



Fusing Constructivism with Experience Economy Theory: A Framework for Understanding and Enhancing Millennial Visitors' Museum Experiences

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Abstract

Understanding the experiences of Millennial museum visitors requires an interdisciplinary approach that considers the interplay of pedagogical, andragogical, psychological, sociological, and cognitive processes. As a distinct generational cohort, Millennials exhibit unique characteristics, including a preference for intellectual engagement, experiential sharing, active social media use, and a strong sense of diversity and social consciousness. These traits shape their educational and entertainment preferences, making their museum experiences particularly complex to study. To address this complexity, this conceptual paper integrates constructivism and experience economy theory to develop a novel framework for analyzing Millennial museum visitor experiences. Drawing from a comprehensive literature review, we synthesize these two theoretical perspectives and identify key visitor-driven factors—such as visit duration, repetition, circulation patterns, and consumption trends—as well as museum-centric factors, including localism in learning, psychological and behavioral development, and heritage interpretation techniques. The resulting framework provides a holistic understanding of Millennial preferences and offers insights into how museums can enhance engagement, promote deeper content exploration, and improve heritage interpretation practices. This study advances theoretical understanding while offering practical recommendations for museums and cultural institutions aiming to cater to the evolving needs of Millennial audiences. Moreover, this theoretical synthesis contributes to the growing discourse on generational differences in educative leisure behavior and cultural consumption, offering a foundation for future empirical research.

Introduction

Museum visitation has significantly evolved, moving from accommodating large visitor groups to targeting specific audiences (Selçuk & Kozak, 2020).

Moreover, museums have increasingly transitioned from solely instructional educational experiences to a blend of educational and entertainment elements (Pallud, 2017; Nigatu et al., 2024). Amidst this transformation,

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Millennials, or Generation Y, have emerged as an important generational cohort. Millennials evaluate their leisure and vacations based on overall experiences rather than just functionalities and satisfaction levels because they are looking for experiences that pique their emotional and intellectual interests, seek opportunities for social and experiential sharing, and engage with cultural experiences (Choudhary & Walia, 2021; Morton, 2002; Yousaf et al., 2018). Millennials bring distinct perspectives and expectations to museum experiences and interpretation techniques. This generation, often dubbed the Internet generation, is deeply connected to social media, and characterised by its diversity and strong social consciousness (Burstein, 2013; Galdames & Guihen, 2022; Valecha & Jaggi, 2023). To effectively engage this diverse and tech-savvy demographic, museums actively explore innovative frameworks that accommodate and align with Millennial preferences.

In visitor and museum experience studies, various theories and conceptual models have applied: Motivation theories, experience economy (Pine & Gilmore, 2011), ideas, peoples, objects, and physical elements theory (IPOP) (Pekarik & Mogel, 2010; Pekarik et al., 2014), visitor typology behavior theories (Falk, 2016; Serrell, 1996; Umiker-Sebeok, 1994), cognitive theory of learning (Haden et al., 2016), mindfulness theory (Hughes & Moscardo, 2019; Ying et al., 2020), flow theory (Ebitz, 2008; Latham, 2016), and museum exhibition user experience model (MEUX) (King et al., 2023).

Due to visitor experience studies covering a wide range of pedagogical, andragogical, psychological, sociological, and cognitive processes, it can be difficult to apply a single theory to fully capture visitors' experiences in a museum setting (Kang & Gretzel, 2012; Komarac & OzretiĐošćen2022). Yet, to understand the complex nature of the visitor experience, integrating two or more theories can be fruitful. Consequently, we propose the integration of constructivism and experience economy theory into one framework to understand better Millennial generation visitor experiences in museums. Constructivism theory stresses the underlying principles of active involvement of visitors in the learning process and seeing museums as dynamic environments where knowledge is constructed through interaction and exploration (Hooper, 2018). The experience economy theory is expressed in entertaining, educating, escapism, and aesthetics in personalized and emotionally resonant experiences (Quadri & Fiore, 2012; Song et al., 2015).

The objective of this paper is to develop a comprehensive framework for understanding and enhancing Millennial museum visitors' experiences by integrating constructivism and experience economy theory. This approach provides a nuanced approach to capturing the interplay of educational, emotional, and participatory dimensions shaping their engagement with cultural institutions. The study is particularly relevant as Millennials, with their distinct preferences for interactive, meaningful, and socially conscious experiences, represent a crucial audience for museums and cultural institutions.

Relying solely on constructivism theory to study visitor experiences within museums overlooks the complex nature and dynamics of these encounters. While constructivism theory emphasizes the educational aspects of visitor experiences (Caban et al., 2000), it also encourages visitors to autonomously build their understanding without clear directives or established frameworks. Therefore, this approach can lead to confusion or disengagement, especially for those unfamiliar with the subject matter or lacking foundational knowledge, as actively constructing meaning from exhibits and artifacts can be challenging without adequate support (Liu & Matthews, 2005). Moreover, constructivism's focus on self-directed and inquiry-based learning presents challenges in accommodating visitors with diverse backgrounds, prior knowledge, and learning preferences (Phillips, 2007). Thus, while constructivism offers valuable insights into certain aspects of museum experiences, it alone falls short in capturing the complexity and diversity inherent in visitor engagements.

Experience economy is another prominent theory that sheds light on museum visitor experiences. Using only the lens of experience economy theory to examine museum visitor experiences poses certain limitations. Firstly, emphasizing marketable experiences over museum heritage's intrinsic cultural and educational values may lead to the commercialization and commodification of cultural assets (Radder & Han, 2015; Wang, 2022). Secondly, an experience economy perspective may prioritize entertaining and immersive experiences at the expense of the core mission of preserving, researching, and educating about cultural heritage and history (Mehmetoglu & Engen, 2011). This could result in superficiality, lack of authenticity, lack of critical engagement, and lack of meaningful learning experiences for visitors, as the theory places more emphasis on creating 'wow' moments and immersive

spectacled (Beverland & Farrelly, 2010).

Integrating both constructivist theory and experience economy theory is crucial for gaining a deeper understanding of the Millennial generation, characterized by distinct traits (Pencarelli et al., 2020). Millennials seek a blend of educational and entertaining experiences, prioritize experiences over material possessions, and demonstrate a strong social consciousness (Zhang & Abd Rahman, 2022). Millennials view museums as a centre of a wide range of artifacts, artworks, historical objects, scientific specimens, and cultural treasures from various civilizations to inspirational stories about people, places, and objects (Yousaf et al., 2018; Spainhour, 2019). Moreover, Millennials expect museum staff to share inspiring anecdotes and showcase magnificent artworks and artifacts (Burstein, 2013; Morton, 2002; Prajabti et al., 2022). Additionally, they value authenticity, diverse experiences, and inclusivity in museum settings (Bautista, 2013; Bordeaux, 2015; Polus & Carr, 2021; Schuch et al., 2018; Serena et al., 2023). By considering Millennials' unique characteristics, we aim to develop a framework that combines constructivism theory and experience economy theory.

Objective

The objective of this paper is to develop a comprehensive framework for understanding and enhancing Millennial museum visitors' experiences by integrating constructivism and experience economy theory.

Research Methodology

The paper employs a theory synthesis approach to develop a comprehensive framework for understanding Millennial generation visitors' experiences in museums. By integrating constructivism theory with experience economy theory, the research aims to create a unified framework that captures both the educational and experiential dimensions of museum visits. This theory synthesis paper aims to conceptually integrate two or more theoretical perspectives to consolidate current knowledge (Jaakkola, 2020; Miller & Salkind, 2002). We synthesized the ideas to relate new information with previous knowledge, creating a new understanding (Parker, 2024; Solanki et al., 2023).

We selected constructivism and experience economy theory based on their relevance and complementary nature for this framework development. Constructivism theory was chosen because it focuses on the idea that individuals construct knowledge through

their experiences and interactions with the world. This aligns well with the context of museums, which are designed to be educational spaces where visitors actively engage with exhibits and learn through exploration. Moreover, constructivism emphasizes active participation and personal engagement in the learning process. Museums are increasingly focusing on interactive and participatory exhibits, making constructivism a relevant framework for understanding how Millennials engage with and learn from museum experiences. Additionally, constructivist approaches are widely adopted in contemporary education, reflecting the learning preferences of Millennials, who often seek personalized, interactive, and experiential learning opportunities.

Experience economy theory was selected because it emphasizes the creation of memorable and transformative experiences, which is relevant to the design and delivery of engaging museum experiences for Millennials, who value unique and impactful experiences. Thus, we selected these two theories for our integration framework to understand how Millennials engage with museum exhibits, a holistic understanding of Millennial visitors' experiences in museums, and by incorporating principles from both theories, museums can create engaging, educational, and memorable experiences that attract and retain Millennial audiences.

To conduct this paper, we positioned ourselves as qualitative, interpretive, reflexive, and self-aware researchers (Savin-Baden & Major, 2010). We are nuanced writers who avoid simple opinions to acknowledge the phenomenon's complexity (Parker, 2024). We refrain from extreme positions (for example, claiming that constructivism is not a good theory for studying museum visitor experiences and vice versa). Instead, we aim to create a bridge by combining the two theories within existing perspectives.

Results and Discussion

To develop an integrated framework by fusing constructivism and experience economy theory to understand the Millennial generation's visitor experiences in museums, we followed the theory synthesis paper development stages. Firstly, we briefly synthesised the two theories, constructivism and experience economy. In this stage, we elaborated on the two theories' development, progress, significance, major essence, strong points, and critiques. Secondly, we detailed the key factors that must be taken into consideration when

developing the integrated framework into the visitor-driven and museum-driven paradigms. Finally, we showed the implications of the integrated framework in our study. The presentation of each theory, the considerable factors, and the implications of the integration have been clarified and summarised below.

The Integrative Framework – Synthesising Constructivism with Experience Economy Theory

This integrated framework combines insights from constructivism and experience economy theories tailored to the preferences, expectations, and traits of Millennial visitors. In the framework, the constructivism museum theory emphasizes active learning through interaction and exploration, intertwined with principles from the experience economy theory, which encompasses entertainment, education, escapism, and aesthetics (Figure 1).

In essence, constructivism is a theory of education that emphasizes learners as active participants in knowledge acquisition. It was initially coined by Jean Piaget (1896-1980), Lev Vygotsky (1896-1934) and John Dewey (1859-1952). Jean Piaget focused on the cognitive aspect of constructivism, postulating that an individual's subjective interpretation of their active experience determines how knowledge is constructed (Case, 1993; Piaget, 1971). Lev Vygotsky emphasised the social learning aspect of constructivism, confirming that knowledge is created via interaction with others and that human development is socially situated (Vygotsky, 1978). Lev Vygotsky thought that context, social setting, culture, and environment all have a big influence on how knowledge is constructed (Vygotsky, 1978). Dewey (1938) believed that learning should not be centred on memorization and repetition and promoted participation in real-world activities like role-plays and practical workshops (Vygotsky & Cole, 2018; Wortham, 1998). So, John Dewey is considered a cognitive constructivism theorist. Cognitive and constructivism are very much related. However, constructivism sees learning as a synthesis of human interaction and cognitive development, in contrast to the cognitive aspect of Piaget's constructivism, which sees learning as solely an internal, mental process (Gupta, 2011).

Constructivism, in the realm of heritage sites, emphasizes visitors' active engagement with various aspects of heritage, fostering learning and enriching experiences (Baradaran et al., 2022; Echegoyen-Sanz & Martín-Ezpeleta, 2020; Pekarik et al., 2014; Shalaginova,

2012). In museums, constructivism theory is further used by different authors in the study of museum education (Shalaginova, 2012). In constructivist museums, visitors are active participants in exhibitions, and socially engaging experiences encourage dialogue between visitors and museum staff (Falk & Dierking, 1992; Kelly, 2007; Trunfio et al., 2020).

According to the constructivist viewpoint, the museum acts as a constructivist learning centre. It concentrates on fundamental themes such as what theory of knowledge applies to the content of the exhibitions and how people learn at exhibitions. In constructivism principles, technology integration further complements visitors' active engagement with museum content. This reflects the evolving nature of museum experiences and offers insights into meeting the diverse needs and expectations of the Millennial generation (Drozda, 2021; Hughes & Moscardo, 2019; Morton, 2018; Schuch et al., 2018; Spainhour, 2019).

In parallel, experience economy theory emphasizes the creation of memorable and personalized experiences over intangible services, with experiences surpassing goods and services alone (Komarac & Ozretić Došen, 2022; Nowacki & Kruczek, 2021). This theory was initially developed by Pine and Gilmore in 1999. It delineates four experiential realms: entertainment, education, escapism, and aesthetics, asserting experiences as the primary currency of economic value for immersive and memorable experiences alongside products and services (Kozinets, 2022; Pine & Gilmore, 2011; Vrettakis et al., 2023; Vu et al., 2018). The experience economy is further expended in the service industry and museum studies (Mehmetoglu & Engen, 2011; Quadri & Fiore, 2012; Song et al., 2015). Researchers used experience economy theory to study museum visitors' experiences (Ledford, 2015; Lee et al., 2020; Radder & Han, 2015). The work of Radder and Han (2015) concluded that most visitors came to the museum as edutainment (education plus entertainment) travellers to three South African heritage museums. Ledford (2015) concluded that the applicability of the four experience economy realms at the Natural History Museum of Utah had a strong association with cognitive variables such as memory, arousal, perceived quality, and satisfaction. This theory provides insights into Millennials' preferences for immersive and memorable experiences beyond conventional museum visits, aligning with their inclination toward engagement, enjoyment, and novelty (Singh & Kumar, 2021; Skinner et al., 2018).

Key Considerable Factors in the Integration Process

Throughout the development process of this framework, we have recognized the importance of both visitor-driven and museum-driven factors in ensuring the framework's success. There are four visitor-driven factors: (1) duration of museum visits, (2) repetition of visitation to museums, (3) demand and trends in consumption for museum heritage collection, and (4) circulation pattern of the visitors. The three museum-driven factors are (1) localism in the learning process, (2) Visitors' psychological and behavioural development, and (3) heritage interpretation techniques. All these seven factors are taken into consideration in integrating the two theories because they determine the engagement of Millennials in museum education and entertainment experiences (Figure 1).

Visitor-driven Factors

(1) Duration of museum visits: The length of stay within the museum is the key factor determining visitor's educational and entertainment experiences. Ashworth (2008) assumed that "compared to other tourist sites, heritage site visitors stayed for a very short time" (p. 54). We extend his assumption to museum visitors: In a museum, an average stay is measured in minutes or, at most, hours (Brida et al., 2012; Pierdicca et al., 2019; Serrell, 2010). Millennials are known for their fast-paced lifestyles and often have limited time available for leisure activities, including museum visits (Kytani, 2020; Madara et al., 2018). Thus, during such a brief museum visit, can they truly learn about and understand the heritage, while also seeking to learn, be entertained, and comprehend the extensive history of the museum collection? (Rennie & Johnston, 2004). Understanding the duration and available time of Millennials while they are in museums is the most important determinant factor in integrating the two theories in shaping the educational and entertainment programs of the museum.

(2) Repetition of visitation to museums: Heritage managers often assume that the intrinsic cultural values reflected in artefacts and sites will encourage repeat visits (King et al., 2016). However, it is important to recognize that factors beyond cultural significance, such as accessibility and visitor experience, influence tourists' return decisions. As noted by Ashworth (2008) tourists often engage with heritage places repeatedly (p. 54). Visitation trends are fashionable and dependent upon a fickle and fashion-conscious market (Graham & Howard, 2016; Holtorf & Fairclough, 2013). Millennials often value experiences that are meaningful and culturally rich,

which determines the likelihood of their returning to heritage sites that offer not just cultural significance but also engaging and accessible experiences (Gwarlann & Carlos, 2019). Additionally, Millennials, like other visitors, appreciate heritage sites that offer ongoing engagement, interactive experiences, and opportunities for learning and exploration (Pencarelli et al., 2020). Moreover, Millennials want to see museums that adapt to changing current market trends, incorporate technology, and offer immersive experiences, providing settings for novel and engaging experiences (Radder & Han, 2015). Therefore, to consider the effectiveness of the Millennial generation's engagement in museums, it is important to understand whether they are first-time visitors or not, how they respond to visitation trends, and how they see the contemporary use of past heritage.

(3) Demand and trends in consumption for museum heritage collection: Over time and generations, the demand for museum heritage collections has changed dramatically (Bakker et al., 2020; Farrell & Medvedeva, 2010). In this dynamic socioeconomic and cultural environment, heritage is one aspect of culture, and the consumption of culture is demonstrably and rapidly growing in response to post-industrial, post-modern, consumerist changes in lifestyle (Ashworth, 2008; Goh & Teh, 2022). Therefore, understanding the Millennial generation's heritage consumption trends should be a key factor when integrating the two theories.

(4) Circulation patterns of visitors: The understanding and meaning-making process of visitors within the museum environment are influenced by several factors, including the active role visitors play, their circulation patterns, levels of engagement, and information-seeking behaviour. (Hornecker & Ciolfi, 2022; Serecko, 2020). As a demographic group characterized by unique preferences, values, and behaviours, Millennials have brought fresh perspectives and expectations to the museum experience (Mosher, 2015; Spainhour, 2019). Millennials are known for their desire to actively participate and engage with experiences rather than being passive consumers. They are inclined towards storytelling, personalization, and creating connections with the content they engage with (Spainhour, 2019). Thus, how Millennial visitors interpret exhibits, what elements they choose to engage with, and how their interactions contribute to their overall experience in the museum are key factors that determine visitors' engagement in the integration of constructivism and experience economy theory.

Museum-driven Factors

(1) Localism in the learning process: Heritage is inherently place-bound, pointed out by Ashworth (2010, p. 286) “Much, but not all, heritage is in this sense place-bound or could be made so.” Heritage is often deliberately used as an instrument for the construction or promotion of local place identities (Terzić et al., 2015). When individuals visit museums that showcase local heritage, it fosters a sense of connection and attachment to their immediate surroundings. This is because museums sometimes curate artefacts, stories, and histories that are specific to the local region. Therefore, we should consider how Millennials relate to and engage with local heritage based on their cultural identity and personal experiences in museums.

(2) Visitors’ psychological and behavioural development: The learning process within museums is crucial and needs to consider visitors’ psychological and behavioural development. Scholars often highlight that museums serve as educational hubs and entertainment destinations for visitors. However, many museums face systematic challenges, such as issues with chronologically or thematically displaying collections, which can exacerbate difficulties in addressing visitors’ motivation and may not fully align with their psychological needs (Ham, 2013). For instance, children aged 7 to 11 typically prefer activities that involve creating meaning, exploration, discovery, and fine motor

coordination. At the same time, those over 11 tend to learn more complex problem-solving and participatory activities during their museum visits (Ham, 2013). Millennials are social learners, not traditional linear thinkers, and hence emphasize interactions with others; They often seek entertainment in their leisure activities and experiences (Hughes & Moscardo, 2019; Morton, 2018; Schuch et al., 2018; Serena et al., 2023; Singh & Kumar, 2021). Given these considerations, it is essential to account for the psychological and behavioural development of each generation to meet their experiential needs effectively. Therefore, we regard this factor as a significant aspect in integrating constructivism theory and experience economy theory for studying Millennial visitors in museums.

(3) Heritage interpretation techniques: Within museum settings, heritage interpretation techniques serve as creative keys that unlock histories, allowing visitors to experience the world of the past and glimpse into the future (Beeksmas & De Cesari, 2019; Hooper, 2018). Museum heritage interpretation includes a blend of approaches that interweave knowledge and stories. It is not a one-size-fits-all undertaking; it encompasses demonstrations, presentations, guided tours, puppet shows, talks/storytelling, audio tours/podcasts, brochures, wall text, displays, DVDs/videos, interactive displays, augmented reality, virtual reality, and dioramas (Ambrose & Paine, 2012; Giannini & Bowen, 2022).

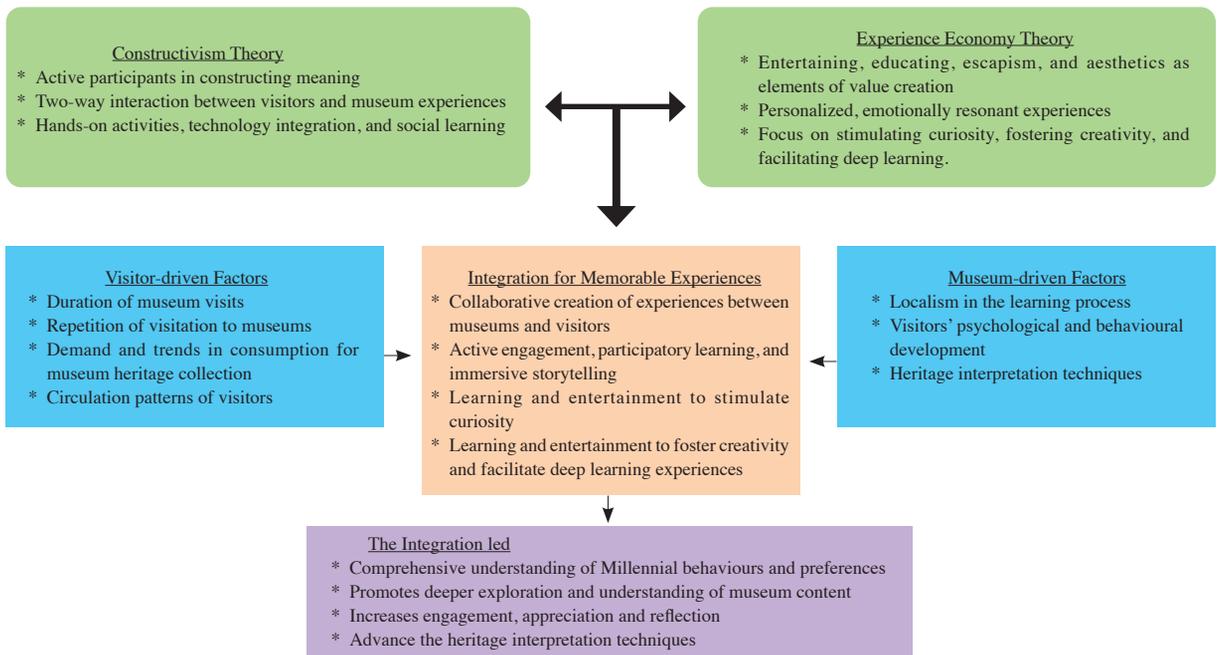


Figure 1 The Integrated Framework

In this sense, we believe that not all visitors can make contextual links with what they see on display without interpretative help. Hence, heritage interpretation tools are crucial in engaging visitors effectively in this process (Ahmed, 2022). Museum heritage interpretation techniques are a major consideration for educating and entertaining the Millennial generation in integrating constructivism and experience economy theory.

Implications of the integration

In this section, we further discuss the implications of integrating constructivism and experience economy theories into one framework (Figure 1). These are categorised into four areas:

(1) **Comprehensive understanding of Millennial behaviours and preferences:** The integration of constructivism and experience economy theories offers a comprehensive framework for understanding Millennial behaviours and preferences in museums. This generation has a range of interests, from social interactions, entertainment, art, and history to personal growth (Mosher, 2015; Schuch et al., 2018). In line with Millennials' inclination towards interactive experiences, constructivism emphasizes the visitor's active participation in knowledge construction. This is further strengthened by experience economy theory, which emphasizes unique and memorable experiences (Kozinets, 2022), appealing to Millennials' need for personalized experiences. Researchers and museum professionals can better understand the preferences of Millennials through this integration, which helps museums customize programs, exhibits, and communication strategies to increase visitor engagement.

(2) **Promote deeper exploration and understanding of museum content:** One of the key benefits of integrating constructivism and experience economy theories is promoting deeper exploration and understanding of museum content among Millennial visitors. Constructivism places a strong emphasis on active learning and life-long learning, inviting visitors to create their connections and interpretations of the displays (Mohammed & Kinyó, 2020). Constructivism also encourages critical thinking, curiosity, and a greater understanding of the historical and cultural significance of the objects and artworks on exhibit (Shalaginova, 2012). This is also supported by experience economy theory, which emphasizes the development of immersive, multimodal experiences that elicit strong feelings and improve memory (Lee et al., 2020). Museums can create memorable experiences that

promote prolonged engagement and significant learning outcomes by creating exhibits and programs that appeal to the senses and emotions of Millennials. By providing opportunities for personalization and social sharing, museums can create experiences that resonate with Millennials and inspire them to explore, learn, entertain, and reflect.

(3) **Increase engagement, appreciation, and reflection:** Meaningful and interactive experiences draw Millennials to explore museum content actively, fostering a deeper appreciation for culture and heritage. Building interpersonal relationships, emotional experiences, and opportunities for self-expression and introspection further enrich their museum visits. The integration promotes reflection, empathy, and critical thinking among Millennial visitors through dialogue-based tours, interactive exhibits, storytelling, and activities challenging preconceptions and encouraging personal connections. Both theories emphasize the importance of evaluation and feedback to improve experiences (Amineh et al., 2015; Komarac & Ozretić Došen, 2022; Sabljic & Oswald, 2013). Thus, museums can use data analytics, visitor surveys, and qualitative feedback to assess the effectiveness of combined constructivist-experience economy approaches and make informed decisions for future programming and design. Integrating these theories encourages museums to gather feedback from Millennial visitors and continuously improve. This way, museums empower Millennials as co-creators of knowledge, guiding their educational journey and contributing to a more informed and empathetic society through active participation, dialogue, and self-reflection. These collaborative efforts could contribute to their active engagements, participatory learning, and immersive storytelling.

(4) **Advance the heritage interpretation techniques:** Museums can inspire Millennial engagement with artefacts by applying constructivism theory, emphasizing personal interaction. This includes digital tech, participatory activities, interactive displays, and storytelling. Experience economy theory complements this by stressing engaging experiences using gamification, multisensory setups, augmented reality, virtual reality, and mixed reality (Weber, 2017). Both theories highlight relevance and personalization; museums use visitor data to customize experiences. Emotional connection and narrative are key, museums prompt empathy and curiosity through narratives, audiovisuals, and emotional cues (Cusripituck & Yamabhai, 2023; Kasperuniene &

Tandzegolskiene, 2020; Rodney, 2019). However, it is essential to ensure that all these technological integrations in museum visitors' experiences align with maintaining authentic experiences. Balancing the use of technology with preserving the authenticity of cultural heritage and providing meaningful learning opportunities is crucial in creating impactful and engaging museum experiences for Millennials because Millennials value authenticity and appreciate authentic representations of different cultures, histories, and identities.

Concluding Remark

This integrated framework aimed to combine constructivism museum theory and experience economy theory to study Millennial visitor experiences in museums. It offers fresh insights for creating exhibits that stimulate curiosity, foster learning, and entertain based on Millennial preferences. The developed framework identified key factors taking into consideration which are both visitor-driven and museum-driven. Duration of museum visits, repetition of visitation to museums, demand, and trends in consumption for museum heritage collection, and circulation pattern of the visitors were factors from the visitor driven. Museum-driven factors are localism in the learning process, visitors' psychological and behavioural development, and heritage interpretation techniques. The paper concluded that; the integration of the two theories will finally contribute to providing a comprehensive understanding of Millennial preferences, promoting deeper exploration, and understanding of museum content, increasing engagement, and improving the heritage interpretation techniques in the museums.

Moving forward, further research from tourism, museology, psychology, and marketing is needed to advance the framework as a holistic approach. Tourism professionals should study the motivations and behaviours of Millennials and develop strategies to attract them. Museologists should focus on exhibit design aligned with constructivism, create visitor-centred experiences for Millennials and curate collections to resonate with Millennial interests. Psychologists should focus their study on Millennials' emotional connections, perceptions, and motivations in collaboration with tourism, museology, and marketing experts. This integrated framework of constructivism theory and experience economy theory presented a promising approach to enhancing museum visitor experiences. This framework provides valuable insights to museums,

museum educators, curators, and guides to understand Millennials in the views of heritage, education in museums, and immersive and meaningful experiences. The framework will guide museums to tailor their exhibits, programs, and digital offerings to resonate better with Millennials' interests, values, and preferences.

Limitation of the Study

Even though the integration framework provides a comprehensive synthesis of two theories, it has certain limitations that we acknowledge. First, while the primary focus of this paper is theoretical synthesis, empirical data may be used to illustrate and support the new framework. Therefore, future researchers might collect empirical data to further validate the framework. Second, this integrated framework focuses on Millennials, potentially limiting its applicability to other generational cohorts such as Gen Z, Gen X, or Baby Boomers. Third, the framework does not account for cultural differences among Millennial visitors from diverse backgrounds, which significantly influence how individuals engage with and perceive museum experiences. Researchers and educators should consider these limitations when using the framework and explore further areas to better understand Millennials' visitor experiences in museums.

Competing interests

The authors declare no competing interest in financial and non-financial issues.

Ethical Approval

This article does not contain any studies with human participants (not applicable).

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References

- Ahmed, M. (2022). The Educational Function of Modern Museums. *IJNW*, 1(1), 43-56.
- Ambrose, T., & Paine, C. (2012). *Museum basics*. New York: Routledge.
- Amineh, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of social sciences, literature and languages*, 1(1), 9-16.
- Ashworth, G. J. (2008). How do tourists consume heritage places? In *Cultural heritage and tourism: potential, impact, partnership, and governance* (pp. 8-52). Vilnius: Ministry of Culture, Department of Cultural Heritage.
- Ashworth, G. J. (2010). Consuming heritage places: Revisiting established assumptions. *Tourism Recreation Research*, 35(3), 281-290.

- Bada, S. O., & Olusegun, S. (2015). Constructivism learning theory: A paradigm for teaching and learning. *IOSR Journal of Research and Method in Education*, 5(6), 66-70.
- Bakker, F. T., Antonelli, A., Clarke, J. A., Cook, J. A., Edwards, S. V., Ericson, P. G., ... & Källersjö, M. (2020). The Global Museum: natural history collections and the future of evolutionary science and public education. *PeerJ*, 8, e8225.
- Baradaran Rahimi, F., Boyd, J. E., Eisenman, J. R., Levy, R. M., & Kim, B. (2022). Museum beyond physical walls: An exploration of virtual reality-enhanced experience in an exhibition-like space. *Virtual Reality*, 26(4), 1471-1488.
- Bautista, S. S. (2013). *Museums in the digital age: changing meanings of place, community, and culture*. Lanham, MD: AltaMira Press.
- Beeksmas, A., & De Cesari, C. (2019). Participatory heritage in a gentrifying neighbourhood: Amsterdam's Van Eesteren Museum as affective space of negotiations. *International Journal of Heritage Studies*, 25(9), 974-991.
- Beverland, M. B., & Farrelly, F. J. (2010). The quest for authenticity in consumption: Consumers' purposive choice of authentic cues to shape experienced outcomes. *Journal of Consumer Research*, 36(5), 838-856.
- Bordeaux, S. (2015). *A Place at the Table: The Role of Historic Sites in Gentrifying Neighborhoods. Our Stories: Shaw through the 1970s* (Doctoral dissertation). The George Washington University.
- Brida, J. G., Statzu, V., Meleddu, M., & Pulina, M. (2012). How much time do visitors spend on a cultural site? An empirical investigation. Retrieved May 18, 2018, from <https://ssrn.com/abstract=1998272>
- Burstein, D. D. (2013). *Fast Future: How the Millennial generation is shaping our world*. MA: Beacon Press.
- Caban, G., Scott, C., & Sweieca, R. (2000). Design learning in museum settings: towards a strategy for enhancing creative learning among design students. *Unsavory Histories. Open Museum Journal*, 2, 1-9.
- Case, R. (1993). Theories of learning and theories of development. *Educational Psychologist*, 28(3), 219-233.
- Choudhary, P., & Walia, S. (2021). Role of gender difference in travel decision-making style of Millennials. *International journal of hospitality and tourism systems*, 14(1), 79.
- Cusripituck, P., & Yamabhai, J. (2023). Mobilizing the (im) mobile museum through hybrid curation: A story of hybrid curation of cultural practice during the COVID-19 pandemic. *Advances in Southeast Asian Studies*, 16(1), 145-155.
- Dewey, J. (1938). *Experience and education*. New York: Macmillan.
- Drozda, S. G. (2021). *Creating the experience: Engaging Millennials in museums focusing on Jewish Millennials and museums*.
- Ebitz, D. (2008). Sufficient foundation: Theory in the practice of art museum education. *Visual Arts Research*, 34(2), 14-24.
- Echegoyen-Sanz, Y., & Martín-Ezpeleta, A. (2020). The Exhibition is Just the Beginning. Qualitative Analysis of Creative Educational Materials Prepared by Pre-Service Teachers. *Journal of Education, Culture and Society*, 11(2), 297-310.
- Falk, J. H. (2016). *Identity and the museum visitor experience*. New York: Routledge.
- Falk, J. H., & Dierking, L. D. (1992). *The Museum Experience*. New York: Routledge.
- Farrell, B., & Medvedeva, M. (2010). *Demographic transformation and the future of museums*.
- Galdames, S., & Guihen, L. (2022). Millennials and leadership: a systematic literature review. *Total Quality Management and Business Excellence*, 33(1-2), 146-162.
- Giannini, T., & Bowen, J. P. (2022). Museums and Digital Culture: From reality to digitality in the age of COVID-19. *Heritage*, 5(1), 192-214.
- Goh, Y. S., & Teh, P. Y. (2022). Festivals and the theory of inclusive development in Malaysia: Perspectives from a festival organizer. *ASEAS-Advances in Southeast Asian Studies*, 15(2), 295-307.
- Graham, B., & Howard, P. (2016). Heritage and identity. In *The Routledge Research Companion to Heritage and Identity* (pp. 1-15). New York: Routledge.
- Gupta, S. (2011). Constructivism as a paradigm for teaching and learning. *International Journal of Physical and Social Sciences*, 1(1), 23-47.
- Gwarlann D. K., & Carlos M. Rodriguez (2019). Luxury brand experiences and relationship quality for Millennials: The role of self-expansion. *Journal of Business Research*, 102, 250-262.
- Haden, C. A., Cohen, T., Uttal, D., Marcus, M., Sobel, D. M., & Jipson, J. J. (2016). *Cognitive development in museum settings: Relating research and practice*.
- Ham, S.H. (2013). *Interpretation: Making a Difference on Purpose*. Colorado: Fulcrum Publishing.
- Holtorf, C., & Fairclough, G. (2013). The New Heritage and re-shapings of the past. In *Reclaiming Archaeology* (pp. 197-210). New York: Routledge.
- Hooper, G. (Ed.). (2018). *Heritage at the interface: Interpretation and identity*. Florida: University Press of Florida.
- Hornecker, E., & Ciolfi, L. (2022). *Human-computer interactions in museums*. Switzerland: Springer Nature.
- Hughes, K., & Moscardo, G. (2019). For me or not for me? Exploring young adults' museum representations. *Leisure Sciences*, 41(6), 516-534.
- Jaakkola, E. (2020). Designing conceptual articles: four approaches. *AMS review*, 10(1), 18-26.
- Kang, M., & Gretzel, U. (2012). Effects of podcast tours on tourist experiences in a national park. *Tourism Management*, 33(2), 440-455.
- Kasperuniene, J., & Tandzegolskiene, I. (2020). Smart learning environments in a contemporary museum: a case study. *Journal of Education Culture and Society*, 11(2), 353-375.
- Kelly, L. J. (2007). *The Interrelationships between adult*

- museum visitors' learning identities and their museum experiences* (Doctoral dissertation). The University of Technology, Sydney, Australia
- King, E., Smith, M. P., Wilson, P. F., Stott, J., & Williams, M. A. (2023). Creating Meaningful Museums: A Model for Museum Exhibition User Experience. *Visitor Studies*, 26(1), 59-81.
- King, L., Stark, J. F., & Cooke, P. (2016). Experiencing the digital world: The cultural value of digital engagement with heritage. *Heritage and Society*, 9(1), 76-101.
- Komarac, T., & Ozretić Došen, Đ. (2022). Discovering the determinants of museum visitors' immersion into the experience: The impact of interactivity, expectations, and scepticism. *Current Issues in Tourism*, 25(22), 3675-3693.
- Kozinets, R. V. (2022). Immersive ethnography: a novel method for service experience research in virtual reality, augmented reality and metaverse contexts. *Journal of Service Management*, 34(1), 100-125.
- Kytani, T. (2020). Audience Engagement in Contemporary Museum Practices (Master's thesis). International Hellenic University, Greece.
- Latham, K. F. (2016). Psychological flow and the numinous museum experience. *Ann Arbor*, 1001, 48109-1354.
- Ledford, A. K. (2015). *Applying the experience economy framework to better understand the visitor experience at the Natural History Museum of Utah* (Master's thesis). The University of Utah, USA.
- Lee, H., Jung, T. H., tom Dieck, M. C., & Chung, N. (2020). Experiencing immersive virtual reality in museums. *Information and Management*, 57(5), 103229.
- Liu, C. H., & Matthews, R. (2005). Vygotsky's Philosophy: Constructivism and Its Criticisms Examined. *International education journal*, 6(3), 386-399.
- Madara, S. R., Maheshwari, P., & Selvan, C. P. (2018, February). Future of millennial generations: A review. In *2018 Advances in Science and Engineering Technology International Conferences (ASET)* (pp. 1-4). IEEE.
- Mehmetoglu, M., & Engen, M. (2011). Pine and Gilmore's concept of the experience economy and its dimensions : An empirical examination in tourism. *Journal of Quality Assurance in Hospitality and Tourism*, 12(4), 237-255.
- Miller, D. C., & Salkind, N. J. (2002). *Handbook of research design and social measurement*. Thousand Oaks: Sage.
- Mohammed, S., & Kinyó, L. (2020). Constructivist theory is a foundation for the utilization of digital technology in the lifelong learning process. *Turkish Online Journal of Distance Education*, 21(4), 90-109.
- Morton I. (2018). Engaging millennials in the historic house museum. Retrieved May 18, 2018, from https://scholar.harvard.edu/files/ilianamorton/files/muse_102-iliana_morton-final_paper-copy.pdf
- Morton, L.P. (2002). Targeting Generation Y. *Public Relations Quarterly*, 47(2), 46-48.
- Mosher, A. (2015). *Redesigning the Museum: Participatory Art and the Importance of Millennial Engagement* (Doctoral dissertation). The George Washington University, USA.
- Nigatu, T. F., Trupp, A., & Teh, P. Y. (2024). A Bibliometric Analysis of Museum Visitors' Experiences Research. *Heritage*, 7(10), 5495-5520.
- Nowacki, M., & Kruczek, Z. (2021). Experience marketing at Polish museums and visitor attractions: The co-creation of visitor experiences, emotions and satisfaction. *Museum Management and Curatorship*, 36(1), 62-81.
- Olinsky, E.F. (2016). *Olinsky's hierarchy of visitor's need*. Retrieved July 30, 2024 from leolinsky.com/maslow-in-museums
- Pallud, J. (2017). Impact of interactive technologies on stimulating learning experiences in a museum. *Information and Management*, 54(4), 465-478.
- Parker D. (2024). How to write a synthesis essay: your guide from start to finish. Retrieved July 30, 2024, from essaypro.com/blog/synthesis-essay
- Pekarik, A. J., & Mogel, B. (2010). Ideas, Objects, or People? A Smithsonian Exhibition Team Views Visitors Anew. *Curator: The Museum Journal*, 53(4), 465-482.
- Pekarik, A. J., Schreiber, J. B., Hanemann, N., Richmond, K. A., & Mogel, B. (2014). IPOP: A Theory of Experience Preference. *Curator: The Museum Journal*, 57(1), 5-27.
- Pencarelli, T., Gabbianelli, L., & Savelli, E. (2020). The tourist experience in the digital era: the case of Italian Millennials. *Sinergie Italian Journal of Management*, 38(3), 165-190.
- Phillips, A. B. (2007). Constructivism. In *International Relations Theory for the twenty-first century* (pp. 60-74). New York: Routledge.
- Piaget, J. (1971). *The construction of reality in the child*. New York: Ballantine Books.
- Pierdicca, R., Marques-Pita, M., Paolanti, M., & Malinverni, E. S. (2019). IoT and engagement in the ubiquitous museum. *Sensors*, 19(6), 1387.
- Pine, B. J., & Gilmore, J. H. (2011). *The experience economy*. Cambridge, MA: Harvard Business Press.
- Polus, R., & Carr, N. (2021). From Gen Xers to Millennials: Transformation of self through tourism. In *Millennials, spirituality, and tourism* (pp. 201-215). New York: Routledge.
- Prajabti, A., Kien, X. H. D., & Ridho, M. R. (2022). Hedonism in the young generation: The challenge of Pancasila moral education. *Jurnal Panjar: Pengabdian Bidang Pembelajaran*, 4(2), 141-158.
- Quadri F., D., & Fiore, A. M. (2012). Experience economy constructs as a framework for understanding wine tourism. *Journal of Vacation Marketing*, 18(1), 3-15.
- Radder, L., & Han, X. (2015). An examination of the museum experience based on Pine and Gilmore's experience economy realms. *Journal of Applied Business Research (JABR)*, 31(2), 455-470.

- Rennie, L. J., & Johnston, D. J. (2004). The nature of learning and its implications for research on learning from museums. *Science Education*, 88(S1), S4-S16.
- Rodney, S. (2019). *The personalization of the museum visit: Art museums, discourse, and visitors*. New York: Routledge.
- Sabljić, J., & Oswald, T. V. (2013). Genre differentiation in A Guided Tour through the Museum of Communism by Slavenka Drakulić. *Journal of Education, Culture and Society*, 4(1), 243-256.
- Savin-Baden, M., & Major, C. H. (Eds.). (2010). *New approaches to qualitative research: Wisdom and uncertainty*. New York: Routledge.
- Schuch, J. C., Harden, S. B., Bostick, K., & Smith, H. A. (2018). Museums engaging diverse Millennials in community dialogue. *Museums and Social Issues*, 13(2), 58-77.
- Selçuk, O., & Kozak, M. A. (2020). Capturing Museum Experience with Emotional Transfer Theory. *Advances in Hospitality and Tourism Research (AHTR)*, 8(1), 100-124.
- Seredko, A. (2020). *Moving Between Levels of Engagement with Interactive Digital Exhibits. Case study: Human Nature Exhibition at the Museum of World Culture* (master's Thesis, University of Gothenburg, Sweden).
- Serena, C., Ottavia, D. A., Angelica, M., Martina, F., Raimondo, V., Stefano, M., ... & Del Viva, M. M. (2023). Psychophysiological and behavioural responses to descriptive labels in modern art museums. *PLOS ONE*, 1-17.
- Serrell, B. (1996). The question of visitor styles. *Visitor studies: Theory, research, and practice*, 7(1), 48-53.
- Serrell, B. (2010). Paying attention: The duration and allocation of visitors' time in museum exhibitions. *Curator: The Museum Journal*, 40(2), 108-125.
- Shalaginova, I. (2012). *Understanding heritage: A constructivist approach to heritage interpretation as a mechanism for understanding heritage sites* (Doctoral dissertation). BTU Cottbus-Senftenberg, Germany.
- Singh, A., & Kumar, A. (2021). Designing the marketspace for millennials: fun, functionality, or risk? *Journal of Marketing Analytics*, 9(4), 311-327.
- Skinner, H., Sarpong, D., & White, G. R. (2018). Meeting the needs of the Millennials and Generation Z: gamification in tourism through geocaching. *Journal of Tourism Futures*, 4(1), 93-104.
- Solanki V., Madison E. & Brooks A. (2023). *Synthesis writing overview, purpose and examples*. Retrieved July 30, 2024 from <https://study.com/academy/lesson/how-to-synthesize-written-information.html>.
- Song, H. J., Lee, C. K., Park, J. A., Hwang, Y. H., & Reisinger, Y. (2015). The influence of tourist experience on perceived value and satisfaction with temple stays: The experience economy theory. *Journal of Travel and Tourism Marketing*, 32(4), 401-415.
- Spainhour, J. (2019). *Museums and millennials: Engaging the coveted patron generation*. Lanham, MD: Rowman and Littlefield.
- Terzić, A., Bjeljic, Ž., & Ćurčić, N. (2015). Common histories constructed identities: Intangible cultural heritage and the rebranding of Serbia. *International Journal of Intangible Heritage*, 10, 102-120.
- Trunfio, M., Campana, S., & Magnelli, A. (2020). Measuring the impact of functional and experiential mixed reality elements on a museum visit. *Current Issues in Tourism*, 23(16), 1990-2008.
- Umiker-Sebeok, J. (1994). Behavior in a museum: A semio-cognitive approach to museum consumption experiences. *Signifying Behavior*, 1(1), 52-100.
- Valecha, P., & Jaggi, R. K. (2023). How Do Indian Millennials Perceive Advertising on Ott Platforms—Measuring Ad Value and Effectiveness Through Structural Equation Modelling. *Journal of Content, Community & Communication*, 18, 234-249.
- Vrettakis, E., Katifori, A., Kyriakidi, M., Koukouli, M., Boile, M., Glenis, A., Petousi, D., Vayanou, M., & Ioannidis, Y. (2023). Personalization in Digital Ecomuseums: The Case of Pros-Eleusis. *Applied Sciences (Switzerland)*, 13(6), 1-26.
- Vu, H. Q., Luo, J. M., Ye, B. H., Li, G., & Law, R. (2018). Evaluating museum visitor experiences based on user-generated travel photos. *Journal of Travel and Tourism Marketing*, 35(4), 493-506.
- Vygotsky, L. S. (1978). *Mind in society: Development of higher psychological processes*. Cambridge, MA: Harvard University Press.
- Vygotsky, L., & Cole, M. (2018). Lev Vygotsky: Learning and social constructivism. *Learning Theories for Early Years Practice*. UK: SAGE Publications Inc, 68-73.
- Wang, Y. (2022). Intangible cultural heritage as a catalyst for constructing private museums. *Museum International*, 74(1-2), 144-157.
- Weber, J. (2017). *Designing engaging experiences with location-based augmented reality games for urban tourism environments* (Doctoral dissertation). Bournemouth University, UK.
- Wortham, S. (1998). The Collected Works of L.S. Vygotsky, vols. 3-4. *American Scientist*, 86(3), 296.
- Ying, T., Tan, X., Ye, S., Ka, X., & Zhou, Y. (2020). Examining tourist mindfulness in museums: The roles of familiarity and motivation. *Asia Pacific Journal of Tourism Research*, 25(9), 981-996.
- Yousaf, A., Amin, I., & C Santos, J. A. (2018). Tourist's motivations to travel: A theoretical perspective on the existing literature. *Tourism and hospitality management*, 24(1), 197-211.
- Zhang, R., & Abd Rahman, A. (2022). Dive into the flow experience: millennials are tech-savvy, satisfied, and loyal to the smart museum. *Current Issues in Tourism*, 25(22), 3694-3708.