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Modeling the effects of place heritage and place experience on residents' behavioral intentions toward a city: A mediation analysis

Fanny Magnoni*

Aix-Marseille Université, CERGAM, IAE, 13089 Aix-en-Provence, France

fanny.magnoni@iae-aix.com

+33(0)6 22 60 28 70

Pierre Valette-Florence

Université Grenoble-Alpes, Grenoble IAE, CERAG EA 7521, 38000 Grenoble, France

pvalette@grenoble-iae.fr

Virginie De Barnier

Aix-Marseille Univ, CERGAM, IAE, 13089 Aix-en-Provence, France

virginie.de-barnier@iae-aix.com

*Corresponding author

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Abstract

Based on branding and place branding frameworks, we build a comprehensive model which allows the unraveling of the mechanism by which behavioral intentions toward a place brand are formed. Two serial mediation hypotheses are proposed and tested from the perspective of (prospective) residents. Conducted on a sample of residents of a French city (N=571), this study shows that place brand heritage and place brand experience positively influence place brand equity, which in turn positively influences place attachment. Place attachment then influences residents' behavioral intentions toward the city. Thanks to a Bayesian assessment of the uncertainty and plausibility of competing mediation models, the results also validate our more parsimonious relationships network, hence reinforcing the mediating role of both place brand equity and place attachment. Our findings also provide local governments and city brand managers with recommendations regarding how to maintain and enhance relationships with residents.

Keywords: behavioral intentions, place brand, residents, serial mediations, comprehensive model.

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1. Introduction

For several years now, the branding of places and cities has been gaining popularity with city officials, as shown by the creation of city brand rankings such as the Anholt-GMI City Brands Index (Anholt, 2006). From a managerial perspective, place branding is of prime importance. Indeed, due to increasing competition issues, cities are trying to establish themselves as brands (Braun, 2008; Zenker & Martin, 2011), while city managers work on designing and managing those brands (Merrilees et al., 2012). Places and cities hence use branding as a tool for achieving attractive positions and positive perceptions in the minds of key audiences (Ashworth & Kavaratzis, 2009). The objectives are to generate wealth, enhance inward investment and tourism, and develop a sense of community by strengthening local identity (Kavaratzis, 2007).

City branding is a subfield of place branding that focuses on branding cities to (prospective) residents, tourists, and investors as a place in which to live and invest (Merrilees et al., 2009). Residents are often ignored in city branding practices, despite studies highlighting their importance (Oguztimur & Akturan, 2016). Losing residents means that cities and local authorities cannot request governmental resources (financial and urban services) or private investments, which in turn makes it difficult to obtain development funds (Sadeque et al., 2019). Their actions are vital for sustainable tourism, especially in small and medium-sized cities strongly dependent on tourism for their economic viability (Uchinaka et al., 2019). Residents' behaviors influence tourists' travel experiences, from information search to tourism product consumption (Zenker et al., 2017). Residents' involvement in tourism development is a determining factor in city branding because of increasing person-to-person interactions in tourism activity (Chen & Dwyer, 2018). For those reasons, understanding how cities can attract new residents, as well as retain and engage existing ones, is of major interest.

In this paper, we integrate product branding and place branding frameworks to build and test a comprehensive model that allows us to unravel the mechanism by which behavioral intentions toward a place brand are formed. We study that mechanism from the perspective of (prospective) residents.

A gap exists between the increasing importance of residents' place-related behaviors and the research effort. The relationship between place attachment and residents' behaviors is now well established in the literature on place branding (e.g., Braun et al., 2013; Chen et al., 2014; Choo et al., 2011; Daryanto & Song, 2021; Styven et al., 2020; Taecharungroj, 2016; Zenker & Petersen, 2014; Zenker & Rütter, 2014). Place attachment has attracted increasing attention from researchers and practitioners due to its potential for interpreting and predicting behaviors. Focusing on the phenomenon of "human–place bonding," place attachment has developed into a multidimensional concept that encompasses affect and emotions, knowledge and beliefs, and behaviors (Kyle et al., 2005). Nevertheless, little is known about how to create place attachment among residents.

Indeed, there is a need for more detailed studies of the antecedents of residents' behaviors (Chen & Dwyer, 2018). Previous research has focused mostly on visitors, with very few studies investigating other place-related concepts, such as place brand experience or place brand equity, from the perspective of (prospective) residents linking them to place attachment and residents' behaviors. For example, a Beckman et al. (2013) study empirically investigates place brand experiences that influence place attachment and positive outcomes (word of mouth and revisit intention) for residents and tourists. Research by Manyiwa et al. (2018) shows that city brand image influences attachment to the city for both the residents and visitors. However, little is known about the interrelationships between those concepts and, more precisely, about the causal mechanisms that induce residents' favorable behavioral intentions toward a place of living. Consequently, there is a strong need to develop and test integrated models encompassing resident-focused concepts.

In this study, we seek to close the above research gap and contribute to the existing literature. Our contribution is threefold. First, we draw on product branding and place branding concepts, and social identity theory (Tajfel & Turner, 1979), to propose an integrated model that considers place brand heritage and place brand experience as independent variables, and place brand equity and place attachment as mediating variables able to generate residents' place-related behavioral intentions (i.e., brand-building behavioral intentions). With a sample of 571 (prospective) residents of a French city, we empirically test new relationships in place branding and confirm others previously observed in this research field.

Second, this research is one of the first to test a serial mediation model to explain the causal mechanisms that induce residents' favorable behavioral intentions toward a city. We examine through mediational relationships a three-stage process: place brand heritage and place brand experience increase place brand equity, which in turn enhances place attachment, which then influences brand-building behavioral intentions. In addition, we rely on recent methodological developments allowing competing models to be compared. We assess the uncertainty and plausibility of competing models to identify the best mediational model. We prove the usefulness of such an investigation for delineating a more parsimonious and sound research model.

Finally, we reveal managerial implications for city brands management, propose communication actions for activating place brand heritage, and develop methods of enhancing place brand experience. Our results contribute to helping local governments and city brand managers to optimize the value of places of living, and to the understanding of how to develop strong place attachment so as to induce residents' favorable behavioral intentions toward their city.

This paper is structured as follows. The first section reviews the literature and introduces the conceptual model and research hypotheses. The second section explains the empirical study

methodology. The third section presents the results, with the fourth discussing the implications, limits, and directions for future research.

2. Conceptual model and hypotheses

Section 2.1 presents two antecedents that should lead to behavioral intentions toward the city people want to live in, including the behavioral intentions toward the city selected for this research. Section 2.2. examines the mechanism by which behavioral intentions are formed by proposing mediation hypotheses. Figure 1 presents our conceptual model and hypotheses.

[Insert Figure 1 around here]

2.1. Antecedents of behavioral intentions toward a place of living

We rely on the literature on branding and place marketing to identify two independent variables particularly relevant in city branding for (prospective) residents: place brand heritage and experiences related to the place brand.

2.1.1. Place brand heritage

Brand heritage refers to a representation of the past related to the brand's identity. Urde et al. (2007) define it from an internal perspective as a resource that can be activated and protected using identifiable characteristics that demonstrate the salience of brand heritage for companies (symbols, logos, etc.). From an external perspective, brand heritage is considered a set of brand associations based on historical references (Balmer & Burghausen, 2015). The literature on corporate and product branding identifies heritage as a temporal concept that presents specific characteristics such as omnitemporality (brands exist in the past, present, and future), consistency of institutional traits (invariance of corporate traits over time), or intergenerational continuity (brand longevity) (Balmer, 2013; Rose et al., 2016).

Principles of heritage can be applied to the marketing of places. Most places and cities have a long historical and cultural legacy. Histories and symbols associated with places can be used as signals that a place is a great location to live (Wilson, 2018). Logos and slogans can be used in a place heritage branding strategy to increase the effectiveness of territorial and cultural symbols that deliver familiarity, recognition, and affect (Wilson, 2018). Hakala et al. (2015) show the importance of a place's name as the carrier of identity and heritage from the residents' perspective. Places possess fundamental characteristics of corporate heritage: a place exists in the past, present, and future; a place has consistent and relevant traits, and has existed for at least fifty years; a place is infused with several identities (territorial, cultural, social, and ancestral); nurtures and maintains place traits through communications managed by private/public organizations; and a place guarantees that those traits meet the expectations of successive generations of stakeholders (Wilson, 2018).

Local residents are important co-creators of heritage (Fredholm & Holsson, 2018). Places have a history of their own and heritage plays a fundamental role in constructing the identity both of the place and its people (Fredholm & Holsson, 2018; Hakala et al., 2015; Wilson, 2018). We argue that places with a distinctive and strong heritage are perceived as more valuable and allow (prospective) residents to shape their own identity more easily.

2.1.2. Place brand experience

Brand experience is defined as "subjective, internal consumer responses (sensations, feelings, and cognitions), and behavioral responses evoked by brand-related stimuli that are part of a brand's design identity, packaging, communications, and environments" (Brakus et al., 2009, p. 53). Based on the five experiences identified by Schmitt (1999), namely sense, feel, think, act, and relate, Brakus et al. (2009) propose four dimensions of brand experience: affective, behavioral, sensory, and intellectual. Brand experiences generate lasting emotional impressions which can differ in terms of strength, intensity, and valence (positive and negative brand

experiences). Strong and memorable brand experiences produce many benefits for companies, such as higher satisfaction, loyalty, brand relationships, and brand equity (e.g., Brakus et al., 2009; Iglesias et al., 2011; Iglesias et al., 2019; Lin, 2015).

Brand experiences also relate to place brands. Creating positive brand experiences is a major concern for place brand managers. People interact with place brands and can live pleasurable experiences that generate value for the place and place attachment (Lindstedt, 2011). Beckman et al. (2013) consider residents and tourists in examining the effect of brand experiences on downtown success. They apply the Brakus et al. (2009) four dimensions of brand experience to a downtown brand. Their results show that brand experience dimensions influence place attachment (place dependence), which in turn influences positive outcomes (word of mouth and revisit intention) differently for residents and tourists.

Place brand experience may also play an important role in this research, since we focus on residents who are already familiar with the city due to prior real experiences of it. The residents live there and have detailed firsthand knowledge of the city (Zenker et al., 2017), thus influencing their place brand experience. In addition, residents are a vital part of forming the place brand by constituting a part of the brand experience (Braun et al., 2013), as place experience is co-created prior to, during, and after actual exchange(s) and use(s).

2.1.3. Behavioral intentions toward the city

Brand-building behavioral intentions in relation to the place are examined as the dependent variable in this research. The three dimensions we select as relevant for residents were also used by Chen and Dwyer (2018): word of mouth, leaving intention, and ambassador behaviors. Ambassador behaviors refer to residents' behaviors consistent with the image and values of the place, such as dress codes, manners, etc., as well as behaviors that satisfy tourists' needs in the tourism-specific context (Choo et al., 2011). Those behaviors are linked to social conformity.

2.2. Mediation hypotheses

2.2.1. Mediating variables: place brand equity and place attachment

Place brand equity and place attachment are the two core mediating variables in our conceptual model (see Fig. 1), since those two constructs are probably the most important in both the branding and place branding literature, and well known for their strong potential for predicting behaviors. Those two constructs are defined in this section.

First, brand equity allows the capture of the complexity of place brands, as it encompasses multiple facets of place performance and value. Place brand equity is studied in a few papers through the concept of brand image (Brandt & de Mortanges, 2011; Zenker et al., 2009). For instance, Zenker (2014) proposes a method of evaluating city brand image based on brand associations, as an important constituent of place brand equity. Zenker et al. (2009) examine the city image dimensions for talents and people's willingness to sacrifice, for example, annual salary for their preferred choice. From an investor perspective, Papadopoulos and Heslop (2012) also introduce the idea of country brand equity for investors (foreign direct investment), and Jacobsen (2009) proposes drivers for investor-based place brand equity.

In addition, some research has proposed conceptualizations of place brand equity based mainly on the works of Aaker (1996) and Keller (1993). From the investment attractiveness perspective, Bose et al. (2016) propose four dimensions for place brand equity: awareness, image, perceived quality, and loyalty. In the context of international relations (public diplomacy) between two places, Bose et al. (2018) identify three dimensions for place brand equity: salience (awareness and image), perceived quality, and engagement (loyalty). That model closely resembles the Yoo and Donthu (2001) model. Other studies evaluate place brand equity for a tourist destination (Konecnik & Gartner, 2007; Konecnik, 2010; Yuwo et al., 2013), but they all consider four dimensions: awareness, image, quality, and loyalty.

Nonetheless, little is known about place brand equity from the residents' perspective (Zenker & Martin, 2011). Kemp et al. (2012) highlight that when city residents trust and are committed to a unique brand (city), they may form such strong connections with it that it is reflected in their self-concept. Shafranskaya and Potapov (2014) show that city quality is a driver of city brand equity for residents, to the extent that the authors advance the idea that city branding is the signal that communicates city quality. The signal's credibility creates city brand equity. The literature on place branding highlights the need for place brand equity to be more thoroughly examined from the residents' perspective and integrated into a comprehensive model.

Second, the concept of attachment is widely used to analyze people–place relationships in the context of place branding. Several definitions of place attachment exist (Lewicka, 2011). Research into such attachment is increasing and draws on developmental theory (Morgan, 2010), which refers to a developmental model of the process by which place attachment emerges from childhood place experience. For Morgan (2010), place attachment is a developmental process whereby experiences in a place are internalized at an unconscious level and subjectively lead to place attachment, which comes from both social interactions and environmental evaluations, thus implying a bond between the brand and the self. Two dimensions of place attachment were initially proposed and widely accepted: place identity and place dependence. Recent research suggests two other dimensions to accommodate social, purely emotional, or symbolic components in the people–place relationship (Kyle et al., 2005): social bonding and affective attachment.

In line with the literature on place branding, including the classification proposed by Chen and Dwyer (2018), our research considers two dimensions of place attachment. The first is affective attachment, which reflects the purely affective aspects of place attachment and refers to an affective bond to a specific geographical area, and the meaning attributed to that bond. The second is place identity (or place identification) that encompasses the cognitive aspects of place attachment. Place identity is a subcategory of an individual's self-identity linked to the physical environment and "a self-categorization in terms of place" which reflects both sameness

(continuity) and distinctiveness (uniqueness) (Lewicka, 2008). Place identity is an outcome of a cognitive justification process (Rose 1995). In that way, this research takes into consideration both affective and cognitive aspects of place attachment.

2.2.2. Serial mediation hypotheses

Our research suggests that place brand equity and place attachment are two mediators which induce a three-stage process: place brand heritage and place brand experience increase place brand equity, which in turn enhances place attachment, which then influences brand-building behavioral intentions. Two serial mediation hypotheses (H1 and H2) are hence advanced (Figure 1).

First, some empirical studies in branding show that brand heritage has a positive influence on brand equity (Rose et al., 2016; Pecot et al., 2018). For example, Pecot et al. (2018) integrate brand heritage into the model of brand equity. Their results indicate that brand heritage enhances brand credibility, perceived brand quality, and commands a price premium. To our knowledge, that effect has never been empirically tested in the context of place branding, but we predict that, for (prospective) residents, heritage also confers a meaningful and distinctive identity to the place that will generate added value and enhanced brand equity for that place. In other words, place brand heritage should improve place brand equity.

Place brand equity should enhance place attachment. Consistent with the place branding literature, place attachment is regarded in this research as a separate concept to place brand equity. To our knowledge, place attachment, with its numerous dimensions, has never been conceptualized as a component of place brand equity (with awareness, image, quality, and loyalty as main components), only as a consequence of it. Indeed, associations stemming from the qualitative dimension of brand equity nourish attachment. Those associations draw on symbolic benefits and a sense of affiliation with the (place) brand that produce (place) attachment. Moreover, affective attachment and place identity are both outcomes of the cognitive justification

process based on comparisons and evaluations. Proshansky et al. (1983) note that place identity results from a complex cognitive process influenced by attitudes, values, thoughts, beliefs, meanings, and behaviors. In addition, several studies have identified and tested drivers of place attachment, such as place image (Chen & Phou, 2013; Fan & Qiu, 2014; Manyiwa et al., 2018; Strandberg et al., 2020), service quality (Su et al., 2011), and place attractiveness (Cheng et al., 2013; Hou et al., 2005); all those antecedents can be viewed as dimensions of, or proxies for, place brand equity. Consequently, we expect that place brand equity will enhance place attachment.

Finally, we predict that place attachment influences behavioral intentions toward the place. That relationship is well established in the place branding literature. Based on the study by Morhart et al. (2009), Chen and Dwyer (2018) analyze the influence of place attachment and place satisfaction on brand-building behaviors (ambassador behaviors, intention to stay or leave, and word of mouth). Their results show that place satisfaction strongly influences residents' intentions to stay or leave, whereas place attachment more strongly affects residents' word of mouth and ambassador behaviors. Other studies also report that word of mouth about a place is positively influenced by place attachment and residents identifying with their place of living (Chen et al., 2014; Choo et al., 2011). Such residents are more likely to participate in activities and decision-making processes about their place of living, and become ambassadors for it (Braun et al., 2013). Resident identification has a positive relationship with city citizenship behavior (Taecharungroj, 2016) that encompasses word of mouth about the place and intention to stay there (Zenker & Petersen, 2014; Zenker & Rütter, 2014).

We draw on social identity theory (Tajfel & Turner, 1979) to explain the psychological mechanism by which brand-building behaviors arise in the context of place branding. According to that theory, individuals define their self-concepts by their connections with social groups or organizations. That logic extends to brands: consumers identify with brands that can be considered as self-relevant social categories (Fournier, 1998; Lam et al., 2010; Stokburger-Sauer

et al., 2012). As for brands, we argue that place brands with meaningful social identities can fulfill residents' key self-definitional needs and constitute valid targets for identification. Social identity theory posits that individuals adopt behaviors that are consistent with salient aspects of their identities within their self-concepts and help institutions embodying those identities (the place brand in our research) (Ashforth & Mael, 1989). Individuals confirm their self-concept with identity-consistent behaviors that meet their needs for self-consistency and self-expression (Shamir et al., 1993). Therefore, we assume that (prospective) residents with a strong place attachment (affective attachment and place identification) should adopt identity-congruent behavioral intentions in the form of positive word of mouth, negative leaving intention (retention), and ambassador behaviors. As a result, we expect that:

H1: Place brand equity and place attachment will mediate the effect of place brand heritage on behavioral intentions such that a more positive place brand heritage leads to a stronger place brand equity, which in turn leads to a stronger place attachment. Place attachment has an effect on behavioral intentions. Formally: Place Brand Heritage → Place Brand Equity → Place Attachment → Behavioral Intentions.

Second, the link between brand experience and brand equity has also been well investigated. In the service sector, empirical studies indicate that experience has a positive effect on brand equity dimensions (Biedenbach & Marell, 2010, Chen, 2012) or on overall brand equity (Xu & Chan, 2010). The study by Zarantonello and Schmitt (2013) also demonstrates that the above-mentioned four dimensions of brand experience identified by Brakus et al. (2009) positively influence brand equity. In line with those findings, we posit that for (prospective) residents, place brand experience should favorably affect place brand equity. Then, following the same logic as for hypothesis H1, we expect that place brand equity will increase place attachment, which in turn influences brand-building behavioral intentions. As a result, we propose that:

H2: Place brand equity and place attachment will mediate the effect of place brand experience on behavioral intentions such that a more positive place brand experience leads to a stronger place brand equity, which in turn leads to a stronger place attachment. Place attachment then has an effect on behavioral intentions. Formally: Place Brand Experience → Place Brand Equity →Place Attachment → Behavioral Intentions.

3. Research method

3.1. Sample

An online survey was carried out between April and June 2019 with an alumni sample[1] from Aix-en-Provence university business school and other universities located in the city to test empirically the research model. In total, 859 responses were recorded on SurveyMonkey, of which 571 were completed (66.47%). The sample comprised males (49%) and females (51%), with an average age of 33. Aix-en-Provence was chosen as the place brand for this research due to its residential attractiveness, and the research was conducted in collaboration with the city hall.

Aix-en-Provence university alumni were chosen since the city is well known for its excellent university environment. Alumni constitute an interesting sample with various origins (from Aix-en-Provence, other French cities, and other countries) who decided whether to reside in Aix-en-Provence after their studies. Those respondents are well adapted for our study, because they can be either residents or potential residents if they plan to return to live in the city. Moreover, since our research model focuses on a people–place brand relationship construct (e.g., place attachment), respondents need to have prior real experiences of the place brand (objective familiarity with the place). Alumni samples allow us to target respondents with experience of the city as residents (or frequent visitors if they lived in the surroundings areas) during their period of study. Respondents were asked to consider Aix-en-Provence as a brand.

[1] Alumni were contacted via alumni databases provided by universities and alumni associations.

3.2. Measurement

We chose various five-point Likert scales (strongly disagree to strongly agree) with established reliability and validity (see Appendix A). To evaluate place brand heritage, we adapted Pecot's (2016) six-item version of the brand heritage scale encompassing three dimensions: stability, longevity, and adaptability (two items per dimension). Place brand experiences were measured by the Beckman et al. (2013) twelve-item, four-dimensional scale, including sensory experience, affective experience, behavioral experience, and intellectual experience (three items per dimension). To measure place brand equity, we used a fifteen-item, five-dimensional scale adapted from existing measuring instruments that have passed confirmatory factor analyses. Items were modified to suit the resident context. Consistent with place branding studies (e.g., Bose et al., 2016; Bose et al., 2018; Konecnik & Gartner, 2007; Konecnik, 2010; Yuwo et al., 2013), we selected awareness, image (or uniqueness), quality (or value), and loyalty as dimensions. Place brand awareness was measured by items from Yuwo et al. (2013), place brand uniqueness by items from Kemp et al. (2012), place brand perceived value by items from Netemeyer et al. (2004) and Yoo and Donthu (2001), and place brand loyalty by items from Yuwo et al. (2013) and Yoo and Donthu (2001). Place brand social value was added as a fifth dimension and measured by items from Guizani and Valette-Florence (2010). Social value reflects the notion of identification with a group, with people living in the city (other residents), sharing similar values, and social recognition. Lassar et al. (1995) were first to identify that dimension, which fits well with the relational approach to brands adopted in this research and may be relevant for (prospective) residents.

As a precaution, the five-dimensional factorial structure was first verified through a preliminary study conducted on a sample of Aix-en-Provence university business school alumni (N = 134). That sample comprises male (47%) and female (53%) Aix-en-Provence alumni with an average age of 29. Data were collected online between November and December 2017. Of the 157 responses recorded, 134 were completed (85.35%). A series of exploratory factor analyses were

run using promax rotation (SPSS Software). Item purification[2] based on loadings greater than 0.5 resulted in a final place brand equity scale comprising fifteen items and five factors: awareness, uniqueness, social value, loyalty, and perceived value (see Appendix B). That model accounts for 77% of the total variance and the items show strong loadings with their representative factors (between 0.634 and 0.948). Place attachment was measured through two dimensions: place identity and affective attachment.

To measure place identity, in line with social identity theory, we adapted two items[3] developed by Bergami and Bagozzi (2000) and used by Lam et al. (2010) to capture the extent to which a resident identifies with the place brand to measure place identity (cognitive aspects of place attachment). We selected Chen and Dwyer's (2018) one-dimensional scale to measure affective attachment (affective aspects of place attachment). Finally, the three brand-building behavioral intentions—positive word of mouth, leaving intention (retention), and ambassador behaviors—were measured by the three one-dimensional scales proposed by Chen and Dwyer (2018), thus capturing place-related behaviors based on Morhart et al. (2009).

3.3. Analysis

A structural equation modeling (SEM) approach[4] was chosen for testing the causal research model. Structural equation models have been shown to be more effective (Bagozzi & Yi, 1989; Russell et al., 1998) when the analysis seeks to accommodate measurement errors in relation to the concepts examined. A covariance structure analysis (CSA) was chosen for the estimation method of our research model. Moreover, due to the lack of multivariate normality[5] of the measurement variables, we relied on Browne's (1984) asymptotically distribution-free (ADF) method and a systematic bootstrap procedure with 5,000 replications.

[2] The initial pool of items is available from the authors upon request.
[3] The visual item includes a series of Venn diagrams indicating the extent of overlap between oneself and the place brand identity; respondents choose the level of overlap that best reflects their relationship with the place brand. The verbal item is a seven-point scale, where 1 = "completely different," 4 = "neither similar nor different," and 7 = "completely similar."
[4] We relied on both SEPATH and AMOS for the SEM estimation.
[5] Mardia's normalized multivariate coefficient = 61.193, far above the recommended threshold (below 5).

In this research, all relationships between latent variables were tested at the second-order level in a reflective manner. The reflective measurement mode was chosen over the formative for two main reasons. First, the logic underlying reflective measurement modes clearly fits the prior conceptualizations of concepts relied on in this research at the first-order level (e.g., stability, longevity, and adaptability for place brand heritage). The same holds true concerning the second-order constructs (e.g., place brand equity). Indeed, awareness, uniqueness, social value, loyalty, and perceived value are more appropriately considered to be manifestations of the latent construct of place brand equity. The same reasoning applies for other constructs such as place brand experience or place attachment. The latter is hence conceptualized as a second-order latent concept, which reflects the two first-order latent dimensions of place identity and affective attachment. Second, from a theoretical perspective, the second-order dimensions encompassed in this research clearly correspond to constructs that reflect in their respective facets, rather than formative measures that could define them. Moreover, according to Bagozzi (2011) and Edwards (2011), the coefficients in formative models tend to vary according to the number of measures and factors used, thus making them less reliable and appropriate for assessing the validity of a network of plausible mediational relationships such as that investigated in this research. Overall, our research model consists of five second-order factors, with seventeen first-order factors measured by forty-seven observed variables.

We also tested for common method bias using model 2 proposed by Podsakoff et al. (2003; table 4) for testing a causal model with a general method factor linked to all the measurement variables and orthogonal to all the other latent variables. In our case, the method variance effect, calculated as the average of the square loadings of the method factor, equals 4.8%, which indicates that the method bias is rather low, below the reported values in the literature (Schaller et al., 2015), and hence does not seem problematic in our research.

In total, all the goodness of fit indices of the model (Cheung & Rensvold, 2002) suggest an acceptable fit model with a χ^2 (2771, df = 1057; $p < .001$); root mean square error of

approximation (RMSEA) = .057; non-normed fit index (NNFI) = .905; comparative fit index (CFI) = .952; standardized root mean residual (SRMR) = .061.

Once the overall quality of the proposed model had been established, we then assessed reliability, as well as convergent and discriminant validity. First, concerning the measurement variables, the factor loadings were high and all statistically significant (see Appendix A). Second, indicators of convergent validity and reliability were also satisfactory: all but two (which were close to 0.7) of the reliabilities were greater than 0.76, and the convergent validities were equal to or greater than 0.5 (see Table 1), either at the first- or second-order level. Indeed, the betas from the second-order factors to their respective first-order factors are all statistically significant and in absolute value ranging from 0.677[6] to 0.976. Those results statistically validate our second-order conceptualization of place brand equity, which is in line with previous theoretical and empirical considerations (Bose et al. 2016, 2018)[7]. Finally, we also tested discriminant validity by estimating the disattenuated latent correlations (Psi) between multiple pairs of variables to test whether their 95% confidence intervals fell significantly below 1.0 (Bagozzi & Yi, 2012). The results confirmed very good discriminant validity between all our encompassed latent variables, thus bring additional credence to the proposed model. Hence, we can examine the main results stemming from the structural path coefficients estimates. **[Insert Table 1 around here]**

[6] Not surprisingly, the only negative second-order path coefficient (-0.677) is related to leaving intention. That means that the latent variable "Behavioral Intentions" refers as outcome to a favorable and positive orientation.

[7] Indeed, a second-order conception seems preferable for at least five reasons: (1) it accounts for the pattern of relationships between the first-order factors, with high factor loadings between the second-order factor and the first-order ones, as mentioned in the text; (2) it puts a structure on the pattern of covariance between the first-order factors which explains the covariance in a more parsimonious way, with fewer parameters; (3) it provides more parsimonious and theoretically error-free estimates of both the general factor and each specific factor; (4) focusing on the relationships at higher-order level results in a more parsimonious model, which is easier to analyze. Moreover, as pointed out by Liu et al. (2012), such parsimony is not detrimental to the overall predictive power, provided that the R^2 with the second-order construct alone and those obtained only with lower-order facets, are comparable[7] (5) it enables getting a more impactful incidence on the explained variables, since it corresponds to the common variance of all lower-order factors (Liu et al., 2012; Valette-Florence & Valette-Florence, 2020).

4. Results

Our main research focus is on testing and validating two positive serial mediation paths (Figure 1). However, before we go for a formal statistical test, we have to ensure that other plausible alternative models could not bring a better fit to our empirical data. To do that, we rely on recent developments enabling competing models to be compared. Hence, the assessment of uncertainty and plausibility of these models is presented first, then the subsequent section addresses more specifically the testing of the two serial mediation hypotheses.

4.1 Uncertainty and plausibility assessment

In this section, we systematically compare our baseline model with models in which new additional direct links are introduced one by one. Chi² differences hence allow validation of the improvement in fit provided by each newly introduced relationship. Three main models are worth looking at: 1) a fully saturated model (A2) (Figure 5), in which all the relationships between the different concepts are estimated; 2) a simpler model (A1) (Figure 4), in which direct links are solely specified on a full mediation basis, and 3) an "in-between" model, as provided by our research model (RM) (Figure 3). A significant Chi² difference ($\Delta \chi^2 = 21$, $p < 0.001$) shows that model RM provides a better fit than model A1. Globally, that result validates the additional direct links of both place brand heritage and place brand experience with place attachment. Likewise, a significant Chi² difference ($\Delta \chi^2 = 48$, $p < 0.001$) shows that model A2 provides a better fit than model RM, hence supporting the direct links of both place brand heritage and place brand experience on behavioral intentions.

Even if the results tend to favor a saturated model, it remains worth investigating the plausibility of the usefulness of the various uncovered mediation effects. Recent advances proposed by Wu et al. (2020) in the context of mediation models show that switching from a frequentist approach to a Bayesian investigation helps to assess the uncertainty and hence the believability linked to each mediation model. Relying on the most recent advances in the field, we

then calculated posterior probability distribution, called BIC posterior (BICP), to assess the model selection uncertainty of the various mediation models. Whereas the frequentist method seeks the model with the best fit, the posterior probability distribution can be used to form a credibility set of models and hence allows the usefulness of the diverse significant mediation links to be compared. In their founding article, Wu et al. (2020) point out that, from a Bayesian perspective, predicting how well a model predicts the data can be assessed by BIC posterior, hence allowing any number of plausible models to be compared. In practice, the BIC is calculated for each model, and then all probabilities are normalized to one. Such normalized values are called BIC posteriors, which give a full representation of how the sum of probability is distributed across all models and form a posterior probability distribution. That approach is very useful, especially when testing different mediation models, as Wu et al. (2020) illustrate. In our case, besides the fact that all mediating models are statistically significant, that approach helps us to decide which is the most plausible and therefore should be preferred. We then compare the posterior BIC for the three mediation models tested in this research, relying on the Wu et al. (2020) formula (p 5)[8].

The results presented in Table 2 show that our research model could be retained, since it has the highest BIC posterior (0.405). Model A1 has to be discarded, as it has the lowest probability (0.274). Model A2 could be a plausible choice, but it has a lower BIC posterior (0.322) than our research model (0.405). In other words, that means that our research model is the most plausible, with a more parsimonious relationships network. Clearly the search for parsimony favors our research model, thus reinforcing the mediating role of both place brand equity and place attachment. The following section discusses the results generated based on the proposed research model.

[Insert Table 2 around here].

[Insert Figure 3, Figure 4 and Figure 5 around here].

[8] Formally, for a given model M_i with equal prior:

$$Posterior(\mathcal{M}_i) \approx \frac{\left(e^{-0.5(BIC_i - BIC_0)}\right)}{\sum_{i=0}^{k}\left(e^{-0.5(BIC_i - BIC_0)}\right)} \propto e^{-\frac{BIC_i}{2}}$$

4.2 Test of the two serial mediation hypotheses

All tests are performed within a structural equation modeling (SEM)[9] framework and a systematic bootstrap procedure with 5,000 replications. Table 3 provides details of the direct and indirect path coefficients with their corresponding confidence intervals[10]. Although the uncertainty and plausibility assessment shows the superiority of the RM model over models A1 and A2, it is still instructive to compare those models in order to assess the nature of the mediations as either partial or full.

Between model A1 and model RM, the inclusion of a direct path from place brand heritage to place attachment ($\beta = 0.630$) is not detrimental to the corresponding indirect path estimate, which remains significant ($\beta = 0.351$ *vs.* $\beta = 0.398$). A similar pattern arises for the incorporation of a direct path between place brand experience and place attachment ($\beta = 0.281$) which is again not detrimental to the indirect path coefficient, which also remains significant ($\beta = 0.205$ *vs.* $\beta = 0.233$).

The same scheme applies between model A2 and model RM, where the inclusion of a direct path from both place brand experience ($\beta = 0.128$) and place brand heritage ($\beta = 0.135$) to behavioral intentions still leads to statistically significant indirect paths ($\beta = 0.214$ and $\beta = 0.438$ *vs.* $\beta = 0.318$ and $\beta = 0.642$, respectively). Only the estimated path coefficient from place brand equity to behavioral intentions proves to be non-significant ($\beta = 0.051$).

In summary, Figure 2 presents all the estimated direct path coefficients, whereas Table 4 synthetizes the nature and role of the mediating variables, along with their respective direct, indirect, and total path coefficients. These results provide support for the two research hypotheses

[9] Even though SEM and the popular PROCESS software usually give perfectly comparable results for observed variables (Hayes et al., 2017), SEM has been preferred because (see also Sarstedt et al., 2020): (1) contrary to PROCESS, it gives formal tests for validating improvements in fit between concurrent models; (2) it allows testing of more complex mediational network not available with PROCESS; and (3) it explicitly takes into account measurement errors, not available with PROCESS, which is an important point as our research focuses on the relationships between latent variables.

[10] Only one of the confidence intervals includes zero, hence validating the statistical significance of the path coefficient estimates.

H1 and H2 and hence provide an incremental contribution to the literature on place branding. It is worth noting the full mediation[11] role played by brand attachment (β = 0.440) between place brand equity and behavioral intentions. To the best of our knowledge, that role has never been put forward before. Moreover, a comparison of the indirect effects shows that place attachment plays a greater role[12] than place brand equity as regards the impact of place brand heritage and place brand experience on behavioral intentions. Those results hence illustrate the core role played by place attachment.

From a more managerial perspective, we also note that leaving intention is negatively influenced by place attachment (β = -0.443). As for product brands, place brands are social identities with which residents can identify. As the overlap between how a resident perceives their self-identity and the place brand identity increases, the leaving intention decreases. In other words, place attachment encourages resident retention in the city. In addition, place attachment positively influences ambassador behavior (β = 0.463) and word of mouth (β = 0.570). These findings confirm those of Chen and Dwyer (2018). Due to the positive serial mediation, through place attachment, between place brand equity and behavioral intentions, the same happens for place brand equity, but to a lesser extent (see Appendix C for details).

Globally, place brand equity and place attachment demonstrate a partial positive mediator role which induces a three-stage process: place brand heritage and place brand experience increase place brand equity, which in turn enhances place attachment, which then influences residents' behavioral intentions toward the city. From a theoretical perspective and according to the seminal work of Zhao et al. (2010),[13] our results show that omitted mediators are likely to exist and hence should be added in future extensions of this research. More precisely, place brand heritage and place brand experience both entail cognitive and affective dimensions which are not fully mediated by place brand equity. A more complete spectrum of brand relationships is perhaps

[11] Direct β = 0.051; p = 0.619.
[12] The incremental indirect effect of place brand equity compared to that of place attachment is only 0.134 *vs.* 0.184 and 0.229 *vs.* 0.412 for place brand experience and place brand heritage, respectively.
[13] We are indebted to the reviewers for pointing that out.

missing. In that spirit, the effect of introducing the two hot and cold components of the Brand Relationship Quality (BRQ; Nyffenegger et al., 2015) introduced by Fournier (1998) could be worth investigating.

Overall, the two mediation hypotheses comprise two main sections. The upstream part is focused on the mediating role of place brand equity. Our results confirm the partial mediations of place brand equity as regards the impact of place brand heritage and place brand experience on place attachment. More precisely, place brand equity positively (and partially) mediates the relationship between place brand heritage and place attachment (direct $\beta = 0.630$ and indirect $\beta = 0.351$). Place brand equity also positively (and partially) mediates the relationship between place brand experience and place attachment (direct $\beta = 0.281$ and indirect $\beta = 0.205$).

The downstream part relates to the partial mediations involved in place attachment. Our results also confirm its mediations regarding the indirect influence of place brand equity, place brand heritage, and place brand experience (serial mediations) on behavioral intentions. Indeed, the impact of place brand heritage on behavioral intentions is positively and serially mediated by place brand equity and place attachment (direct $\beta = 0.135$ and indirect $\beta = 0.438$). Moreover, the impact of place brand experience on behavioral intentions is positively and serially mediated by place brand equity and place attachment (direct $\beta = 0.128$ and indirect $\beta = 0.214$). Nonetheless, we also note that the direct paths of either place brand heritage or place brand experience on behavioral intentions are significant but rather low. In addition, the difference between the R^2 for a model with those direct paths (67.83%) and the R^2 without those paths (65.83%) is rather small. Such operational and predictive considerations question the usefulness of the saturated model A2, which indeed has been shown to be less plausible than our proposed and validated research model.

[Insert Table 3, Table 4, and Figure 2 around here]

5. Discussion and conclusion

5.1. Theoretical and methodological contributions

This study unravels the mechanism that leads to behavioral intentions of (prospective) residents toward a city by testing a comprehensive model based on branding and place branding frameworks. We empirically test among (prospective) residents serial mediation hypotheses that allow identification of a three-stage process: place brand heritage and place brand experience increase place brand equity, which in turn enhances place attachment, which then influences brand-building behavioral intentions. Our findings refine and extend existing knowledge of the antecedents of residents' behaviors (Braun et al., 2013; Chen & Dwyer, 2018; Chen et al., 2014; Choo et al., 2011; Daryanto & Song, 2021; Taecharungroj, 2016; Zenker & Petersen, 2014; Zenker & Rütter, 2014). This research is theoretically relevant in several ways.

We integrate brand heritage and brand experience as antecedents in our research model to shed new light on residents' place-related behavioral intentions (i.e., brand-building behavioral intentions). Those concepts come from the branding literature. In this way, we add to the body of research on place branding by proposing and empirically testing relationships among under-explored constructs in this field. Heritage is a dimension of brand identity, and we demonstrate that its principles are relevant to our research. Places of living associated with a high degree of stability, longevity, and adaptability generate place value and attractiveness. In the branding literature, little research examines it from the consumer perspective (external perspective) including brand heritage in integrative models (Pecot et al., 2018; Rose et al., 2016). Our results show that place brand equity and place attachment mediate the effect of place brand heritage on behavioral intentions. Thus, our findings bring new insights to this body of literature by demonstrating that place brand heritage is a critical driver of residents' behavioral intentions toward a city.

The effects of brand experiences have been investigated in a few studies in the place branding literature for downtown brands (Beckman et al., 2013) and destination brands (Barnes et al., 2014; Yang et al., 2015). Our research completes existing studies by examining place brand experience as a critical driver of behavioral intentions toward a city. Place brand equity and place

attachment mediate the effect of place brand experience on behavioral intentions. Brand experiences are relevant from the perspective of (prospective) residents. Thus, we confirm that residents should be considered as the first customers of a place. Brand experience theory is often used for product and service brands (e.g., Iglesias et al., 2011; Iglesias et al., 2019; Lin, 2015); our paper contributes to that theory by extending it to city branding research.

Moreover, our findings validate the two serial mediation hypotheses and, consequently, the mediating role of both place brand equity and place attachment. The effect of both place brand heritage and place brand experience on behavioral intentions is serially mediated by place brand equity and place attachment. Place brand equity contributes to explaining the causal mechanisms at work to make the relationship between place brand heritage, place brand experience, and place attachment more efficient. To our knowledge, this research is the first to demonstrate those interrelationships. We also contribute to enriching existing studies on brand equity in place branding by demonstrating that place attachment generates positive word of mouth, lower leaving intentions, and ambassador behaviors for places. Word of mouth and ambassador behaviors are positively influenced by place attachment, whereas leaving intention is negatively influenced by place attachment. That result is in line with Chen and Dwyer (2018). Thus, this research extends their work, in which they request that future research test their structural model in other contexts.

Mediation analysis also highlights the critical role of place attachment, as the effect of place brand equity on behavioral intentions is fully mediated by place attachment. Consequently, we confirm the relevancy of considering both affective and cognitive aspects of place attachment (place identity and affective attachment) in terms of their impacts on behavioral intentions. That highlights more globally the central role of attachment in predicting behaviors consistent with previous studies (Hosany et al., 2017; Park et al., 2010). These findings enrich the literature on place attachment and its dimensionality in understanding residents' behaviors. In line with social identity theory, the more (prospective) residents identify with a city and are emotionally attached to it, the more they will: (1) spread positive word of mouth, (2) intend to reside there, and (3) act

as ambassadors. Consequently, we contribute to marketing uses of social identity theory by showing its relevance to city branding. The relevancy of identification processes is also confirmed through place brand social value, which is one of the five dimensions we identified in the measurement of place brand equity. Social value reflects the notion of identification with people living in the city (other residents), meaning that, to be a valued place of living, residents need to feel that they share similar values. In other words, to be attractive, generate attachment, and lead to city-supporting behaviors, a place of living and its people must be consistent with a resident's identity and self-image.

Finally, from a methodological perspective, we have assessed the uncertainty and plausibility of the mediation models based on the calculation of BIC posterior (BICP). To our knowledge, this methodological approach has never been used before to investigate mediation models in the field of place branding. The Bayesian approach allows any number of plausible models (Wu et al., 2020) to be compared and the most plausible one identified. Our findings indicate that, when compared with two other models, our research model has the highest plausibility and a more parsimonious relationships network, which reinforces the mediating role of both place brand equity and place attachment. Consequently, our paper contributes to this very recent methodological approach by applying it to city branding research.

5.2. Managerial implications

Our results have important implications for city brand management; they may help managers to define effective place branding actions.

First, marketing communication is one of the primary ways in which heritage is activated and communicated to stakeholders (Urde et al., 2007). As branding elements, symbols, historical references, logos, slogans, images, photographs, and texts can be used to reinforce corporate heritage and competitive positioning. In a place branding setting, using those branding elements enhances the effectiveness of territorial and cultural symbols, thereby providing strong evidence

of a place heritage branding strategy (Kotler & Gertner, 2002). For the messages to be persuasive, historical references and symbols need to be relevant and meaningful to the intended targets (Wilson, 2018). We also recommend selecting heritage traits based on their degree of perceived stability, longevity, and adaptability, as well as their distinctiveness. Since heritage plays a major role in the construction of both place and resident identities (Hakala et al., 2015), cities with a distinctive heritage may help residents to shape their own identity more easily.

The city of Porto (second largest city in Portugal) illustrates how heritage traits can contribute to the identity of a place of living. The city's visual identity was redesigned in 2014 to enhance citizen engagement[14]. To represent what Porto means for each citizen, more than seventy geometric icons (traditional Portuguese blue earthenware tiles) illustrating the city and its people were used to show its history. More than simple logos, the icons became a visual code to express the identity and soul of the city, uniting history and modernity in a surprising way, with all facets of the city represented (past, future, sea, food, culture, innovation, etc.). Porto provides an example of how, from a competitive positioning perspective, selected heritage traits should be distinctive and constitute actionable points of differentiation. With those aims in mind, city brand managers could benchmark their city against others.

Second, residents' experiences related to the place of living are also crucial. The stronger and more positive residents' experiences related to the place brand are, the stronger their attachment to the place of living will be. Thus, to attract new and retain existing residents, city managers should create and optimize place brand experience (sensory, affective, behavioral, and intellectual), inspired by practices in service and tourism contexts in which hedonic or experiential consumption is central. Beckman et al. (2013) recommend implementing marketing actions specifically aimed at enhancing sensory and behavioral experiences when considering local residents (vs. tourists). Sensory brand experience refers to sensory experiences had when people are exposed to a city. Such experiences can be improved by integrating unique elements into the

[14] Source: https://www.behance.net/gallery/20315389/New-identity-for-the-city-of-Porto (accessed on February 17, 2020).

city that may appeal to all the senses (sight, sound, touch, smell, and taste), making the city memorable and inducing a more positive experience (e.g., architecture, landscapes, lights, food and drink, music, traffic, and mountain breezes).

Behavioral brand experience encompasses physical actions and behaviors stimulated by the city. For residents, those experiences can be improved by various initiatives that engage them, such as offering a weekly farmers' market, discounted tickets to museums and events, or actions to attract a local workforce (Beckman et al., 2013). Paris Plages, an event created in 2002 by the city of Paris, is an example of how to generate sensory and behavioral experiences. Every summer, the banks of the Seine and the Bassin de la Villette turn into a seaside resort. The event offers free relaxation and leisure spaces to Parisians during the heat of summer: fresh lawns, parasols, deckchairs, palm trees, cultural and sporting activities, and swimming, enabling people to cool off and enjoy the beautiful weather.

Third, we demonstrate the importance of identification and attachment processes to place of living in inducing residents' behavioral intentions. Thus, city managers could investigate how to generate a strong identification with the place, a sense of belonging, and how to make the city a valuable target for identification. With globalization, it is increasingly rare for countries, nationalities, and cities to inspire a sense of belonging, so cities could aim to trigger it. A good example is the city of Amsterdam, which implemented that very idea with the "**I Am**sterdam" slogan to create a strong emotional bond between the city and the residents through identification with the place. Based on social identity theory, Elbedweihy et al. (2016) highlight that value congruence increases identification with a brand. Applied to our research, congruence between the values of the target market (current and potential residents) and the brand (the place of living) could also be nurtured by marketing actions aimed at positioning the city as a salient category in residents' minds (Elbedweihy et al., 2016), for example by communicating that the city's values match those of the residents, thus making the city more appealing to target people by satisfying

their self-verification needs, and drawing favorable comparisons with other cities to emphasize the values perceived as important for the city's actual and potential residents.

Finally, this research provides a reliable and valid scale of place brand equity. This tool should help city brand managers to estimate the extent to which residents perceive the value of a place of living. Our results show that place brand equity is a mediating variable. Consequently, by managing place brand equity efficiently, city brand managers could also better manage place attachment and behavioral intentions toward their city. More generally, our results contribute to helping local governments and city brand managers to diagnose and better manage performance of places of living, to understanding how to create and develop strong place attachment so as to engage residents, and to encouraging managers to initiate actions that not only increase resident–place connections but also internalize the place of living and induce place-supportive behaviors.

5.3. Limitations and future research

Several limitations of this study present opportunities for further research. First, it was conducted on a single city, so it is impossible to make generalizations relevant to all places. Replicating this study for other cities and countries should allow us to test the model in other contexts. Second, data were collected from an alumni sample, so a multi-sample study, based on potential residents who are not specifically alumni, would be beneficial. Such a study would allow validation of both the model and the managerial recommendations regarding the contributory factors to a city's attractiveness. As our model is partly based on prior experiences related to the place brand, other drivers would need to be investigated to understand how to attract residents who have no previous experience of the city. Moreover, other relatively new dimensions of place attachment, such as social bonding, should be added to the study for a better understanding of the social phenomena arising from place branding issues. As discussed above, the partial mediations clearly indicate that omitted mediators are likely to exist, so future research should add other mediators to the model. Relying on a more complete spectrum of brand relationships, the hot and

cold dimensions of the BRQ (Fournier, 1998), could be useful from that perspective. Finally, brand equity has only recently been conceptualized as a process (Chatzipanagiotou et al., 2016; Stocchi & Fuller, 2017). Future studies could extend our findings by analyzing how the dimensions of place brand experience and place brand heritage are relevant to understanding the place brand equity creation process using fuzzy-set Qualitative Comparative Analysis.

References

Aaker, D. A. (1996). Measuring brand equity across products and markets. *California Management Review, 30*(3), 102–20.

Anholt, S. (2006). The Anholt-GMI city brands index: How the world sees the world's cities. *Place Branding and Public Diplomacy, 2*(1), 18-31.

Ashforth, B. E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review, 14*(1), 20–39.

Ashworth, G., & Kavaratzis, M. (2009). Beyond the logo: Brand management for cities. *Journal of Brand Management, 16*(8), 520–531.

Balmer, J. M. T. (2013). Corporate heritage, corporate heritage marketing, and total corporate heritage communications. *Corporate Communications: An International Journal, 18*(3), 290-326.

Balmer, J. M. T., & Burghausen, M. (2015). Explicating corporate heritage, corporate heritage brands and organisational heritage. *Journal of Brand Management, 22*(5), 364–384.

Bagozzi, R. P. (2011). Measurement and meaning in information systems and organizational research: Methodological and philosophical foundations. *MIS Quarterly, 35*(2), 261–92.

Bagozzi, R. P., & Yi, Y. (2012). Specification, evaluation, and interpretation of structural equation models. *Journal of the Academy of Marketing Science,* 40*(1),* 8–34.

Bagozzi, R. P., & Yi, Y. (1989). On the use of structural equation models in experimental designs. *Journal of Marketing Research, 26*(3), 271-284.

Barnes, S. J., Mattsson, J., & Sorensen, F. (2014). Destination brand experience and visitor behavior: Testing a scale in the tourism context, *Annals of Tourism Research, 48,* 121-139.

Biedenbach, G., & Marell, A. (2010). The impact of customer experience on brand equity in a business-to-business services setting. *Journal of Brand Management, 17(6),* 446–458.

Braun, E., Kavaratzis, M., & Zenker, S. (2013). My city – my brand: the different roles of residents in place branding. *Journal of Place Management and Development, 6*(1), 18-28.

Beckman, E., Kumar, A., & Kim, Y. K. (2013). The impact of brand experience on downtown success. *Journal of Travel Research, 52*(5), 646-658.

Bergami, M., & Bagozzi, R. P. (2000). Self-categorization, affective commitment, and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychology, 39*(4), 555–77.

Bose, S., Roy, S. K., & Tiwari, A. K. (2016). Measuring customer-based place brand equity (CBPBE): an investment attractiveness perspective. *Journal of Strategic Marketing, 24*(7), 617-634.

Bose, S., Roy, S. K., Alwi, S. F. S., & Nguyen, B. (2018). Measuring customer based place brand equity (CBPBE) from a public diplomacy perspective: Evidence from West Bengal. *Journal of Business Research*, In press.

Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Brand experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing, 73*(3), 52-68.

Brandt, C., & de Mortanges, C. P. (2011). City branding: a brand concept map analysis of a university town. *Place Branding and Public Diplomacy, 7*(1), 50–63.

Braun, E. (2008). *City Marketing: Towards an Integrated Approach*. Rotterdam, the Netherlands: Erasmus Research Institute of Management (ERIM).

Browne, M. W. (1984). Asymptotically distribution-free methods for the analysis of covariance structures. *British Journal of Mathematical and Statistical Psychology*, 37, 62–83.

Chatzipanagiotou, K., Veloutsou, C., & Christodoulides, G. (2016). Decoding the complexity of the consumer-based brand equity process. *Journal of Business Research, 69*(11), 5479-5486.

Chen, L. S. L. (2012). What drives cyber shop brand equity? An empirical evaluation of online shopping system benefit with brand experience. *International Journal of Business and Information, 7(1),* 81–104.

Chen, N. C., & Dwyer, L. (2018). Residents' place satisfaction and place attachment on destination brand-building behaviors: conceptual and empirical differentiation, *Journal of Travel Research, 57*(8), 1026–1041.

Chen, N. C., Dwyer L., & Firth, T. (2014). Effect of dimensions of place attachment on residents' word-of-mouth behavior. *Tourism Geographies, 16*(5), 826–43.

Chen, C. F., & Phou. S. (2013). A closer look at destination: Image, personality, relationship and loyalty. *Tourism Management 36*(June), 269–78.

Cheng, T. M., Wu C. H., & Huang, L. M. (2013). The influence of place attachment on the relationship between destination attractiveness and environmentally responsible behavior for Island tourism in Penghu, Taiwan. *Journal of Sustainable Tourism, 21*(8), 1166–87.

Cheung, G. W., & Rensvold, R. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling*, *9*(2), 233–255.

Choo, H., Park S. Y., & Petrick. J. (2011). The influence of the resident's identification with a tourism destination brand on their behavior. *Journal of Hospitality Marketing & Management, 20*(2), 198–216.

Daryanto, A., & Song, Z. (2021). A meta-analysis of the relationship between place attachment and pro-environmental behaviour. *Journal of Business Research, 123,* 208-219.

Edwards, J. R. (2011). The fallacy of formative measurement. *Organizational Research Methods, 14*(2), 370–88.

Elbedweihy, A. M., Jayawardhena, C., Elsharnouby, M. H., & Elsharnouby, T. H. (2016). Customer relationship building: The role of brand attractiveness and consumer–brand identification. *Journal of Business Research, 69*(8), 2901-2910.

Fan, J., & Qiu, H. L. (2014). Examining the effects of tourist resort image on place attachment: a case of Zhejiang, China. *Public Personal Management, 43*(3), 340-354.

Fredholm, S., & Holsson, K. (2018). Managing the image of the place and the past: contemporary views on place branding and heritage management. *Place Branding & Public Diplomacy, 18*(4), *141-151*.

Fournier, S. (1998). Consumers and their brands: Developing relationship theory in consumer research. *Journal of Consumer Research, 24*(4), 343–373.

Guizani, H., & Valette-Florence, P. (2010). Proposition d'une mesure psychométrique du capital client de la marque. *Marché et organisations*, *2*(12), 11-41.

Hakala, U., Sjoblom, P., & Kantola, S. (2015). Toponyms as carriers of heritage: Implications for place branding. *Journal of Product and Brand Management 24*(3), 263–275.

Hayes, A. F., Montoya, A. K. & Rockwood, N. J. (2017). The analysis of mechanisms and their contingencies: PROCESS versus structural equation modeling. *Australasian Marketing Journal, 25*(1), 76-81.

Hosany, S., Prayag, G., Van der Veen, R., Huand, S., & Deesiltham, S. (2017). Mediating effects of place attachment and satisfaction on the relationship between tourists' emotions and intention to recommend. *Journal of Travel Research, 56*(8), 1079-1093.

Hou, J. S., Lin, C. H., & Morais, D. B. (2005). Antecedents of attachment to a cultural tourism destination: The case of hakka and non-hakka taiwanese visitors to Pei-Pu, Taiwan. *Journal of Travel Research, 44(2),* 221–33.

Iglesias, O., Markovic, S., & Rialp, J. (2019). How does sensory brand experience influence brand equity? Considering the roles of customer satisfaction, customer affective commitment, and employee empathy. *Journal of Business Research, 96,* 343-354.

Iglesias, O., Singh, J. J., & Batista-Foguet, J. M. (2011). The role of brand experience and affective commitment in determining brand loyalty. *Journal of Brand Management, 18*(8), 570–582.

Jacobsen, B. P. (2009). Investor-based place brand equity: A theoretical framework. *Journal of Place Management and Development, 2*(1), 70 – 84.

Kavaratzis, M. (2007). City Marketing: The past, the present and some unresolved issues. *Geography Compass, 1*(3), 695–712.

Keller, K. L. (1993). Conceptualizing, measuring and managing customer-based brand equity. *Journal of Marketing, 57*(1), 1–22.

Kemp, E., Childers, C. Y., & Williams, K. H. (2012). A tale of a musical city: Fostering self-brand connection among residents of Austin, Texas. *Place Branding and Public Diplomacy, 8*(2), 147–157.

Konecnik, M. (2010). Extending the tourism destination image concept into customer-based brand equity for a tourism destination. *Ekonomska istrazivanja, 23*(3), 24-42.

Konecnik, M., & Gartner, W. C. (2007). Customer-based brand equity for a destination. *Annals of Tourism Research, 34*(2), 400–421.

Kotler, P., & Gertner, D. (2002). Country as a brand, product, and beyond: A place marketing and brand management perspective. *Brand Management, 9*(4/5), 249–261.

Kyle, G., Graefe, A., & Manning, R. (2005). Testing the dimensionality of place attachment in recreational settings. *Environment and Behavior, 37*(2), 153–77.

Lam, S. K., Ahearne, M., Hu, Y., & Schillewaert, N. (2010). Resistance to brand switching when a radically new brand is introduced: A social identity theory perspective. *Journal of Marketing, 74*(6), 128-146.

Lassar, W., Mittal, B., & Sharma, A. (1995). Measuring customer-based brand equity. *Journal of Consumer Marketing, 12*(4), 11-19.

Lewicka, M. (2008). Place attachment, place identity, and place memory: Restoring the forgotten city past. *Journal of Environmental Psychology, 28*(3), 209–31.

Lewicka, M. (2011). Place attachment: How far have we come in the last 40 years? *Journal of Environmental Psychology, 31*(3), 207–30.

Lin, Y. H. (2015). Innovative brand experience's influence on brand equity and brand satisfaction. *Journal of Business Research, 68*(11), 2254–2259.

Lindstedt, J. (2011). Place, identity and the socially responsible construction of place brands. *Place Branding and Public Diplomacy, 7*(1), 42-49.

Liu, L., Li, C., & Zhu, D. (2012). A new approach to testing nomological validity and its application to a second-order measurement model of trust. *Journal of the Association for Information Systems, 13*(12), 950–975.

Manyiwa, S., Priporas, C. & Wang, X. (2018). Influence of perceived city brand image on emotional attachment to the city. *Journal of Place Management and Development, 11*(1), 60-77.

Merrilees, B., Miller, D., & Herington, C. (2009). Antecedents of residents' city brand attitudes. *Journal of Business Research, 62*(3), 362-67.

Merrilees, B., Miller, D. & Herington, C. (2012). Multiple stakeholders and multiple city brand meanings. *European Journal of Marketing, 46*(7/8), 1032-1047.

Morgan, P. (2010). Towards a developmental theory of place attachment. *Journal of Environmental Psychology, 30*(1), 11-22.

Morhart, F. M., Herzog W., & Tomczak. T. (2009). Brand-specific leadership: Turning employees into brand champions. *Journal of Marketing, 73*(5), 122–42.

Netemeyer, R. G., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Dean, D., Ricks J., & Wirth, F. (2004). Developing and validating measures of facets of customer-based brand equity. *Journal of Business Research, 57*(2), 209–224.

Nyffenegger, B., Krohmer, H., Hoyer, W. D., & Malaer, L. (2015). Service Brand Relationship Quality: Hot or Cold? *Journal of Service Research, 18(1)*, 90–106.

Oguztimur, S., & Akturan, U. (2016). Synthesis of city branding literature (1988–2014) as a research domain. *International Journal of Tourism Research, 18*(4), 357-372.

Papadopoulos, N., & Heslop, L. (2002). Country equity and country branding: Problems and prospects. *Journal of Brand Management, 9*(4/5), 294-314.

Park, W. C., MacInnis, D., Priester, J., Eisingerich, A. B., & Iacobucci, D. (2010). Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marketing, 74*(6), 1-17.

Pecot, F. (2016). *Consumers' responses to brand heritage: Cognitive and affective paths* (Doctoral thesis in management science), Aix-Marseille Université.

Pecot, F., Merchant, A., Valette-Florence, P., & De Barnier, V. (2018). Cognitive outcomes of brand heritage: A signaling perspective. *Journal of Business Research, 85,* 304-316.

Podsakoff, P., MacKenzie, S., Lee, J., & Podsakoff, N. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*(5), 879–903.

Proshansky, H. M., Fabian, A. K., & Kaminoff, R. (1983). Place-identity: Physical world socialization of the self. *Journal of Environmental Psychology, 3*(1), 57–83.

Rose, G. (1995). Place and identity: A sense of place. In *A Place in the World? Places, Cultures and Globalisation*, edited by D. Massey & P. M. Jess, 87–135. Oxford: Oxford University Press.

Rose, G. M., Merchant, A., Orth, U. R., & Horstmann, F. (2016). Emphasizing brand heritage: Does it work? And how? *Journal of Business Research*, *69*(2), 936–943.

Russell, D. W, Kahn, J. H., & Altmaier, E. M. (1998). Analyzing data from experimental studies: a latent variable structural equation modeling approach. *Journal of Counseling Psychology, 45*(1), 18-29.

Sadeque, S., Roy S. K., Swapan M. S. H., Chen, C.H., & Ashikuzzaman, M. (2019). An integrated model of city and neighborhood identities: A tale of two cities. *Journal of Business Research*, in press.

Sarstedt M., Hair, J. F., Nitzl, C., Ringle, C. M. & Howard, M. C. (2020). Beyond a tandem analysis of SEM and PROCESS: Use of PLS-SEM for mediation analyses! *International Journal of Market Research*, *62*(3), 288-299.

Schaller, T., Patil, A., & Malhotra, N. (2015). Alternative techniques for assessing common method variance: an analysis of the theory of planned behavior research. *Organizational Research Methods, 18*(2), 177–206.

Schmitt, B. (1999). Experiential marketing. *Journal of Marketing Management, 15*(1–3), 53-67.

Shafranskaya, I., & Potapov, D. (2014). An empirical study of consumer-based city brand equity from signaling theory perspective. *Place Branding and Public Diplomacy, 10*(2), 117–131.

Shamir, B., House R. J., & Arthur, M. B. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science, 4*(4), 577-594.

Strandberg, C., Styvén, M. E. & Hultman, M. (2020). Places in good graces: The role of emotional connections to a place on word-of-mouth. *Journal of Business Research, 119*, 444-452

Styvén, M. E., Mariani, M. M., & Strandberg, C. (2020). This is my hometown! The role of place attachment, congruity, and self-expressiveness on residents' intention to share a place brand message online. *Journal of Advertising, 49(5)*, 540-556.

Stocchi, L., & Fuller, R. (2017). A comparison of brand equity strength across consumer segments and markets. *Journal of Product and Brand Management*, *26(5)*, 453‑468.

Stokburger-Sauer, N., Ratneshwar, S., & Sen, S. (2012). Drivers of consumer–brand identification. *International Journal of Research in Marketing, 29*(4), 406–418.

Su, H. J., Cheng, K. F., & Huang, H. H. (2011). Empirical study of destination loyalty and its antecedent: The perspective of place attachment. *The Service Industries Journal, 31*(16), 2721–2739.

Taecharungroj, V. (2016). City ambassadorship and citizenship behaviors: Modelling resident behaviors that help cities grow. *Journal of Place Management and Development, 9*(3), 331–350.

Tajfel, H. & Turner J. C. (1979). The social identity theory of intergroup behavior. In *Psychology of Intergroup Relations*. Stephen Worchel and William G. Austin, eds. Chicago: Nelson-Hall, 33–47.

Uchinaka, S., Yoganathan, V. & Osburg, V.-S. (2019). Classifying residents' roles as online place ambassadors. *Tourism Management, 71,* 137-150.

Urde, M., Greyser, S. A., & Balmer, J. M. T. (2007). Corporate brands with a heritage. *Journal of Brand Management, 15*(1), 4–19.

Valette-Florence, R., & Valette-Florence, P. (2020). Effects of emotions and brand personality on consumer commitment, via the mediating effects of brand trust and attachment. *Recherche et Applications en Marketing*, *35*(1), in press.

Wilson, R. T. (2018). Transforming history into heritage: applying corporate heritage to the marketing of places. *Journal of Brand Management, 25*(4), 351-369.

Wu, H., Cheung, S. F. & Leung, S. O. (2020). Simple use of BIC to Assess Model Selection Uncertainty: An Illustration using Mediation and Moderation Models. *Multivariate Behavioral Research, 55*(1), 1-16.

Xu, J. B., & Chan, A. (2010). A conceptual framework of hotel experience and customer based brand equity: Some research questions and implications. *International Journal of Contemporary Hospitality Management, 22(2),* 174–193.

Yang, Y., Liu, X., & Li, J. (2015). How customer experience affects the customer-based brand equity for tourism destinations. *Journal of Travel & Tourism Marketing, 32*(1), 1-17.

Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-based brand equity scale. *Journal of Business Research, 52*(1), 1–14.

Yuwo, H., Ford, J. B., & Purwanegara, M. S. (2013). Customer-based brand equity for a tourism destination (CBBETD): the specific case of Bandung city, Indonesia. *Organizations and Markets in Emerging Economies, 4*(1), 8-22.

Zarantonello, L., & Schmitt, B. H. (2013). The impact of event marketing on brand equity: The mediating roles of brand experience and brand attitude. *International Journal of Advertising, 32(2),* 255–280.

Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of consumer research, 37(2),* 197-206.

Zenker, S. (2014). Measuring place brand equity with the advanced Brand Concept Map (aBCM) method. *Place Branding and Public Diplomacy, 10*(2), 158–166.

Zenker, S., Braun, E. & Petersen, S. (2017). Branding the destination versus the place: The effects of brand complexity and identification for residents and visitors. *Tourism Management, 58*, 15-27.

Zenker, S., Eggers, F., & Farsky, M. (2009). Putting a price tag on cities. Paper presented at the 38th European Marketing Academy Conference, Nantes, France.

Zenker, S, & Martin, N. (2011). Measuring success in place marketing and branding. *Place Branding and Public Diplomacy, 7*(1), 32–41.

Zenker, S., & Petersen, S. (2014). An integrative theoretical model for improving resident city identification. *Environment and Planning, 46*(3), 715–729.

Zenker, S., & Rütter, N. (2014). Is satisfaction the key? The role of citizen satisfaction, place attachment and place brand attitude on positive citizenship behavior. *Cities, 38*, 11–17.

TABLES AND FIGURES

Table 1. Reliability and convergent validity

Latent variable (order 2)	Convergent validity	Reliability (Rhô)	**Latent variable (order 1)**	Number of items	Reliability (Rhô)	Convergent validity
Place brand heritage	0.546	0.783	Stability	2	0.795	0.662
			Longevity	2	0.668	0.502
			Adaptability	2	0.831	0.711
Place brand experiences	0.811	0.945	Sensory	3	0.856	0.665
			Affective	3	0.828	0.616
			Behavioral	3	0.763	0.518
			Intellectual	3	0.784	0.548
Place brand equity	0.542	0.854	Awareness	2	0.672	0.506
			Uniqueness	3	0.861	0.674
			Social value	2	0.856	0.748
			Loyalty	3	0.914	0.726
			Perceived value	4	0.904	0.702
Place attachment	0.863	0.927	Place identity	2	0.792	0.547
			Affective attachment	4	0.929	0.767
Brand building behavioral intentions	0.573	0.799	Positive WOM	3	0.907	0.765
			Leaving intention	3	0.794	0.563
			Ambassador behavior	3	0.858	0.668

Table 2. Model uncertainty assessments

Model Uncertainty Assessments: SEM Fit indices, BIC & BIC Posteriors

Fit Indices & BIC Posteriors		***Research Model***	***Alternative Model A2***	***Alternative Model A1***
SEM Fit indices	χ^2/df	***2.62***	***2.28***	***2.64***
	CFI	**0.952**	**0.953**	**0.948**
	NFI	**0.905**	**0.907**	**0.883**
	TLI	**0.950**	**0.951**	**0.946**
	RMSEA	**0.057**	**0.057**	**0.058**
	SRMR	**0.061**	**0.059**	**0.062**
BIC & BIC Posteriors	***AIC***	**5.206**	**5.656**	**5.884**
	BIC	**6.137**	**6.597**	**6.921**
	Δ ***(BIC - BIC$_{min}$)***	**0.000**	**0.795**	**0.676**
	BIC Posterior	**0.405**	**0.322**	**0.274**

Grey shading represents best value, from lighter (worst) to darker (best)

Table 3. CB-SEM Bootstrapped Direct and Indirect Effects for Models RM, A1 and A2.

CB-SEM Bootstrapped Direct and Indirect Effects									
From	To (R^2)	Bootstrapped Effects		Pr > |t|		Lower Confidence interval (95%)		Upper Confidence interval (95%)	
		Direct	Indirect	Direct	Indirect	Direct	Indirect	Direct	Indirect
Research Model (RM): RMSEA= 0.057; χ^2=2771 (χ^2/df = 2.62; df=1057); BIC= 6.137; AIC=5.206									
Place Brand Experience	Place Brand Equity R^2= 56.89%	0.305	/	0.000	/	0.268	/	0.349	/
Place Brand Heritage		0.522	/	0.000	/	0.473	/	0.568	/
Place Brand Experience	Place Attachment R^2=63.91%	0.281	0.205	0.000	0.002	0.232	0.167	0.347	0.259
Place Brand Heritage		0.630	0.351	0.000	0.000	0.574	0.296	0.687	0.407
Place Brand Equity		0.672	/	0.000	/	*0.561*	/	*0.724*	/
Place Attachment	Behavioral Place Response R^2=65.83%	0.655	/	0.000	/	0.582	/	0.731	/
Place Brand Experience		/	0.318	/	0.000	/	0.264	/	0.369
Place Brand Heritage		/	0.642	/	0.000	/	0.593	/	0.684
Place Brand Equity		/	0.440	/	0.000	/	0.396	/	0.497
Research Model (A1): RMSEA= 0.058; χ^2=2792 (χ^2/df = 2.64; df=1059); BIC= 6.921; AIC=5.884									
Place Brand Experience	Place Brand Equity R^2= 56.89%	0.305	/	0.000	/	0.268	/	0.349	/
Place Brand Heritage		0.522	/	0.000	/	0.473	/	0.568	/
Place Brand Experience	Place Attachment R^2=58.86%	/	0.233	/	0.000	/	0.184	/	0.284
Place Brand Heritage		/	0.398	/	0.000	/	0.325	/	0.438
Place Brand Equity		0.763	/	0.000	/	0.712	0.718	0.813	0.801
Place Attachment	Behavioral Place Response R^2=57.56%	0.759	/	0.000	/	0.702	/	0.805	/
Place Brand Experience		/	0.177	/	0.000	/	0.126	/	0.225
Place Brand Heritage		/	0.302	/	0.000	/	0.257	/	0.348
Place Brand Equity		/	0.579	/	0.000	/	0.525	/	0.619
Research Model (A2): RMSEA= 0.057; χ^2=2723 (χ^2/df = 2.28; df=1054); BIC= 6.597; AIC=5.656									
Place Brand Experience	Place Brand Equity R^2= 56.89%	0.305	/	0.000	/	0.268	/	0.349	/
Place Brand Heritage		0.522	/	0.000	/	0.473	/	0.568	/
Place Brand Experience	Place Attachment R^2=63.91%	0.281	0.205	0.000	0.002	0.232	0.167	0.347	0.259
Place Brand Heritage		0.630	0.351	0.000	0.000	0.574	0.296	0.687	0.407
Place Brand Equity		0.672	/	0.000	/	0.561	/	0.724	/
Place Attachment	Behavioral Place Response R^2=67.83%	0.447	/	0.000	/	0.397	/	0.498	/
Place Brand Experience		0.128	0.214	0.000	0.000	0.079	0.169	0.175	0.256
Place Brand Heritage		0.135	0.438	0.000	0.000	0.083	0.394	0.188	0.487
Place Brand Equity		*0.051**	0.300	*0.619*	0.000	-0.023	0.251	0.094	0.353

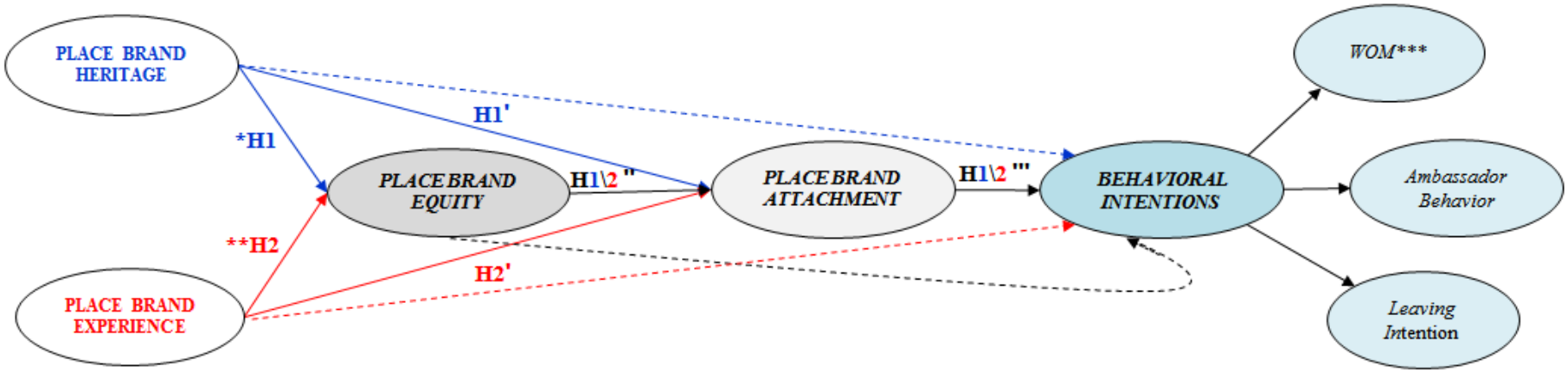
**Estimates in italics are not statistically significant;* lines in light grey refer to *identical parameter estimates.*

Table 4. Synthezis of Mediation analyses for Research Model (RM)

Investigated Relationships: Source	*--->Target*	*Mediating Variables*	*Direct Effects*	*Indirect Effects*	*Nature of Mediation*	*Omitted Mediators*
Place Brand Experience	--->Place Attachment	Place Brand Equity	0.281	0.205	P M [a]	Likely
Place brand heritage			0.630	0.351		
Place Brand Experience	--->Place Behavioral response	Place Attachment	0.128	0.184	P M	Likely
Place brand heritage			0.135	0.412		
Place Brand Experience	--->Place Behavioral response	Place Brand Equity & Place Attachment	0.128	0.318	SPM[c]	Likely
Place brand heritage			0.135	0.642		
Place Brand Equity	--->Place Behavioral response	Place Attachment	*0.051**	0.440	F M [b]	Unlikely

[a]: PM = Partial Mediation; [b]: FM = Full Mediation; [c]: SPM = Serial Partial Mediation; **Estimates in italics are not statistically significant*

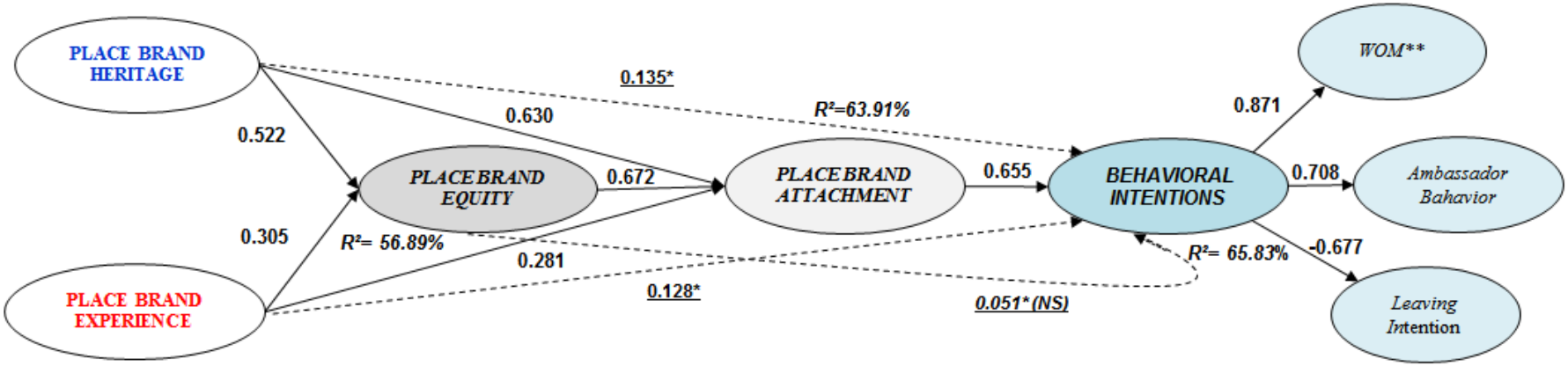
Figure 1. Research Model and Hypotheses



Legend:

* Blue arrows and hypotheses **H1** to **H1'''** correspond to the serial mediations taking their source in **place brand heritage** up to behavioral intentions
** Red arrows and hypotheses **H2** to **H2'''** correspond to the serial mediations taking their source in **place brand experience** up to behavioral intentions
*** WOM: Positive word of mouth.
Doted lines refer to additional paths necessary for the mediation tests
Plain lines refer to the direct links between concepts estimated for the proposed Research Model (RM)

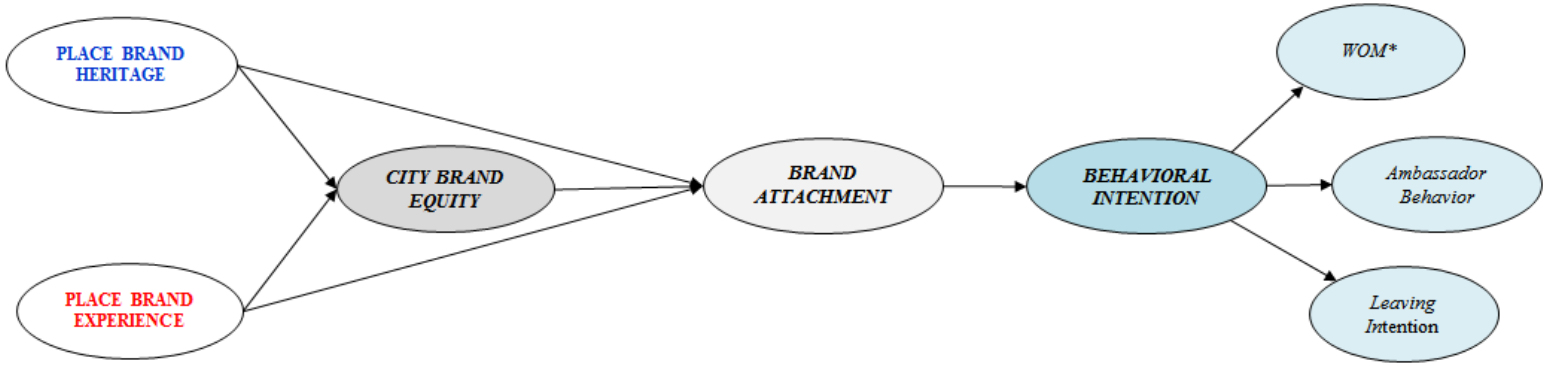
Figure 2. Model RM and path coefficinet estimates



Legend:

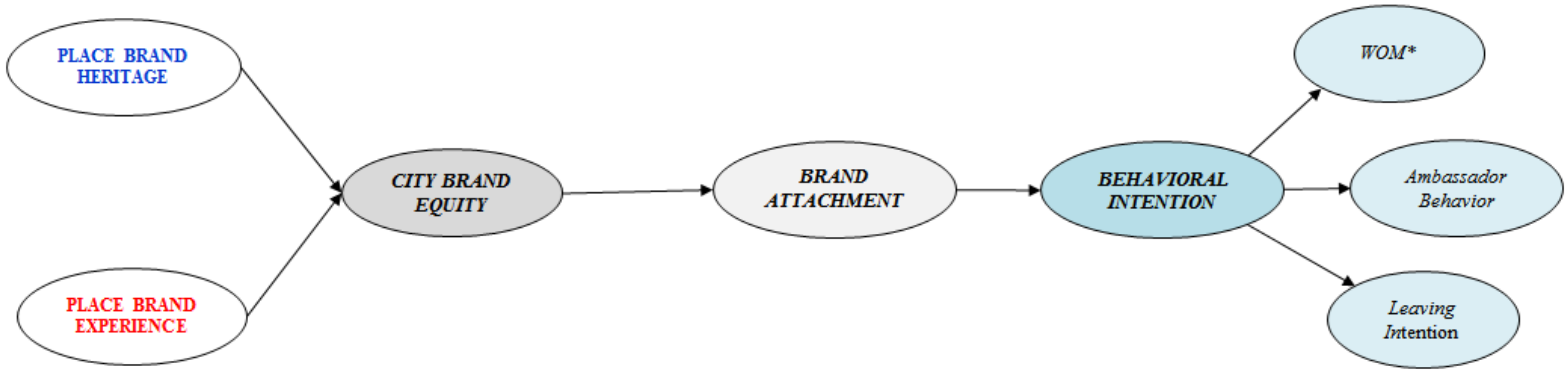
* Underlined path coefficients correpsond to additional paths tested for the mediation tests.
** WOM: Positive word of mouth

Figure 3. Research Model (RM): Serial mediation model



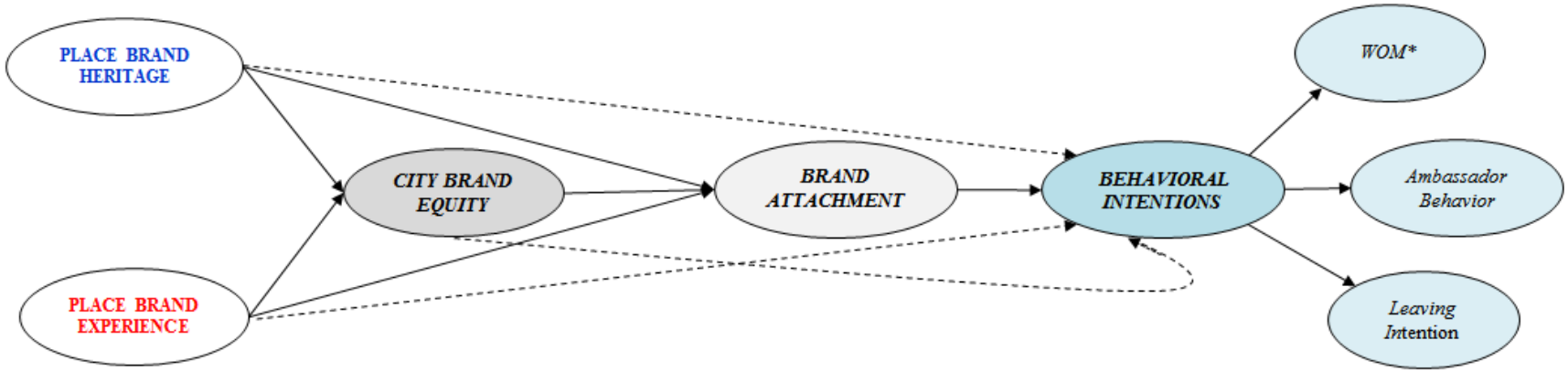
Legend: *WOM: Positive word of mouth

Figure 4. Alternative Model 1 (A1): Simple mediation model



Legend: *WOM: Positive word of mouth

Figure 5. Alternative Model 2 (A2): Fully saturated model

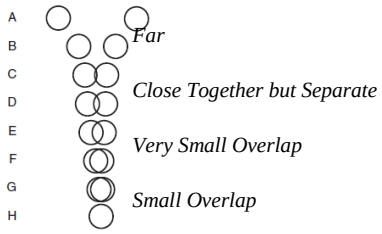


Legend: *WOM: Positive word of mouth.

APPENDICES

Appendix A. Measurement scales used and confirmatory factor loadings

Construct	Authors	Operationalization	Factor loadings
Place brand heritage	Pecot (2016)	A city which will never go out of fashion	**0.894**
		A city that is very continuous	**0.723**
		A city that reinforces and builds on long-held traditions	**0.721**
		A city with roots	**0.696**
		A city that knows how to reinvent itself	**0.873**
		A city that renews itself	**0.813**
Place brand experiences	Beckman et al. (2013)	This city makes a strong impression on my visual sense or other senses	**0.795**
		I find this city interesting in a sensory way	**0.808**
		This city appeals to my senses	**0.842**
		This city induces feelings and sentiments	**0.813**
		I have strong emotions for this city	**0.747**
		This city generates emotional experiences	**0.792**
		I engage in physical actions and behaviors when I experience this city	**0.715**
		This city results in bodily experiences	**0.759**
		This city is action oriented	**0.682**
		I engage in a lot of thinking when I visit this city	**0.776**
		This city makes me think	**0.718**
		This city stimulates my curiosity	**0.726**
Place brand equity	Yuwo et al. (2013); Kemp et al. (2012); Netemeyer et al. (2004); Yoo & Donthu (2001); Guizani & Valette-Florence (2010)	Some characteristics of this city come to my mind quickly	**0.705**
		I can recognize this city among others	**0.718**
		This city really "stands out" from other cities	**0.826**
		This is very different from other cities	**0.847**
		This city is very "unique"	**0.790**
		I can identify with the people of this city	**0.887**
		I share the same values as the people of this city	**0.842**
		This city is one of the cities where I most want to live	**0.854**
		*I intend to recommend this city to people I know (to live there)**	***0.858***
		This city is an ideal place to live	**0.845**
		It's a city where you want to live / continue to live	**0.852**
		Compared to others, this city offers one of the best qualities of life	**0.829**
		We can rely on this city to have a good quality of life	**0.864**

		This city is a safe bet	**0.797**
		The quality of life in this city is high	**0.859**
Place attachment	Bergami & Bagozzi (2000); Lamb et al. (2010); Chen and Dwyer (2018)	Imagine that one of the circles at the left in each represents your own self-definition or identity and the other circle at the right represents [Aix-en-Provence] identity. Please indicate which case (A, B, C, D, E, F, G, or H) best describes the level of overlap between your own and [Aix-en-Provence] identity. 	**0.844**
		To what extent does your own sense of who you are (i.e., your personal identity) overlap with your sense of what [Aix-en-Provence] represents (i.e., the [Aix-en-Provence]'s identity)? Anchored by 1 = "completely different," 4 = "neither similar nor different," and 7 = "completely similar."	**0.618**
		Aix-en-Provence means a lot to me	**0.887**
		I feel a strong sense of belonging to Aix-en-Provence and its facilities	**0.894**
		I am emotionally attached to Aix-en-Provence and its facilities	**0.893**
		I have a special connection to Aix-en-Provence and the people here	**0.827**
Brand Building Behavioral Intentions	Chen and Dwyer (2018)	I talk up Aix-en-Provence to people I know	**0.883**
		I bring up Aix-en-Provence in a positive way in conversations I have with my friends and acquaintances	**0.867**
		In social situations, I often speak favorably about Aix-en-Provence	**0.874**
		I have decided to leave Aix-en-Provence	**0.789**
		I intend to leave Aix-en-Provence within a short period of time and live elsewhere	**0.683**
		I am looking at other places to live now	**0.775**
		In tourist contacts situations, I ensure that my personal appearance corresponds to the appearance of the Aixois(e)s	**0.830**
		I adhere to my standards for Aixois(e)s behavior	**0.877**
		My actions in tourist contacts are not in contradiction	**0.740**

	with the behavior of an Aixois(e)

***** Item not used to test the research model due to its closeness to the concept of positive word of mouth.

Appendix B. Exploratory factor analysis

Dimension (factor)	Measurement items	Factor loadings
Place brand awareness	Some characteristics of this city come to my mind quickly	**0.744**
	I can recognize this city among others	**0.857**
Place brand uniqueness	This city really "stands out" from other cities	**0.802**
	This is very different from other cities	**0.837**
	This city is very "unique"	**0.903**
Place brand social value	I can identify with the people of this city	**0.922**
	I share the same values as the people of this city	**0.894**
Place brand loyalty	This city is one of the cities where I most want to live	**0.948**
	I intend to recommend this city to people I know (to live there)	**0.718**
	This city is an ideal place to live	**0.669**
	It's a city where you want to live / continue to live	**0.891**
Place brand perceived value	Compared to others, this city offers one of the best qualities of life	**0.832**
	We can rely on this city to have a good quality of life	**0.852**
	This city is a safe bet	**0.634**
	The quality of life in this city is high	**0.912**

Appendix C. Path coefficients from place attachment & place brand equity on the facets of behavioral intentions

Behavioral Intentions		***Indirect path coefficients***	
First Order Facets	***Loadings***	***Place Attachment***	***Place Brand Equity***
Word of mouth	0.871	0.570	0.383
Ambassador behavior	0.708	0.463	0.311
Leaving Intention	-0.677	-0.443	-0.298