Journal of Regional Science

WILEY

JOURNAL OF REGIONAL SCIENCE

RESEARCH ARTICLE OPEN ACCESS

The Role of Resident-Place Identification in Mediating Consumption Localism and Mobility Intentions

Thomas Leicht[1] | Massimo Giovanardi[2] | William Darler[3] | Mihalis Kavaratzis[4]

[1]School of Business, University of Leicester, Leicester, UK | [2]Department for Life Quality Studies & Centre for Advanced Studies in Tourism, University of Bologna, Bologna, Italy | [3]School of Business, Marketing Division, University of Leicester, Leicester, UK | [4]Department of Marketing, International Business and Tourism, Manchester Metropolitan University, Manchester, UK

Correspondence: Thomas Leicht (thomas_leicht@gmx.de)

Received: 2 May 2023 | **Revised:** 4 November 2024 | **Accepted:** 23 November 2024

Keywords: consumption localism | person-place identification | place identity | residential mobility intentions | residential satisfaction

ABSTRACT

Residents' personal identification with places (regions, cities, towns, and so on) and with what places are supposed to stand for often determines their place-supportive attitudes and behaviors. However, little is known about how residents' identification with the characteristics of places and their adoption of place-related norms and values specifically affect residential mobility intentions and pro-local consumption tendencies, which are key topics in many spatial development plans and place marketing. The present study addresses this gap in the literature by using a structural equation modeling approach and a cross-place survey in Germany with 612 residents. The findings show that resident-place identification, on the basis of residential need satisfaction, increases residents' intentions to stay in a place and pro-local consumption preferences. These findings suggest that spatial planners and public managers can support the socioeconomic development of cities and regions and increase residents' willingness to stay in a place by strengthening their individual identification with places. We discuss the implications of our findings for the marketing and branding of places.

1 | Introduction

Public management and place marketing have been extensively concerned with enhancing the socioeconomic performance of places (i.e., regions, cities, towns, communities) to increase their residential attractiveness and commercial competitiveness (Florida, Mellander, and Stolarick 2011; Hong 2015; Zheng 2014). Over the last few decades, public authorities have therefore invested important amounts of financial resources to develop places and create place brands that summarize and promote what places stand for (Jacobsen 2012; Zenker 2014).

A well-established body of literature (e.g., Kemp, Childers, and Williams 2012; Braun, Kavaratzis, and Zenker 2013; Eshuis, Klijn, and Braun 2014) has in this context underlined that residents—as the prime audience of many spatial marketing and development programmes—play a crucial role in terms of defining places and therefore also in the legitimization or adoption of place brand content. In fact, a place brand's characteristics are supposed to create or reinforce a self-connection between places and their users, and this self-connection is expected to result into place-supportive outcome attitudes and behaviors on the side of residents (Kemp, Childers, and Williams 2012). This means that residents' identification with their place of living on the basis of a perceived fit between their own self-concept and what the place stands for can define their sense of belonging, how they relate to the place and whether they support the place (Zenker and Beckmann 2013).

Prior studies (e.g., Chen and Dwyer 2018; Lewicka 2010) have in this context predominantly focused on residents' affective or emotional bonds (i.e., place attachment) with places, overlooking how residents' longer-term adoption of the characteristics of places into their self-concept might influence pro-place

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2024 The Author(s). *Journal of Regional Science* published by Wiley Periodicals LLC.

attitudes. While prior research has identified that improving people's affective or emotional attachment with places can increase their intentions to stay in the place (Chen and Dwyer 2018) and preferences for local inshopping, especially in rural areas (Cowell and Green 1994; Mullis and Kim 2011), there is a gap in the literature concerning how residents' personal identification with places (i.e., place identity) with regard to congruence between residents' self-concept and the perceived (and communicated) features of places predicts support for local businesses and products, and mobility intentions. Since places may be experienced cognitively as parts of the self (Proshansky 1978), places can become a part of residents' identity and extended self-concept as residents are constituted by places and define themselves in terms of their attributes (Zenker and Petersen 2014), especially if places satisfy residential needs and motives (Droseltis and Vignoles 2010).

Since public authorities and regional development organizations aim to develop places and regions strategically (Kavaratzis and Kalandides 2015), insights into the role of resident-place identification in explaining residential mobility and place-supportive attitudes are critical (Zheng 2014; Kremer 2021). Therefore, our research aims to test how residents' identification with their place of residence is related to place-supportive outcome attitudes. More specifically, we ask how residents' identification with their place of residence, on the basis of personal need satisfaction, is related to mobility intentions and pro-local consumption preferences?

To address this research question, our research uses a resident sample ($n = 612$), collected from places of different sizes in the south of Germany, to develop and test a new empirical measurement model. The model testing results show that resident-place identification increases residents' intentions to stay in a place and pro-local consumption attitudes. Resident-place identification is predicted by residents' satisfaction with their place of living. Furthermore, we demonstrate the mediating effects of resident-place identification between place satisfaction and consumption localism and mobility intentions. Moderation analysis also shows that size or type of place did not seem to influence the empirical relationships between the tested constructs, while being born in a place and length of residence might influence the strength of certain inter-construct relationships.

Providing the aforementioned empirical insights is of critical relevance for the socioeconomic development of places (Zenker, Petersen, and Aholt 2013) and extends existing studies that focus on the factors that make places and regions attractive to important target audiences (Zheng 2014; Hong 2015; Lovén, Hammarlund, and Nordin 2020). Satisfying and retaining residents in places and developing competitive commercial landscapes where local businesses can thrive are often primary targets of regional development plans and place marketing activities (Chen and Dwyer 2018; Florida 2002). Our research thus contributes practical insights to the fields of public administration, spatial planning and place marketing in that it demonstrates empirically that local authorities can potentially retain residents and promote locally manufactured goods, shops, and suppliers by improving residents' satisfaction and personal identification with the place.

Moreover, we offer an empirically validated measurement tool for the field of public management and place marketing that allows practitioners to perform standardized over-time assessments of residents' place evaluations to more effectively steer residents' relationships with their living environment. Establishing the link between person-place relationship concepts such as resident-place identification and residential loyalty and place-supportive consumption attitudes can help local authorities in securing their funding and in justifying future investments in pro-local marketing campaigns (Tasci 2020). In a world where public administrations generally aim to create attractive living environments where residents can enjoy a good quality of life (Merrilees, Miller, and Herington 2009), it is crucial for place managers to understand how residents evaluate their places and how such evaluations may transform into place-supportive attitudes and behaviors (Hanna and Rowley 2013). Since previous research has found that managers often lack "a proper success measurement for assessing the results" of marketing investments (Zenker 2014, 158), there is a need for models that offer a better understanding of how people's satisfaction and identification with their place of living translates into place-supportive outcomes (Zenker and Petersen 2014).

With most research focusing on emotional place attachment in explaining pro-local attitudes, another contribution of this research lies in the fact that it puts resident-place identification in the focus of the investigation. Resident-place identification is conceptually distinct from place attachment in expressing residents' relationships with their home area, as it focuses more on residents' self-concept and congruence between the characteristics of a place and the self and less on residents' emotional ties with places that are often grounded on social relationships (Low and Altman 1992; Droseltis and Vignoles 2010; Zenker and Petersen 2014). Furthermore, residents' assimilation of a place's values, norms and characteristics generally involves a longer-term psychological investment with the place (Giuliani and Feldman 1993), whereas place attachment and emotional bonds can also result from residents' recent experiences and short-term interaction with specific places (Anton and Lawrence 2014).

The paper starts with summarizing the existing literature and the main concepts involved in the measurement model development. Then, an empirical model is developed and validated through data collected via a cross-place survey. The last section discusses the study's contributions and implications for public management, spatial planning, and place marketing.

2 | Theoretical Background

2.1 | Determinants of Resident-Place Identification

The study of personal relationships that people develop towards their place of residence has received much attention over the last decades (Lewicka 2011; Boley et al. 2021). Prior research from the fields of place marketing, sociology, and economic geography has suggested that places (regions, cities, towns, communities, and so on) do not only compete for inward investment and strong local industries (e.g., Glaeser, Kolko, and Saiz 2001; Zenker and Gollan 2010), but also in securing

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

"talented residents" and skilled workforces (e.g., Florida 2002; Insch and Florek 2008). The rationale of this argument is that a place's (socioeconomic) sustainability and attractiveness for companies is dependent on the availability of educated and stable local populations that are satisfied by and identify with their place of residence (Insch and Florek 2008). From a place promotional perspective, it is thus necessary to understand how residents evaluate and relate to their places of living, and how specific target groups of place marketing can be retained on the long term (Hanna and Rowley 2013).

Theories of environmental psychology hold that people's relationships with places are based on human experience and interaction with places, as individuals consider personal life experiences and needs when relating to their social and physical surroundings (Potter and Cantarero 2006). There has been due recognition to the fact that places contribute to the formation of individual identities, which are influenced by people's cognitions about the physical environment, memories, ideas, and attitudes (Kremer 2021). For instance, people might want to live in New York City because they associate "cosmopolitanism" or "diversity" with this city and because these attributes represent important personal values and are part of their personality. In this sense, New York City can become reflective of such attributes and define whether external people also identify with the place (Zenker and Petersen 2014).

As outlined by Malpas (1999), places can be considered as a framework and structure through which individual subjectivity, experience, and self-identity are constituted. In this sense, places are constitutive of human identity as they define individuals, who, in turn, also define the place in terms of its meaning (Strandberg and Ek Styvén 2024; Malpas 1999). By living in specific cities or regions, individuals affirm specific identities and also express and potentially differentiate themselves from people living in other places that are perceived to be distinct on the basis of local characteristics and cultural standards (Jackson and Thrift 1995).

The concept of place identity has been widely used to refer to "those dimensions of the self that define the individual's personal identity in relation to the physical environment" (Proshansky 1978, 155). Since people's personal identity is defined by cognitive structures contributing to self-categorization (Korpela 1989), place identity is expressed through person-place identification, which describes people's propensity to integrate place-related characteristics (norms, values, mentality, lifestyles, and so on) into their own belief system (Zenker and Petersen 2014). This integration of place characteristics can be expressed through place-self congruence, which reflects the idea that places are in some way similar to or compatible with the values and personality of people, but also through self-extension, which refers to the idea that the cognitive sense of a place is part of people's extended self-concept (which means for instance that place-related events in people's lives may cause the same effects as person-related events) (Droseltis and Vignoles 2010). For instance, when individuals identify with a city such as Berlin, they can enhance and broaden their personal self-concept by adopting and assimilating city attributes such as "diverse"(Zenker and Petersen 2014).

On a regional level, a region's cultural or natural characteristics in combination with people's personal experience in the environment may foster some kind of regional consciousness which becomes a part of people's social identity (Paasi 2002). According to Zenker and Petersen (2014, 717–718), identification with places "allows one to feel truly at home in a place, not only in a physical sense as a mere resident, but also in the figurative sense of feeling a strong connection between the self and the place." Kremer (2021) highlights in this regard that people may develop a connection to their home area as they express their own identity in terms of the place and refer to it when making new social acquaintances. This idea can be tied to Feldman (1990) notion of "settlement identity" according to which individuals develop identification with specific categories of places (e.g., rural communities).

People's personal connection and identification with places are based on the satisfaction of human motives and needs (Droseltis and Vignoles 2010). Such motives and needs can be satisfied by different physical (shopping options, green areas, infrastructures, and so on) and social (diversity, inclusion, and so on) features of places (Merrilees, Miller, and Herington 2009; Lovén, Hammarlund, and Nordin 2020; Zheng 2014; Greasley, John, and Wolman 2011; Courtney and Moseley 2008; Ottaviano and Prarolo 2009).

In many previous studies, this connection between people and places has been conceptualized in terms of place attachment, which can be defined as an "affective relationship between people and the landscape that goes beyond cognition, preference, or judgment" (Riley 1992, 13). While place attachment has been related to place dependence and functional attachment (Boley et al. 2021), many studies focus on its definition as an emotional tie that can be located on various spatial levels (home, building, neighborhood, city, and so on) (Lewicka 2010).

Following Zenker and Petersen (2014, 721), "it is important to note that place attachment is not the same as identification with the place, although the concepts overlap and are sometimes used interchangeably". Zenker and Petersen (2014) argue that identification with places is concerned with the incorporation of the place's norms and values into one's personal identity, while the concept of place attachment relates to feeling emotionally bonded to a place. Moore (2000) for instance argues that place attachment focuses on evaluations of places, whereas place identity, or person-place identification, is more related to the ways in which places influence people's identity and vice versa. In this sense, place identity or identification involve various psychological processes (e.g., self-categorization, congruence between self-identity and the identity of the place) between the self and the place, requiring a certain level of psychological investment with the place that is generally developed over time (Giuliani and Feldman 1993). While place attachment can result from people's short-term contact with places (e.g., weekend trip to a travel destination), place identification is defined by longer-lasting and more holistic processes that affect people's identity creation (Fleury-Bahi, Félonneau, and Marchand 2008). Place identification can evolve across the entire lifespan, from early childhood (emergence and evolution of the self) to adolescence (consolidation of the self) and adulthood (expression of the self) (Knez 2005). The seminal work of Erikson (1964) describes in this regard the significance for children to develop in a "genuine milieu," involving cues such

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

as cultural norms, values or conventions that are representative of their place of growing up. According to Erikson (1964), individual identity is a dynamic process as the meaning and valence of childhood places define how memories and experiences in places offer opportunities for creative self-development (Manzo 2003). Place identification is thus concerned with the longer-term processes that allow people to integrate local place features into their self-concept, whereas place attachment can result from short-term person-place interactions and is often based on (social) relationships within places (Low and Altman 1992).

As outlined above, the present study considers place identity and therefore resident-place identification as a separate, but related concept to place attachment (see also Casakin, Hernández, and Ruiz 2015). Since many studies have used place identity or identification and place attachment interchangeably (Strandberg and Ek Styvén 2024; Zenker and Petersen 2014), we recognize that study findings may indeed depend on how well the operationalizations have distinguished (theoretically and empirically) between the two concepts (Droseltis and Vignoles 2010). As shown in Table 1, prior studies have subsumed place identity or identification by using place attachment as an umbrella concept. However, to avoid conceptual dilution, our research specifically focuses on place identification on the basis of residents' ability to project themselves on their place of living and incorporate its values and norms into the definition of themselves (see Droseltis and Vignoles 2010; Zenker and Petersen 2014).

A focus on resident-place identification offers value added for multiple reasons: First, place identity or identification has been identified as a central concept to explain people's assimilation of the characteristics of places in the fields of environmental psychology, place marketing, and regional studies, and yet, "research has been hampered" by a lack of insights into its causes and consequences (Droseltis and Vignoles 2010, 23). In particular, prior research has neglected the role of human motives and needs in influencing place identification (Droseltis and Vignoles 2010) and how the evaluation of a place's features influences residents' identification with places (Zenker and Petersen 2014), which makes further research into the antecedents and outcomes of place identification necessary. Second, a focus on resident-place identification offers important new theoretical insights as it enables a better understanding of how places are vital to sustaining residents' sense of belonging and feeling of living in the right place. There is evidence that residents' place associations lead them to develop strong connections with the place, which become reflective of their self-concept (Kemp, Childers, and Williams 2012). Focusing on the role of residents' identification with places can therefore provide strategic insights for the marketing and management of cities and regions. Residents' ability to incorporate a place's values, norms and characteristics into their self-concept, and their perceived compatibility with what a place stands for, plays a crucial role for residents' intentions to stay in a place and to support it pro-actively in terms of place-supportive advocacy and commitment (Kemp, Childers, and Williams 2012; Eshuis, Klijn, and Braun 2014). For place management organizations, it is thus necessary to understand how congruence between residents' perceptions of their self-concept and the communicated contents of place branding campaigns can be achieved and how the level of congruence can be assessed (Insch and Walters 2018).

Standardized empirical measurement tools and models enable in this context comparative and over-time assessments of residents' individual levels of place identification. Besides, such tools and models can help to establish the conceptual relationships between the antecedents and outcomes of resident-place identification. In particular, establishing the link between resident-place identification and residential mobility and consumption attitudes can help local authorities in securing their funding for future pro-local branding campaigns (Tasci 2020).

2.2 | Outcomes of Resident-Place Identification

As outlined above, few studies in the fields of environmental psychology, regional planning, and place marketing have focused on the effects of resident-place identification in mediating pro-local consumption attitudes and residential mobility, which are two of the primary aims of many place development plans (Zenker, Petersen, and Aholt 2013; Insch and Florek 2008). In fact, there is a gap in the literature in terms of how resident-place identification influences pro-local consumption patterns and residents' intentions to stay in a place, and how residents' satisfaction of needs and motives drives their identification with their place of residence.

Previous studies (Merrilees, Miller, and Herington 2009; Zheng 2014; Hong 2015; Horie and Managi 2017; Cerisola and Panzera 2022) have identified that residential satisfaction and attitudes are grounded on the (favorable) perception of physical and social place features (green areas, social diversity, and so on). The perception of such place attributes generally results into an overall assessment of residential satisfaction (Potter and Cantarero 2006; Zenker, Petersen, and Aholt 2013).

Droseltis and Vignoles (2010) argue that residents' identification with places can have a motivational or need-based character. When places do not satisfy residents' needs for feeling a sense of belonging in a place (in terms of fit between the perceived self and what the place represents), residents' identity construction can be undermined. From this perspective, it seems intuitive that people would identify themselves with places which give them a sense of compatibility and feelings of control of their self-concept (Droseltis and Vignoles 2010).

When residents are satisfied with their place of living, they may start defining themselves in terms of the place (Droseltis and Vignoles 2010; Zenker and Rütter 2014; Fleury-Bahi, Félonneau, and Marchand 2008). Zenker and Petersen (2014) thus propose that high levels of satisfaction increase residents' feeling of identification with the place, which means that place satisfaction is a direct predictor of identification with local and regional values and norms, and a place's characteristics. While there are studies stipulating that identification would predict place satisfaction (e.g., Fleury-Bahi, Félonneau, and Marchand 2008), an important body of literature has suggested that the relationship between both concepts is the opposite: Place satisfaction predicts person-place identification (i.e., place identity) (Bonaiuto et al. 1999; Uzzell, Pol, and Badenas 2002). Although we recognize that the link between place satisfaction and

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

TABLE 1 | Scale measures.

Reference	Concept	Construct	Items
Knez (2005)	Place identity	Place-related distinctiveness	I feel a sense of togetherness with others who live in this part of the town. I feel like a "city person."
		Place-referent continuity	This part of the town reminds me of the environment of my childhood. The climate here is like the climate in the environment of my childhood.
		Place congruent-continuity	I would rather prefer to live in a place like the one where I live now. I want to live in a place with the same climate as here.
		Place-related self-esteem	I feel good when I am in this part of the town. I am proud to live in this part of the town.
		Place-related self-efficacy	I feel safe and secure in this part of the town. Everything I need in my everyday life is here.
	Place attachment		My bonds to this part of town are strong.
Williams and Vaske (2003)	Place attachment	Place identity	I feel X is a part of me. X is very special to me. I identify strongly with X. I am very attached to X. Visiting X says a lot about who I am. X means a lot to me.
		Place dependence	X is the best place for what I like to do. No other place can compare to X. I get more satisfaction out of visiting X than any other. Doing what I do at X is more important to me than doing it in any other place. I wouldn't substitute any other area for doing the types of things I do at X. The things I do at X I would enjoy doing just as much at a similar site.
Ramkissoon, Graham Smith and Weiler (2013)	Place attachment	Place dependence	For what I like to do, I could not imagine anything better than the settings and facilities provided by this National Park. For the activities I enjoy the most, the settings and facilities provided by this National Park are the best. I enjoy visiting this National Park and its environment more than any other parks.
		Place identity	I identify strongly with this park. I feel this National Park is part of me. Visiting this National Park says a lot about who I am.
		Place affect	I am very attached to this park. I feel a strong sense of belonging to this National Park and its settings/facilities.

(Continues)

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

TABLE 1 | (Continued)

Reference	Concept	Construct	Items
			This National Park means a lot to me.
Chen and Dwyer (2018)	Evaluative place attachment	Place identity	I identify strongly with Sydney. I feel commitment to Sydney. I feel that I can really be myself in Sydney. Sydney is very special to me.
		Place dependence	I prefer Sydney to others for the activities that I enjoy. Sydney is my favorite place to be. I really miss Sydney when I am away from it for too long.
		Affective attachment	Sydney means a lot to me. I feel a strong sense of belonging to Sydney and its settings/facilities. I have a special connection to Sydney and its people here.
Droseltis and Vignoles (2010)	Identification	Self-extension	I feel this place is part of who I am. If this place no longer existed, I would feel I had lost a part of myself.
		Environmental fit	I feel this is the place where I fit. This place allows me to "connect with myself".
		Place-self congruity	This place reflects the type of person I am. This place reflects my personal values.
		Emotional attachment	I feel a sense of emotional attachment to this place.

Note: Negatively worded item.

identification might be bidirectional to a certain extent, we propose that identification is preceded by satisfaction since individuals may only be able to identify themselves with places and local values if the place satisfies fundamental human expectations and motives (physical well-being, social needs, and so on) (Droseltis and Vignoles 2010). We therefore hypothesize that if a place of residence satisfies residents' (social and physical) needs and expectations, and if the place reflects residents' norms and values, resident-place identification is expected to grow:

H1 *Place satisfaction increases resident-place identification*

According to Zenker and Petersen (2014), residents that commit to and identify themselves with their place of living can form a meaningful link between the self-concept and the type of place, and this link is likely to influence their attitudes and behaviors towards the place and intention to stay in a place. Prior studies have often conceived residents' level of satisfaction with places as a direct determinant of residential mobility (Burholt 2012; Clark and Mulder 2000; Lovén, Hammarlund, and Nordin 2020; Hong 2015). The rationale of residential mobility studies is often that residents' satisfaction with their living environment is the key driver of individual moving intentions (Zenker and Petersen 2014), meaning that satisfied residents are likely to stay in a place, while dissatisfied residents are likely to move away sooner or later. However, this assumption can be problematized. In fact, residents' moving intentions are often informed by their personal background in the place and personal life course (Helderman, Mulder, and Ham 2004). Significant life events (e.g., growing up, entering school) can in this context represent critical transitions that eventually challenge people's self-categorization and perceived fit to places, which can result into actualizations of their self-concept and so influence people's moving intentions (Helderman, Mulder, and Ham 2004). For those reasons, satisfaction with places might not be a direct predictor of residents' moving intentions since it is rather residents' incorporation of the place's features into their extended self-concept that defines their willingness to move.

We thus follow Zenker and Petersen's (2014) argument that residents with a higher level of place identification are more likely to possess a strong connection with their place of living. Residents' personal identification with their home area can thus create long-term residential relationships, since residents tend to stay in places that match their values and norms (Zenker and Petersen 2014). Kremer (2021) provides further evidence of this link by showing that (regional) identity based on people's connection to their place of residence shapes the (economic) decision of individuals on whether and where to move. While the link between resident-place identification and intentions to stay in a place might be mutually reinforcing in the sense that unwillingness to leave a place and longer lengths of residence might further substantiate people's incorporation of local values

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

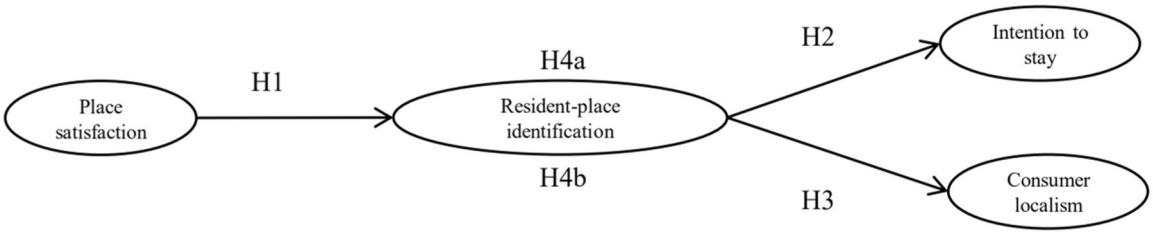

FIGURE 1 | Conceptual model.

and norms into their self-concept (Fleury-Bahi, Félonneau, and Marchand 2008), we propose that it is residents' identification with places that drives their mobility intentions (Zenker and Petersen 2014), meaning that increased levels of resident-place identification result into stronger intentions to stay in a place:

H2 *Resident-place identification increases residents' intentions to stay in a place*

As outlined by Zenker and Petersen (2014), residents' meaningful place identification is likely to increase their attitudinal commitment to their place of living. Overlooking the role of person-place identification, prior studies have so far focused on environmental or place-protective behaviors and intentions as outcomes of place attachment (e.g., Burholt 2012; Ramkissoon, Graham Smith, and Weiler 2013; Ramkissoon and Mavondo 2015). In the context of food consumption for instance, consumers may develop a preference for locally grown, seasonal products from local suppliers as a result of their attachment to the place (Spielmann and Bernelin 2015). Put differently, local inshopping may be a result of people's connection with the place (Miller 1998), which means that consumers may develop a preference for products and firms from their geographic area as a result of their personal relationship with their place of residence. Miller (2001) however notes that investigations concerning such conceptual relationships are limited (see also Mullis and Kim 2011). Besides, prior studies (e.g., Mullis and Kim 2011) have not established a direct empirical effect between place attachment and local inshopping, raising the question whether other person-place relationship concepts such as residents' personal identification with places might better explain pro-local consumption?

By consuming local products, "locavores" are willing to support the local economy and counterbalance the domination of (nonnative) retail chains based on personal values for instance (Spielmann and Bernelin 2015). A symbolic motivation for consuming local products is people's potential to identify with local products, brands, and producers, so that "local production brings the producer and the consumer closer together" (Spielmann and Bernelin 2015, 620). However, Spielmann and Bernelin (2015, 622) argue that few studies "have modeled the antecedents and consequences of involvement" with local consumption. Furthermore, Fernández-Ferrín and Bande-Vilela (2013, 301) argue that "studies on regional ethnocentrism are virtually non-existent," as most studies have focused on the national level.

As outlined by Jackson and Thrift (1995), individuals might express their own identity by consuming specific products. People's preference for regional and local products might thus be dependent on their values and norms (e.g., Cleveland, Laroche, and Papadopoulos 2009) and the degree to which they identify with the place in terms of their self-concept (e.g., rural residents preferring locally grown food). We thus propose that support for local products and businesses in the form of consumption localism may stem from people's identification with a place:

H3 *Resident-place identification increases consumption localism*

As outlined in the hypotheses above, we stipulate that resident-place identification mediates the links between residents' place satisfaction and intentions to stay in a place and consumption localism. Previous studies (e.g., Ramkissoon, Graham Smith, and Weiler 2013; Ramkissoon and Mavondo 2015) have in this context proposed that place attachment acts as a mediator between place satisfaction and other place-supportive outcomes. However, there is an important body of literature highlighting the role of person-place identification in this process (Zenker and Petersen 2014; Fleury-Bahi, Félonneau, and Marchand 2008; Droseltis and Vignoles 2010; Kremer 2021). The rationale for treating person-place identification as a mediator in this process is that residents' place-supportive outcome attitudes and preferences are grounded in the satisfaction with the physical and nonphysical properties of places (Zenker and Petersen 2014). Satisfying resident needs is likely to enhance their identification with places and thus leads to person-place self-extensions and congruence (Droseltis and Vignoles 2010) which results into intentions to stay in a place and conscious support for local products and producers. Focusing on resident-place identification as a mediating variable offers a new contribution to the literature as it is concerned with people's longer-term connection with places that has important implications on people's self-definition and branding campaigns about the place. Since prior studies have neglected the antecedents and outcomes of place identification (Droseltis and Vignoles 2010), we propose that resident-place identification mediates the link between satisfaction and mobility intentions and consumption localism:

H4a *Resident-place identification mediates the links between residential satisfaction and residents' intentions to stay in the place*

H4b *Resident-place identification mediates the links between residential satisfaction and consumption localism* (*Figure* 1)

3 | Development and Validation of an Empirical Model

3.1 | Measure Development

Based on the existing literature, the objective of this research was to test the effects of resident-place identification, on the basis of need

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

satisfaction, in explaining residents' intentions to stay in a place and pro-place consumption behaviors. To collect data, an online questionnaire was designed. The survey included items to measure the empirical constructs that were identified in the literature. First of all, place satisfaction was measured by adapting Zenker et al.'s (2013) satisfaction construct (3 items). Mobility intentions were in this study related to the willingness to stay living in a place. For this reason, 6 items from Lewicka's (2010) scale, which focused on individual mobility intentions, were adapted. People's personal identification on the basis of congruence and self-extension with places was measured by adapting 6 items from Droseltis and Vignoles' (2010) identification scale. Preferences for local products and willingness to sustain local businesses were adapted from Yildiz Heitz-Spahn, and Belaud (2018) ethnocentrism scale (three items) and Kearns and Whitley's (2015) sense of community concept (three items). The used scale items had shown high levels of validity and reliability in prior studies, whereas this study further tested them with n.ew samples.

Scale items were to be rated on a 5-point scale ranging from 1 ("fully agree") to 5 ("fully disagree"), including a middle point ("don't know/not sure"). To avoid sequence effects, item orders were randomized for each participant and negatively worded items were included too (Malhotra, Nunan, and Birks 2017). Since the survey was published in German, back-translation techniques were used. To assess face and content validity, the survey was also shared with interview participants (residents of the target places) from a qualitative pre-study. In total, eight respondents gave feedback about the survey, leading to the ejection and re-labeling of multiple items. To mitigate social desirability bias, all participants were informed that data was going to be analyzed anonymously (Malhotra, Nunan, and Birks 2017).

3.2 | Methodology and Research Approach

For the development of the research model, convenience sampling was used by collecting data via social networks on the Internet. Convenience or snowball samples have drawbacks in terms of limited representativeness, but they are useful for testing new hypotheses and models (Malhotra, Nunan, and Birks 2017). The survey link was published in social network groups from five places in Germany with different sizes: A large city with approximately 600,000 inhabitants, two mid-sized cities (with approximately 150,000 and 230,000 inhabitants respectively), a town (approximately 90,000 inhabitants) and a rural community with around 10,000 inhabitants. On the first page of the survey, participants were informed about the aims of the study and data privacy. Participants were informed that by replying to the questions, their data was stored and used anonymously for research purposes. The next survey pages contained the items and multiple choice questions. Demographic data was collected at the end of the survey.

In total, 612 responses were collected between January and December 2020. Qualifier data showed that most respondents (72.2%) had lived in the place for more than 5 years and reported "good" or "very good" familiarity with the place (86.1%). Most respondents were however not born in the place (74.7%) and did not own property there (71.7%). The sample included a slightly higher percentage of female respondents (56.5%) than male respondents (40.8%). Most respondents were younger than 50 years (77.1%) and had an educational profile based on university diploma (55.2%). Many respondents were "single" (47.5%). Most respondents had an annual gross income of less than 50,001€ (62.1%).

To assess the psychometric validity of our research model, the data sample was split into three sub-samples by following the recommendations of Hair et al. (2013): A first sub-sample for the model purification with factor analysis ($n = 204$), a second sample for the validation of the factorial structure with confirmatory factor analysis ($n = 204$), and a third sample for the model Revalidation with confirmatory factor analysis ($n = 204$). Applying confirmatory factor analysis on two sub-samples had the aim of re-testing the model twice to assess its external validity and to test for mediation effects (Hair et al. 2013). For all confirmatory factory analyses, a measurement model and a structural model was tested.

3.3 | Research Model Development

To select suitable measurement items and identify the factorial structure of the research model, principal axis factoring (PFA) with Varimax rotation was applied to the first sub-sample (Malhotra, Nunan, and Birks 2017). The decision to use principal axis factoring was led by the fact that the research model's constructs were supposed to be reflective of their measurement items, so that principal components analysis (PCA) was not admissible (Malhotra, Nunan, and Birks 2017).

A total of 204 responses were analyzed by using IBM's SPSS 26. Data patterns were checked for normality and outliers. Kurtosis and skewness levels were in the acceptable range of −2 to +2 for kurtosis and −10 to +10 for skewness (Collier 2020). In the next step, all measurement scales were factor analyzed and assessed according to factor loadings and communalities (Hair et al. 2013). Since the aim of factor analysis was to remove low-loading items, a cut-off value of 0.6 for factor loadings was chosen (Hair et al. 2013). This means that all items having factor loadings < 0.6 were ejected one-by-one, starting with the lowest loading item. This "purification" procedure led to 4 factors and 13 items in total (see Table 2). It was ensured that all factors had at least three measurement items and met the minimum level of 60% for variance explained (Hair et al. 2013). Besides, all factors exceeded the minimum value of 0.7 for Cronbach alpha, confirming their internal consistency (Collier 2020).

3.4 | Validation of the Measurement Model

The model derived from the factor analysis was then tested with confirmatory factor analysis (CFA) and a new sample of 204 residents. An evaluation of the distributional patterns of the scale items showed that kurtosis and skewness values were again within the acceptable ranges of −2 to +2 and −10 to +10, respectively (Collier 2020). To assess the research model, a measurement model was specified in IBM's SPSS AMOS 26.

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

TABLE 2 | Factor analysis results.

Factor/items	Variance explained	Cronbach alpha	Communality	Loading
Place satisfaction	87.591%	0.929		
I feel good in ...			0.810	0.900
All in all I'm satisfied with the place I live in...			0.738	0.859
In general I like living in ...			0.899	0.948
Resident-place identification	74.101%	0.825		
... is a part of myself			0.604	0.777
I identify myself with ...			0.874	0.935
... reflects the type of person I am			0.413	0.643
Intention to stay	82.268%	0.891		
... is the right type of place where I want to live			0.631	0.794
I would leave ... with pleasure*			0.857	0.926
I would not like to move out from ...			0.726	0.852
Consumption localism	66.600%	0.823		
Buying local products helps to boost the local employment level			0.408	0.639
Even if it's more costly, I prefer to buy local products			0.724	0.851
I prefer to buy local products rather than products from other places			0.757	0.870
I like to support the local community			0.382	0.618

Maximum likelihood (ML) estimation was used to estimate the parameters of the given distribution (Collier 2020).

It was found that all inter-factor covariances were positive and significant at the $p \leq 0.001$ level. To assess discriminant validity, composite variables were computed for each construct by using IBM's SPSS 26 (Collier 2020). Table 3 in combination with Table 4 shows that the squared inter-factor correlations between all factors were lower than the average variances extracted of each factor, confirming the discriminant validity of our model. Convergent validity was achieved since all factors had average variances extracted above the 0.5 level (Hair et al. 2013). With regard to reliability and internal consistency, all factors exceeded the minimum levels of 0.7 for composite reliability (CR) and Cronbach alpha. Model fit indexes were also satisfying (Table 4) (Collier 2020). Our testing results thus suggested a high level of psychometric validity.

3.5 | Structural Relationship Testing

The next step consisted of specifying and testing the structural relationships between the dimensions. Following the literature (Zenker and Petersen 2014), it was hypothesized that place satisfaction would result into resident-place identification, which was expected to predict intentions to stay in a place (Zenker, Petersen, and Aholt 2013) and consumer localism (Miller 2001).

It was found that all structural relationships were positive and significant at the $p = 0.001$ level. More in detail, place satisfaction predicted resident-place identification (H1) ($\beta = 0.882$; $p \leq 0.001$). Resident-place identification, in turn, had a positive and significant relationship with intentions to stay in the place (H2) ($\beta = 0.962$; $p \leq 0.001$) and consumption localism (H3) ($\beta = 0.423$; $p \leq 0.001$). Model fit indexes showed that the model reflected the data well. The root mean square error of approximation (RMSEA) was with a value of 0.079 below the general cut-off level 0.08 (Hair et al. 2013), while the comparative fit index (CFI = 0.956) for instance was much above the general minimum threshold of 0.92 (Collier 2020).

Common method bias was assessed in two ways. First, confirmatory factor analysis was applied to a model in which all items were purposely linked to one common factor (Collier 2020). The results showed that model fit indices (e.g., RMSEA from 0.079 to 0.172; CFI from 0.956 to 0.780) deteriorated a lot in the one-factor-model. Besides, we also incorporated a theoretically unrelated marker variable ("housing & facility offer") in the empirical model and observed rather low levels of correlations between our core concepts and the marker variable.

4 | Revalidation of the Measurement Model

To revalidate the structure and relationships of the research model (Collier 2020), a new resident sample ($n = 204$) was analyzed by using IBM's SPSS 26. An evaluation of the distributional patterns of the scale items showed that skewness and kurtosis values were again within the acceptable ranges cited before (Collier 2020). To assess the research model, a measurement model was specified in

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

TABLE 3 | Inter-factor correlations in the model validation.

	Mean	SD	Place satisfaction	Resident-place identification	Intention to stay	Consumption localism
Place satisfaction	1.790	0.913				
Resident-place identification	2.716	1.050	0.676** (0.457)			
Intention to stay	2.260	1.071	0.773** (0.598)	0.706** (0.498)		
Consumption localism	2.214	0.816	0.368** (0.135)	0.379** (0.144)	0.396** (0.157)	

** $p \leq 0.01$.

IBM's SPSS AMOS 26. Maximum likelihood (ML) estimation was used to estimate the parameters (Collier 2020).

The findings showed again that all inter-factor covariances were positive and significant at the $p \leq 0.001$ level. To assess the model's discriminant validity, composite variables were computed (Collier 2020). Table 5 shows the means, standard deviations and correlations between the composite constructs and their squares in parentheses.

Table 5 in combination with Table 6 indicates that the squared inter-factor correlations between all factors were lower than the average variances extracted of each factor. Since all factors had average variances extracted above the 0.5 level (Hair et al. 2013), convergent validity was also achieved. With regard to reliability and consistency, all factors exceeded the minimum levels of 0.7 for composite reliability (CR) and Cronbach alpha. Model fit indexes exceeded again the generally required thresholds (see Table 6) (Collier 2020). Again, our testing results suggested a high level of psychometric validity for the research model.

4.1 | Structural Relationship Re-Testing

The next step consisted of re-testing the structural relationships between the dimensions to confirm our hypotheses with a new sample. It was again assumed that place satisfaction would result into resident-place identification, which would predict residents' intentions to stay in the place and consumption localism (Zenker and Petersen 2014).

The results confirmed that place satisfaction was a powerful predictor of resident-place identification ($\beta = 0.931$; $p \leq 0.001$). Besides, resident-place identification was again a strong determinant of intentions to stay ($\beta = 0.945$; $p \leq 0.001$). The results revealed also that resident-place identification predicted consumption localism ($\beta = 0.470$; $p \leq 0.01$). Model fit indices further indicated that the model reflected the data well (CMIN/DF = 2.258; RMSEA = 0.079; IFI = 0.961; TLI = 0.951; CFI = 0.961). In summary, both structural model tests suggested that resident-place identification plays a mediating role between place satisfaction and behavioral intentions based on people's willingness to stay in the place and pro-place consumption.

Common method bias testing showed again that model fit indices (e.g., RMSEA from 0.079 to 0.172; TLI from 0.951 to 0.765; CFI from 0.961 to 0.804) deteriorated again a lot when using the one-factor-model. Furthermore, we found again relatively low levels of correlations between the theoretically unrelated marker variable and the empirical concepts of our model.

4.2 | Mediation Analysis of Resident-Place Identification

To confirm that resident-place identification was indeed a mediator of the linkages between place satisfaction and intentions to stay in the place (H4a), and place satisfaction and consumption localism (H4b), mediation tests were performed in IBM's SPSS AMOS 26. As recommended by Collier (2020), a

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

TABLE 4 | Loadings and fit indices in the model validation.

Factor/items	Standardized loading	*t*-value (C.R.)	AVE	CR	Alpha
Place satisfaction			0.818	0.931	0.931
I feel good in ...	0.868	—			
All in all I'm satisfied with the place I live in...	0.893	17.994			
In general I like living in ...	0.951	20.326			
Resident-place identification			0639	0.841	0.834
... is a part of myself	0.788	—			
I identify myself with ...	0.862	12.755			
... reflects the type of person I am	0.744	10.905			
Intention to stay			0.654	0.849	0.862
... is the right type of place where I want to live	0.901	—			
I would leave ... with pleasure*	0.774	14.000			
I would not like to move out from ...	0.742	13.059			
Consumption localism			0.547	0.824	0.814
Buying local products helps to boost the local employment level	0.619	—			
Even if it's more costly, I prefer to buy local Products	0.823	8.902			
I prefer to buy local products rather than products from other places	0.877	9.059			
I like to support the local community	0.597	7.098			

Note: CMIN = 98.838; CMI/DF = 1.675; RMSEA = 0.058; IFI = 0.978; TLI = 0.970; CFI = 0.977.

bootstrapping technique with the bias-corrected percentile method was used, which treats the sample like a pseudo-population and then takes a random sample with replacement to identify if an indirect effect lies within a certain confidence interval ($p \leq 0.05$). To test the mediation effects of resident-place identification, the two sub-samples that were used for validating the model were also used for the mediation testing.

The results of the analysis showed that place satisfaction had a significant direct effect ($\mu = 0.728$; $p \leq 0.001$) and a significant indirect effect ($\mu = 0.339$; lower bound = 0.237; upper bound = 0.462; $p \leq 0.001$) on intentions to stay, suggesting that resident-place identification was a partial mediator of this link. This finding is consistent with previous research (e.g., Zenker, Petersen, and Aholt 2013) as it shows that satisfied residents tend to show higher intentions to stay in their place of residence. Besides, the results revealed that place satisfaction had a nonsignificant direct effect ($\mu = 0.041$; $p = 0.680$) on consumption localism, but a significant indirect effect ($\mu = 0.237$; lower bound = 0.068; upper bound = 0.428; $p \leq 0.05$). Resident-place identification was thus identified as a mediator between residential place satisfaction and consumption localism, underlining its role for fostering pro-local consumption attitudes.

4.3 | Moderation Analysis

To assess our research model further in terms of its implications, we performed different moderation tests and evaluated the impact of control variables by using two-group analysis in IBM's SPSS AMOS 26. According to Collier (2020), moderation refers to a situation where the direct influence of an independent variable on a dependent variable is altered by a third variable called "moderator". Moderators can thus affect the strength of relationships between two empirical constructs (Collier 2020).

First, we tested whether the type of place was a moderator, since our total data sample was derived from places of different sizes and contexts (rural, urban). For this purpose, we divided the sample into two sub-groups: A first group for participants from the larger/mid-sized cities and a second group for participants from the town and rural community. As shown in Table 7, none of the tests yielded significant results, meaning that size or type of place did not seem to significantly influence (i.e., strengthen or weaken) the relationships between the concepts.

Since resident-place identification and people's incorporation of a place's characteristics into their self-concept can also be influenced by their personal past and length of residence in the place (e.g., Droseltis and Vignoles 2010), we also tested if the fact of being born in a place or not was a moderator of the inter-construct relationships. As shown in Table 8, the link between "place satisfaction" and "place identification" was significantly impacted by the moderator variable, showing that the influence of satisfaction on identification was slightly stronger for people that were born in the place. Besides, the link between "place identification" and "intention to stay" was moderated and stronger for people that were born in the place (vs. for people that were not born in the place). This finding underlines that being born in a place influences resident-place identification and has favorable effects from a person-place relationship building perspective (e.g., Kemp, Childers, and Williams 2012).

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

TABLE 5 | Inter-factor correlations in the model validation.

	Mean	SD	Place satisfaction	Resident-place identification	Intention to stay	Consumption localism
Place satisfaction	1.828	0.901				
Resident-place identification	2.770	1.150	0.757** (0.573)			
Intention to stay	2.317	1.108	0.830** (0.689)	0.763** (0.582)		
Consumption localism	2.209	0.864	0.407** (0.166)	0.450** (0.203)	0.381** (0.145)	

** $p \leq 0.01$.

5 | Discussion of Theoretical Contributions

The present study provided empirical insights to better understand the processes that shape residents' evaluations of their home area and foster resident-place relationships in terms of place-supportive attitudes. More specifically, the present study demonstrated that resident-place identification, on the basis of personal need satisfaction, results into residents' willingness to stay in a place and consumption localism. Resident-place identification, a concept which has received less attention in the literature than the broader (and perhaps more illusive) concept of place attachment, was in this context found to be a mediator of place-supportive outcome attitudes and behavioral intentions. Zenker and Petersen (2014) for instance highlight the crucial role of resident-place identification on the level of values and norms in predicting people's relationships towards places.

Measuring the effects of resident-place identification offers value added and new theoretical insights since there is a lack of insights into its causes and consequences (Droseltis and Vignoles 2010) and how the evaluation of a place's features influences residents' identification with places (Zenker and Petersen 2014). Furthermore, our findings show that residents' longer-term relationship with their place of living is crucial for explaining their intentions to stay in the place and pro-local consumption preferences.

Residential satisfaction, which is based on the fulfillment of psychological needs and motives through the availability of material and immaterial offerings (e.g., Zenker, Petersen, and Aholt 2013), was in this context confirmed as an antecedent of resident-place identification. While previous studies (e.g., Ramkissoon and Mavondo 2015) had already highlighted the role of emotional attachment to places as an outcome of place satisfaction, the present study underlined that residents' personal identification with their local area also needs consideration.

The present study also provided evidence of another conceptual relationship that is much less explored, but at least equally important for regional planning and place branding theory: Resident-place identification predicts consumption localism. Multiple studies have so far focused on the effects of place or community attachment on localism (Mullis and Kim 2011; Cowell and Green 1994), but this study identified resident-place identification as a direct determinant of consumption localism. Furthermore, the findings align with Kremer's (2021) study into the effects of regional identity on residential mobility by showing that resident-place identification increases residents' intentions to stay in a place. This finding shows that residents' meaningful connection with their place is likely to influence their intentions to stay loyal to their place of living. Overall, the present study thus developed a model that is not restricted to perceptual domains (Merrilees, Miller, and Herington 2009), as it outlines a complete evaluation process: From evaluative domains to attitudes and behavioral intentions.

Another contribution of this study is that the empirical model was tested in a cross-place context (Hanna and Rowley 2013), including different types of places with differing sizes (i.e.,

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

TABLE 6 | Loadings and fit indices in the model validation.

Factor/items	Standardized loading	*t*-value (C.R.)	AVE	CR	Alpha
Place satisfaction			0.781	0.914	0.915
I feel good in ...	0.917	—			
All in all I'm satisfied with the place I live in...	0.824	16.719			
In general I like living in ...	0.907	20.950			
Resident-place identification			0.706	0.877	0.874
... is a part of myself	0.867	—			
I identify myself with ...	0.904	17.175			
... reflects the type of person I am	0.741	12.504			
Intention to stay			0.702	0.875	0.873
... is the right type of place where I want to live	0.861	—			
I would leave ... with pleasure*	0.909	17.898			
I would not like to move out from ...	0.734	12.441			
Consumption localism			0.587	0.847	0.839
Buying local products helps to boost the local employment level	0.685	—			
Even if it's more costly, I prefer to buy local Products	0.844	10.574			
I prefer to buy local products rather than products from other places	0.903	10.890			
I like to support the local community	0.591	7.709			

Note: CMIN = 94.587; CMI/DF = 1.603; RMSEA = 0.055; IFI = 0.982; TLI = 0.976; CFI = 0.982.

TABLE 7 | Two-group analysis for type of place.

	Satisfaction -> Identification	Identification -> Intention to stay	Identification -> Consumer localism
Larger and mid-sized cities (group 1; $n = 425$)	$\beta = 0.907$*** ($t = 18.151$)	$\beta = 0.942$*** ($t = 17.481$)	$\beta = 0.447$*** ($t = 7.786$)
Town/rural community (group 2; $n = 187$)	$\beta = 0.869$*** ($t = 11.041$)	$\beta = 0.954$*** ($t = 11.524$)	$\beta = 0.484$*** ($t = 4.880$)
Group differences ($\Delta\chi^2$/1df)	0.334; $p = 0.563$	1.301; $p = 0.254$	0.952; $p = 0.329$

Note: Model fit across the groups (uncons.): $\chi^2 = 420.774$; df = 124; $p < 0.001$; IFI = 0.947; TLI = 0.933; CFI = 0.947; RMSEA = 0.063.
***$p \leq 0.001$.

TABLE 8 | Two-group analysis for born in the place versus not born in the place.

	Satisfaction -> Identification	Identification -> Intention to stay	Identification -> Consumer localism
Born in the place (group 1; $n = 154$)	$\beta = 0.910$*** ($t = 9.451$)	$\beta = 0.962$*** ($t = 9.043$)	$\beta = 0.432$*** ($t = 4.285$)
Not born in the place (group 2; $n = 457$)	$\beta = 0.906$*** ($t = 19.825$)	$\beta = 0.938$*** ($t = 19.260$)	$\beta = 0.452$*** ($t = 8.031$)
Group differences ($\Delta\chi^2$/1df)	12.222; $p = 0.000$	4.306; $p = 0.038$	2.256; $p = 0.133$

Note: Model fit across the groups (uncons.): $\chi^2 = 390.482$; df = 124; $p < 0.001$; IFI = 0.953; TLI = 0.941; CFI = 0.953; RMSEA = 0.059.
***$p \leq 0.001$.

cities, communities). Previous studies have focused selectively on cities as a spatial entity, but there are "few research studies that took into account more than one type of place" (Lewicka 2010, 36) and spatial entities larger than the immediate residential neighborhood (Manzo 2003). In fact, many studies have focused on one place scale only and avoided focusing on how the local population engages with its place—be it in cities or rural areas (Lewicka 2011).

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

6 | Implications for Public Management and Marketing

By focusing on the role of resident-place identification, our research provides a better understanding of how place management organizations can foster intentions to stay in a place and pro-local consumption attitudes. Our research posits that resident-place identification is the result of congruence or compatibility between the characteristics of places and residents' self-concept and self-definition. A crucial question is in this context how place marketers and place management organizations can achieve and increase congruence between residents' perceptions of places and the communicated contents of place brands?

The findings of our study highlight that public managers, spatial designers, and place marketers should aim to increase residents' perceived congruence with their places of residence through targeted interventions and the creation of place-related identities that match resident expectations (Cerisola and Panzera 2022). Following Strandberg and Ek Styvén (2024), place brand identity is generally viewed as the supply-side's (i.e., place managers) expression of how a place shall be perceived, while place identity is considered as the demand-side perspective, involving how individuals understand and recognise places (Kavaratzis and Kalandides 2015). Place marketing and branding interventions that reinforce residents' perceived identification with places may in this context enhance the relationships between the place brand identity and the perceived identity of places (Braun, Kavaratzis, and Zenker 2013). To do so, local authorities may need to re-think their adoption of place branding as a "one-size" fits all approach and find ways to promote the perceived unique attributes of the place by relying on residents' individual perceptions of what a place stands for (Insch and Walters 2018). For instance, promotional campaigns that focus on residents' meaning-making processes of local attributes address people's identification with places and might lead to acceptance and support of the place brand (Kemp, Childers, and Williams 2012; Zenker and Beckmann 2013). Place management organizations may thus pro-actively involve local residents in the identification of salient local attributes (e.g., representative place elements, values).

While involving residents in the place brand co-creation process may certainly help local populations in identifying with place brands (Braun, Kavaratzis, and Zenker 2013, p. 23) and foster positive attitudes regarding the place (ambassadorship, civic pride, and so on), it can also be questioned whether the shared contents of place brands are always "good" or "desirable" in the eyes of all residents. Zenker and Petersen (2014) for instance argue that a 100% identity fit between residents and places is not necessarily desirable, since individuals may want to stay unique or differentiate themselves at least from certain attributes that are associated with places (e.g., rural regions might be associated with attributes such as "conservative" or "calme", while some of their residents may not identify with such attributes even though they like the place).

In general, a focus on resident-place identification offers insights into how place authorities can better understand place-related experiences and how place perceptions can be managed to improve residential satisfaction and identification (Hanna and Rowley 2013). Especially in areas where local authorities are responsible for the socioeconomic development of places, regional planners and public managers need to understand how residents' relationships with places may transform into place- or region-supportive attitudes such as consumption localism.

As shown by our findings, local authorities can benefit from having a more refined understanding of resident-place relationships and their outcomes. A strategic approach towards regional planning would be to forge long-term identification between residents and their places, as this can sustain the consumption of local products and support for local shops. Residents' mobility intentions were also found to be influenced by satisfaction and a person's compatibility with a place. If spatial planners and public managers succeed in improving resident-place relationships, residents' ties with places are expected to grow, which is a desired outcome of public management (Chen and Dwyer 2018). The research model equally demonstrates that resident-place identification is likely to favor residents' support for local shops and products (Miller 2001; Mullis and Kim 2011). This finding is interesting for regional planning, as it suggests that at least some branches of the local economy (e.g., food) could be sustained by branding. Demonstrating the link between evaluative concepts and monetary outcomes can in fact be helpful for spatial planning in retaining funds for future development programmes. Establishing a link between perceptual evaluations and monetary outcomes can thus help public managers and place marketing organizations to justify investments in such campaigns, as related expenditures could sustain the local commercial infrastructure (Zenker and Martin 2011; Tasci 2020).

A focus on person-place relationships is helpful because it facilitates a holistic view on person-place evaluation and bonding processes. As outlined before, our research model links place satisfaction, resident-place identification, intentions to stay, and pro-local consumption. The identification and linkage of these evaluative and attitudinal domains may in fact facilitate the work of public managers, as it shows which processes can be influenced when individuals evaluate a brand or a bundle of place-related products. A focus on specific dimensions of this process might allow place managers to strategically develop cities and entire regions.

Measurement scales are in this regard useful to investigate the outcomes of place evaluations as "each brand association is quantifiable to give diagnostic feedback to government agencies" (Merrilees, Miller, and Herington 2009, 363). If assessments of positive or negative place perceptions are paired with other forms of market research focusing on the nature of such attributes and how they potentially change over time, place managers can obtain more in-depth insights into how their place is perceived and how they can retain residents and support local producers. The present research suggests that public managers should use standardized measures of resident need satisfaction, identification, intentions to stay in the place and preference for local products and producers on a regular basis because it can help them to further improve the place's residential offerings (Zenker and Rütter 2014). Public managers can for instance develop the functional offer of places (e.g., amenities) and create platforms for social engagement (e.g., events) with the place and its community (Lovén, Hammarlund, and Nordin 2020; Hong 2015), which is expected to increase residents' satisfaction and identification with the place and might

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

ultimately result into place-supportive consumption attitudes and intentions to stay, as shown by our findings.

7 | Limitations and Further Research Avenues

While the present study has derived new empirical insights into the mediating effects of resident-place identification, certain drawbacks need to be discussed. First, the data samples used for this research were based on convenience sampling in online networks. Even if much attention was paid to recruit respondents showing variance on personal traits that were deemed relevant for this study (e.g., length of living the place), the survey was only accessible for a cross-section of the population (i.e., Internet users). While prior studies (e.g., Zenker, Petersen, and Aholt 2013; Droseltis and Vignoles 2010; Lewicka 2010) in the field of spatial planning, environmental psychology, and place marketing have also relied on nonrepresentative samples to draw conclusions, further research is required to substantiate the findings. Future research should also test further control variables between the conceptual links and re-assess the impact of type or size of place, as our sample from rural areas might not have been fully representative of this type of place.

Besides, the empirical model developed in this study can be considered as a simplified representation of complex (social) processes. It should be recognized that quantitative measurement results are generally influenced by the selection of items and applied methods (Zenker, Petersen, and Aholt 2013). This assertion seems to be especially relevant for places, which often consist of a variety of attributes. Besides, the conceptual links tested in our research model might at least in some cases run in both directions (e.g., place satisfaction and resident-place identification) so that future research may retest their causality and further develop the research model to substantiate its external and predictive validity.

The present study confirmed consumption localism as an outcome variable of person-place relationships, but it needs to be acknowledged that localism or ethnocentrism is usually product-specific (e.g., Cleveland, Laroche, and Papadopoulos 2009) and depends on which products can indeed be bought locally. In fact, "the definition of what is realistically local" might depend on each consumer (Spielmann and Bernelin 2015, 621). Cowell and Green (1994) find that strong attachment is related to local food purchases, but weakly related to local clothing. Further research may thus provide more nuances on the empirical relationships of our research model and also assess the potential impact of closed mindsets, patriotism or nationalism in terms of how person-place identification affects consumer localism.

Ethics Statement

Obtained from University of Leicester—School of Business—with the reference 22564-tcl11-ss/bu:management&organisation by the Ethics Committee (chair: Dr. Chris Grocott).

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The authors have nothing to report.

References

Anton, C. E., and C. Lawrence. 2014. "Home Is Where the Heart Is: The Effect of Place of Residence on Place Attachment and Community Participation." *Journal of Environmental Psychology* 40: 451–461.

Boley, B. B., M. Strzelecka, E. P. Yeager, et al. 2021. "Measuring Place Attachment With the Abbreviated Place Attachment Scale (APAS)." *Journal of Environmental Psychology* 74: 101577.

Bonaiuto, M., A. Aiello, M. Perugini, M. Bonnes, and A. P. Ercolani. 1999. "Multidimensional Perception of Residential Environment Quality and Neighbourhood Attachment in the Urban Environment." *Journal of Environmental Psychology* 19: 331–352.

Braun, E., M. Kavaratzis, and S. Zenker. 2013. "My City—My Brand: The Different Roles of Residents in Place Branding." *Journal of Place Management and Development* 6, no. 1: 18–28.

Burholt, V. 2012. "The Dimensionality of 'Place Attachment' for Older People in Rural Areas of South West England and Wales." *Environment and Planning A: Economy and Space* 44: 2901–2921.

Casakin, H., B. Hernández, and C. Ruiz. 2015. "Place Attachment and Place Identity in Israeli Cities: The Influence of City Size." *Cities* 42: 224–230.

Cerisola, S., and E. Panzera. 2022. "Cultural Cities, Urban Economic Growth, and Regional Development: The Role of Creativity and Cosmopolitan Identity." *Papers in Regional Science* 101, no. 2: 285–303.

Chen, N., and L. Dwyer. 2018. "Residents' Place Satisfaction and Place Attachment on Destination Brand-Building Behaviors: Conceptual and Empirical Differentiation." *Journal of Travel Research* 57, no. 8: 1026–1041.

Clark, W. A. V., and C. H. Mulder. 2000. "Leaving Home and Entering the Housing Market." *Environment and Planning A: Economy and Space* 32: 1657–1671.

Cleveland, M., M. Laroche, and N. Papadopoulos. 2009. "Cosmopolitanism, Consumer Ethnocentrism, and Materialism: An Eight-Country Study of Antecedents and Outcomes." *Journal of International Marketing* 17, no. 1: 116–146.

Collier, J. E. 2020. *Applied Structural Equation Modeling Using AMOS—Basic to Advanced Techniques*. New York, NY: Routledge.

Courtney, P., and M. Moseley. 2008. "Determinants of Local Economic Performance: Experience From Rural England." *Local Economy: The Journal of the Local Economy Policy Unit* 23, no. 4: 305–318.

Cowell, D. K., and G. P. Green. 1994. "Community Attachment and Spending Location: The Importance of Place in Household Consumption." *Social Science Quarterly* 75: 637–655.

Droseltis, O., and V. L. Vignoles. 2010. "Towards an Integrative Model of Place Identification: Dimensionality and Predictors of Intrapersonal-Level Place Preferences." *Journal of Environmental Psychology* 30: 23–34.

Erikson, E. 1964. *Insight and Responsibility*. New York, NY: W.W. Norton.

Eshuis, J., E. H. Klijn, and E. Braun. 2014. "Place Marketing and Citizen Participation: Branding as Strategy to Address the Emotional Dimension of Policy Making?" *International Review of Administrative Sciences* 80, no. 1: 151–171.

Feldman, R. M. 1990. "Settlement-Identity: Psychological Bonds With Home Places in a Mobile Society." *Environment and Behavior* 22: 183–229.

Fernández-Ferrín, P., and B. Bande-Vilela. 2013. "Regional Ethnocentrism: Antecedents, Consequences, and Moderating Effects." *Food Quality and Preference* 30: 299–308.

Fleury-Bahi, G., M. L. Félonneau, and D. Marchand. 2008. "Processes of Place Identification and Residential Satisfaction." *Environment and Behavior* 40, no. 5: 669–682.

Florida, R. 2002. *The Rise of the Creative Class—and How it's Transforming Work, Leisure, Community and Everyday Life*. New York, NY: Basic Books.

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Florida, R., C. Mellander, and K. Stolarick. 2011. "Beautiful Places: The Role of Perceived Aesthetic Beauty in Community Satisfaction." *Regional Studies* 45, no. 1: 33–48.

Giuliani, M. V., and R. Feldman. 1993. "Place Attachment in a Developmental and Cultural Context." *Journal of Environmental Psychology* 13: 267–274.

Glaeser, E. L., J. Kolko, and A. Saiz. 2001. "Consumer City." *Journal of Economic Geography* 1, no. 1: 27–50.

Greasley, S., P. John, and H. Wolman. 2011. "Does Government Performance Matter? The Effects of Local Government on Urban Outcomes in England." *Urban Studies* 48: 1835–1851.

Hair, Jr., J. E., R. E. Anderson, R. L. Tatham, and W. C. Black. 2013. *Multivariate Data Analysis*. New York, NY: Prentice Hall.

Hanna, S., and J. Rowley. 2013. "A Practitioner-Led Strategic Place Brand-Management Model." *Journal of Marketing Management* 29, no. 15–16: 1782–1815.

Helderman, A. C., C. H. Mulder, and M. Ham. 2004. "The Changing Effect of Home Ownership on Residential Mobility in the Netherlands." *Housing Studies* 19: 601–616.

Hong, G. 2016. "Examining the Role of Amenities in Migration Decisions: A Structural Estimation Approach." *Papers in Regional Science* 95, no. 4: 733–755.

Horie, S., and S. Managi. 2017. "Why Do People Stay in or Leave Fukushima?" *Journal of Regional Science* 57, no. 5: 840–857.

Insch, A., and M. Florek. 2008. "A Great Place to Live, Work and Play: Conceptualising Place Satisfaction in the Case of a City's Residents." *Journal of Place Management and Development* 1, no. 2: 138–149.

Insch, A., and T. Walters. 2018. "Challenging Assumptions About Residents' Engagement With Place Branding." *Place Branding and Public Diplomacy* 14, no. 3: 152–162.

Jackson, P., and N. Thrift. 1995. "Geographies of Consumption." In *Acknowledging Consumption*, edited by D. Miller. London: Routledge.

Jacobsen, B. P. 2012. "Place Brand Equity: A Model for Establishing the Effectiveness of Place Brands." *Journal of Place Management and Development* 5, no. 3: 253–271.

Kavaratzis, M., and A. Kalandides. 2015. "Rethinking the Place Brand: The Interactive Formation of Place Brands and the Role of Participatory Place Branding." *Environment and Planning A: Economy and Space* 47, no. 6: 1368–1382.

Kearns, A., and E. Whitley. 2015. "Getting There? The Effects of Functional Factors, Time and Place on the Social Integration of Migrants." *Journal of Ethnic and Migration Studies* 41, no. 13: 2105–2129.

Kemp, E., C. Y. Childers, and K. H. Williams. 2012. "Place Branding: Creating Self-Brand Connections and Brand Advocacy." *Journal of Product & Brand Management* 21, no. 7: 508–515.

Knez, I. 2005. "Attachment and Identity as Related to a Place and Its Perceived Climate." *Journal of Environmental Psychology* 25: 207–218.

Korpela, K. M. 1989. "Place-Identity as a Product of Environmental Self-Regulation." *Journal of Environmental Psychology* 9: 241–256.

Kremer, A. 2022. "Home Is Where the History Is: How Today's Migration in Germany Is Shaped by Regional Identity." *Journal of Regional Science* 62, no. 2: 604–638.

Lewicka, M. 2010. "What Makes Neighborhood Different From Home and City? Effects of Place Scale on Place Attachment." *Journal of Environmental Psychology* 30: 35–51.

Lewicka, M. 2011. "Place Attachment: How Far Have We Come in the Last 40 Years?" *Journal of Environmental Psychology* 31: 207–230.

Lovén, I., C. Hammarlund, and M. Nordin. 2020. "Staying or Leaving? The Effects of University Availability on Educational Choices and Rural Depopulation." *Papers in Regional Science* 99, no. 5: 1339–1366.

Low, S., and I. Altman. 1992. *Place Attachment*. New York, NY: Plenum Press.

Malhotra, N. K., D. Nunan, and D. F. Birks. 2017. *Marketing Research—An Applied Approach*. London: Pearson Education Limited.

Malpas, J. 1999. *Place and Experience: A Philosophical Topography*. Cambridge: Cambridge University Press.

Manzo, L. C. 2003. "Beyond House and Haven: Toward a Revisioning of Emotional Relationships With Places." *Journal of Environmental Psychology* 23: 47–61.

Merrilees, B., D. Miller, and C. Herington. 2009. "Antecedents of Residents' City Brand Attitudes." *Journal of Business Research* 62: 362–367.

Miller, D. 1998. *A Theory of Shopping*. Cambridge: Polity.

Miller, J. 2001. "Contributions of Social Capital Theory in Predicting Rural Community Inshopping Behaviour." *Journal of Socio-Economics* 30: 475–493.

Moore, J. 2000. "Placing Home in Context." *Journal of Environmental Psychology* 20: 207–217.

Mullis, K., and M. Kim. 2011. "Factors Determining Inshopping in Rural US Communities." *International Journal of Retail & Distribution Management* 39, no. 5: 326–345.

Ottaviano, G. I. P., and G. Prarolo. 2009. "Cultural Identity and Knowledge Creation in Cosmopolitan Cities." *Journal of Regional Science* 49, no. 4: 647–662.

Paasi, A. 2002. "Regional Transformation in the European Context: Notes on Regions, Boundaries and Identity." *Space and Polity* 6, no. 2: 197–201.

Potter, J., and R. Cantarero. 2006. "How Does Increasing Population and Diversity Affect Resident Satisfaction? A Small Community Case Study." *Environment and Behavior* 38, no. 5: 605–625.

Proshansky, H. M. 1978. "The City and Self Identity." *Environment and Behavior* 10: 147–169.

Ramkissoon, H., L. D. Graham Smith, and B. Weiler. 2013. "Testing the Dimensionality of Place Attachment and Its Relationships With Place Satisfaction and Pro-Environmental Behaviours: A Structural Equation Modelling Approach." *Tourism Management* 36: 552–566.

Ramkissoon, H., and F. T. Mavondo. 2015. "The Satisfaction-Place Attachment Relationship: Potential Mediators and Moderators." *Journal of Business Research* 68, no. 12: 2593–2602.

Riley, R. B. 1992. "Attachment to the Ordinary Landscape." In *Place Attachment*, edited by I. Altman, and S. M. Low. New York, NY: Plenum Press.

Spielmann, N., and M. Bernelin. 2015. "Locavores: Where You Buy Defines Who You Are." *International Journal of Retail & Distribution Management* 43, no. 7: 617–633.

Strandberg, C., and M. Ek Styvén. 2024. "The Multidimensionality of Place Identity: A Systematic Concept Analysis and Framework of Place-Related Identity Elements." *Journal of Environmental Psychology* 95: 102257.

Tasci, A. D. A. 2020. "Exploring the Analytics for Linking Consumer-Based Brand Equity (CBBE) and Financial-Based Brand Equity (FBBE) of Destination or Place Brands." *Place Branding and Public Diplomacy* 16: 36–59.

Uzzell, D., E. Pol, and D. Badenas. 2002. "Place Identification, Social Cohesion, and Environmental Sustainability." *Environment and Behavior* 34, no. 1: 26–53.

Yildiz, H., S. Heitz-Spahn, and L. Belaud. 2018. "Do Ethnocentric Consumers Really Buy Local Products?" *Journal of Retailing and Consumer Services* 43: 139–148.

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License

Williams, D. R., and J. J. Vaske 2003. "The Measurement of Place Attachment: Validity and Generalizability of a Psychometric Approach" *Forest Science* 49: 830–841.

Zenker, S. 2014. "Measuring Place Brand Equity With the Advanced Brand Concept Map (aBCM) Method." *Place Branding and Public Diplomacy* 10, no. 2: 158–166.

Zenker, S., and S. C. Beckmann. 2013. "My Place Is Not Your Place—Different Place Brand Knowledge by Different Target Groups." *Journal of Place Management and Development* 6, no. 1: 6–17.

Zenker, S., and T. Gollan. 2010. "Development and Implementation of the Resident Migration Scale (ReMis): Measuring Success in Place Marketing." In *Sozialpsychologie und Ökonomie*, edited by E. H. Witte and T. Gollan. Lengerich: Pabst Verlag.

Zenker, S., and N. Martin. 2011. "Measuring Success in Place Marketing and Branding." *Place Branding and Public Diplomacy* 7, no. 1: 32–41.

Zenker, S., and S. Petersen. 2014. "An Integrative Theoretical Model for Improving Resident-City Identification." *Environment and Planning A: Economy and Space* 46: 715–729.

Zenker, S., S. Petersen, and A. Aholt. 2013. "The Citizen Satisfaction Index (CSI): Evidence for a Four Basic Factor Model in a German Sample." *Cities* 31: 156–164.

Zenker, S., and N. Rütter. 2014. "Is Satisfaction the Key? The Role of Citizen Satisfaction, Place Attachment and Place Brand Attitude on Positive Citizenship Behavior." *Cities* 38: 11–17.

Zheng, L. 2016. "What City Amenities Matter in Attracting Smart People?" *Papers in Regional Science* 95, no. 2: 309–328.

14679787, 2025, 2, Downloaded from https://onlinelibrary.wiley.com/doi/10.1111/jors.12749 by Area Sistemi Dipart & Doc, Wiley Online Library on [06/06/2025]. See the Terms and Conditions (https://onlinelibrary.wiley.com/terms-and-conditions) on Wiley Online Library for rules of use; OA articles are governed by the applicable Creative Commons License