, T. (2019). From indifference to awakening: The rethink of Western tourism studies on body tourism studies on body. *Human Geography, 34*(4), 1. https://doi.org/10.13959/j.issn.1003-2398.2019.04.001

Shapiro, L., & Stolz, S. A. (2019). Embodied cognition and its significance for education. *Theory and Research in Education, 17*(1), 19–39. https://doi.org/10.1177/1477878518822149

Skavronskaya, L., Moyle, B., & Scott, N. (2020). The experience of novelty and the novelty of experience. *Frontiers in Psychology, 11*(February). https://doi.org/10.3389/fpsyg.2020.00322

Skavronskaya, L., Scott, N., Moyle, B., Le, D., Hadinejad, A., Zhang, R., … Shakeela, A. (2017). Cognitive psychology and tourism research: State of the art. *Tourism Review, 72*(2), 221–237. https://doi.org/10.1108/TR-03-2017-0041

Southworth, M. (2005). Designing the Walkable City. *Journal of Urban Planning and Development, 131*(4), 246–257. https://doi.org/10.4324/9781315519210

Sthapit, E. (2019). Memories of gastronomic experiences, savoured positive emotions and savouring processes. *Scandinavian Journal of Hospitality and Tourism, 19*(2), 115–139. https://doi.org/10.1080/15022250.2017.1402702

Sthapit, E., Björk, P., Coudounaris, D. N., & Stone, M. J. (2022). A new conceptual framework for memorable Airbnb experiences: Guests' perspectives. *International Journal of Culture, Tourism, and Hospitality Research, 16*(1), 75–86. https://doi.org/10.1108/IJCTHR-01-2021-0002

Svensson, M. (2021). Walking in the historic neighbourhoods of Beijing: Walking as an embodied encounter with heritage and urban developments. *International Journal of Heritage Studies, 27*(8), 792–805. https://doi.org/10.1080/13527258.2020.1821240

Taheri, B., Jafari, A., & O'Gorman, K. (2014). Keeping your audience: Presenting a visitor engagement scale. *Tourism Management, 42*, 321–329.

Tiwari, A. V., Bajpai, N., Singh, D., & Vyas, V. (2022). Antecedents of hedonism affecting memorable tourism experience (MTE) leading to revisit intention in tourists. *International Journal of Tourism Cities, 8*(3), 588–602. https://doi.org/10.1108/IJTC-03-2021-0043

Torabi, A., Hamidi, H., & Safaie, N. (2021). Effect of sensory experience on customer word-of-mouth intention, considering the roles of customer emotions, satisfaction, and loyalty. *International Journal of Engineering, 34*(3), 682–699. https://doi.org/10.5829/ije.2021.34.03c.13

Tsiompras, A. B., & Photis, Y. N. (2017). What matters when it comes to "walk and the city"? Defining a weighted GIS-based walkability index. *Transportation Research Procedia, 24*, 523–530. https://doi.org/10.1016/j.trpro.2017.06.001

Ujang, N., & Muslim, Z. (2015). Walkability and attachment to tourism places in the City of Kuala Lumpur, Malaysia. *Athens Journal of Tourism, 2*(1), 55–67. https://doi.org/10.30958/ajt.2-1-4

Wang, C., Liu, J., Wei, L., & Zhang, T.(C.) (2020). Impact of tourist experience on memorability and authenticity: A study of creative tourism. *Journal of Travel & Tourism Marketing, 37*(1), 48–63. https://doi.org/10.1080/10548408.2020.1711846

Wang, N. (1999). Rethinking authenticity in tourism experience. *Annals of Tourism Research, 26*(2), 349–370. https://doi.org/10.1016/S0160-7383(98)00103-0

Wang, Z., Zhang, H., Ramachandran, S., & Cheng, S. (2025). Why are individuals tracing travel trends? A case study of City walk in Malaysia. *PLoS One, 20*(2), Article e0309493. https://doi.org/10.1371/journal.pone.0309493

Watson, L., & Spence, M. T. (2007). Causes and consequences of emotions on consumer behaviour: A review and integrative cognitive appraisal theory. *European Journal of Marketing, 41*(5–6), 487–511. https://doi.org/10.1108/03090560710737570

Windasari, N. A., Santoso, H. B., & Wang, J. C. (2022). Memorable digital tourism experience: Utilization of emotions and sensory stimuli with service-dominant logic. In D. Jaziri, & R. A. Rather (Eds.), *Contemporary approaches studying customer experience in tourism research* (pp. 147–172). Emerald Publishing Limited. https://doi.org/10.1108/978-1-80117-632-320221016.

Wiyanti, S., & Hanfan, A. (2022). The role of word-of-mouth, shopping lifestyle and City walk concept on brand image mall in Indonesia. *International Journal of Entrepreneurship and Business Management, 1*(1), 43–50. https://doi.org/10.54099/ijebm.v1i1.124

Wörfel, P., Frentz, F., & Tautu, C. (2022). Marketing comes to its senses: A bibliometric review and integrated framework of sensory experience in marketing. *European Journal of Marketing, 56*(3), 704–737. https://doi.org/10.1108/EJM-07-2020-0510

Wu, D. (2024). City walk in a gap day: Potential and opportunities for tourism and leisure. *Tourism Review, 79*(9), 1576–1581. https://doi.org/10.1108/TR-09-2023-0614

Xiang, K., & Qiao, G. (2022). Exploring well-being outcomes and influenced mechanism of senior tourists: Evidence from an embodiment and continuity perspective. *Current Issues in Tourism, 26*(13), 2203–2220. https://doi.org/10.1080/13683500.2022.2081134

Xu, X. (Even), Le, T. H., Kwek, A., & Wang, Y. (2022). Exploring cultural tourist towns: Does authenticity matter? Tourism Management Perspectives, 41, 100935. doi:https://doi.org/10.1016/j.tmp.2021.100935.

Yan, N., & Halpenny, E. A. (2023). *Tourists' savoring of positive emotions and place attachment formation: A conceptual paper. In Affect and emotion in Tourism. Routledge*. https://doi.org/10.1080/14616688.2019.1647454

Yanjun, X., Yingchun, H., & Danping, W. (2018). The embodied experience model of industrial tourism: Embodied obstacles, obstacles remove and embodied realization. *Tourism Science, 32*(4), 1–16. https://doi.org/10.16323/j.cnki.lykx.2018.04.001

Yin, Z., Huang, A., & Wang, J. (2023). Memorable tourism experiences' formation mechanism in cultural creative tourism: From the perspective of embodied cognition. *Sustainability (Switzerland), 15*(5), 4055. https://doi.org/10.3390/su15054055

Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of Consumer Research, 37*(2), 197–206. https://doi.org/10.1086/651257

Zheng, D., Ritchie, B. W., & Benckendorff, P. J. (2021). Beyond cost–benefit analysis: Resident emotions, appraisals and support toward tourism performing arts developments. *Current Issues in Tourism, 24*(5), 668–684. https://doi.org/10.1080/13683500.2020.1732881

Zhou, G., Chen, W., & Wu, Y. (2022). Research on the effect of authenticity on revisit intention in heritage tourism. *Frontiers in Psychology, 13*, Article 883380. https://doi.org/10.3389/fpsyg.2022.883380

Zhou, M., & Yu, H. (2022). Exploring how tourist engagement affects destination loyalty: The intermediary role of value and satisfaction. *Sustainability, 14*(3), 1–17. https://doi.org/10.3390/su14031621