### ARTICLE



# Reflections on "place attachment": perceptions of urban redevelopment in an informal neighborhood in Istanbul

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### Abstract

In the last two decades, urban redevelopment practices in informal settlements in Turkey often neglected inhabitants' spatial practices. The contradictions between conceived and lived space constitutes reactions to these spatial interventions. Against this background, this paper examines the association between place attachment and residents' attitudes toward the redevelopment project in an informally developed neighborhood. Using path and decision tree analysis of survey data, the paper explores the relationship between their attitudes towards and their attachment to the neighborhood. Our findings reveal that individuals' social and physical bonds with their neighborhood shape their attitude toward urban redevelopment. As such, this study confirms the idea that daily interactions between residents reinforce their place attachment in informal settlements where place identity compensates for the (low) quality of life. Still, our findings also demonstrate that residents' identification with the place is a more influential factor, compared to the risk of leaving the neighborhood, on the level of concern against spatial interventions.

**Keywords** Place attachment  $\cdot$  Place identity  $\cdot$  Informal settlement  $\cdot$  Istanbul  $\cdot$  Path analysis  $\cdot$  Decision tree analysis

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## 1 Introduction

In recent decades, the reproduction of space through urban redevelopment projects has become a prominent spatial policy in many cities. These state-led processes include physical and social reorganization of neighborhoods. Although lip service is paid to concepts such as participation and co-production, which prioritize residents' demands and needs during redevelopment, top-down decision-making practices often guide spatial interventions, especially in developing countries (Hossain & Hackenbroch, 2019; Swapan, 2016). Recent urban studies literature pays significant attention to the physical transformation of space, the displacement of the residents, and their resistance strategies (Glucksberg, 2017; Karaman, 2014; Kuyucu & Ünsal, 2010; Wallace, 2017). Lately, research aiming to understand perceptions about these interventions and why individuals react differently to them has also gained traction.

The existing body of research in this vein reports significant connections between attitudes toward spatial interventions and place attachment (Anton & Lawrence, 2016; Vorkinn & Riese, 2001). Place attachment is defined as the bond that individuals establish with their physical environment (Anton & Lawrence, 2016; Hidalgo & Hernández, 2001; Rollero & Piccoli, 2010). At the same time, individuals' bond with their environment also involves concern for the places that they live in. Correspondingly, inhabitants with a strong attachment to a place are likely to resist controversial state-led redevelopment processes (Li et al., 2019). Yet, substantive research on how place attachment affects residents' attitudes towards a state-led redevelopment project in informal settlements has not hitherto been investigated.

Against this backdrop, this paper aims to fill this gap in the literature, focusing on an informal neighborhood in İstanbul. Few studies on place attachment in declining neighborhoods investigate pre-conditions of a spatial intervention (Goetz, 2016; Li et al., 2019; Manzo, 2014). Surprisingly, even far little attention has been paid to place attachment as a motive for participating in redevelopment projects (Dülgeroğlu Yüksel et al., 2019; Falanga, 2022). Accordingly, this paper explores the factors influencing the interests or concerns of the residents of an informal neighborhood to engage in state-led redevelopment projects. In doing so, it examines the relationship between individuals' responses to and perceptions of a redevelopment project in Okmeydanı, on the one hand, and their attachment to the place, their identification with the neighborhood, and their physical and social bonds, on the other. To this end,

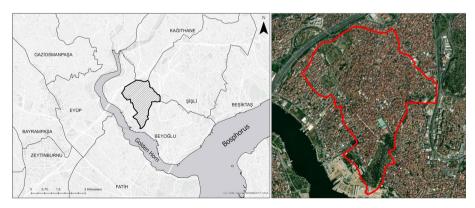


Fig. 1 Location of Okmeydanı project area (maps by authors, 2023)



the paper applies the concepts of conceived and lived space (Lefebvre, 1991) to data gathered during fieldwork conducted in 2016 and analyzed through path and decision tree analysis.

In what follows, the paper first gives a brief overview of the recent redevelopment history of Okmeydani, an informally developed neighborhood in İstanbul. Following this, we present the theoretical and conceptual framework, including our hypothesis. The following two sections present the methodology and followed by research findings and concluding remarks on how residents of Okmeydani relate to the conceived space.

## 2 Conceived versus lived space: conflicting and confusing formalization history of Okmeydanı

With a population of 17 million, Istanbul is the biggest and one of the most dynamic cities in Turkey in terms of urbanization processes due to the rental potential of the land, on the one hand, and the scarcity of vacant urban land, on the other. This giant metropolis' social and physical building blocks are products of the rural—urban migration starting from the 1950s. One of the largest informally developed neighborhoods due to this rapid urbanization, Okmeydanı has been undergoing a conflicted process of the urban redevelopment.

Okmeydanı is a primarily residential neighborhood on a hillside overlooking the Golden Horn in Beyoglu District. Until 1950, it was an open public space with targets for archery practice, tombstones, and buildings owned by Sultan Mehmet the Conqueror Foundation. The informal settlers in Okmeydanı were rural migrants leaving the land and moving to İstanbul, which was at the time certainly not ready to absorb the housing and infrastructural needs of the newcomers. Therefore, informal structures known as "gecekondu" were built, characterizing the urbanization process (Figs. 1, 2). According to Baharoglu and Leitmann (1998, pp. 116), "gecekondu", which in Turkish means "built overnight", "...are dwellings that are illegal because they are either: (a) built on public land usually belonging to the Treasury; (b) constructed on private property not belonging to the homeowner; (c) built on shared-title land; and/or (d) constructed without occupancy or construction permits". This meant migrants from rural areas built their own houses either on public or private land, first in geographically undesirable places (like steep slopes, river beds etc.), and then, in the periphery of the city (Erman, 1997) where there was relatively less control.



Fig. 2 Street views from Okmeydanı, 2022

In 1961, Okmeydani was declared a historical preservation site, and accordingly, the law prohibited any construction in order to prevent more unauthorized buildings. Still, by the 1970s, Okmeydani became one of the most densely inhabited neighborhoods in the city. Moreover, the 1980s marked a new era where cities became the main sources of access to political power via clientelist practices. Successive governments, for instance, used instruments such as amnesties for unauthorized housing construction to appeal to the voters. As a result, Okmeydani, like other informal settlements in the city, gradually started to receive urban services like electricity, running water, public transportation, sewage, and educational facilities. This entire process shaped the transformation of Okmeydani into a neighborhood of multi-story buildings on publicly owned land with conservation status.

A reclamation plan for Okmeydanı was prepared based on the newly issued Building Amnesty Law (No. 3290) in 1986. Accordingly, residents were asked to apply for a title deed; however, this process was never completed. Several other plans in the 1980s and 1990s to upgrade and develop Okmeydanı failed because of conflicting regulations, political disputes, and the use of illegal planning instruments concerning historic preservation, land use, and land tenure.

The late 1990s brought changes in the disposition of the central and local governments. The new urban development approach was based on neo-liberalization of cities through erecting mega projects, expanding the real estate market, gentrification of inner-city areas, and boosting the economy. Here it is worth mentioning the Marmara Earthquake in 1999, one of the worst natural disasters in recent decades in Turkey, leading to approximately 17,000 fatalities with an estimated 20,000 collapsed buildings displacing more than 250,000 people (Scawthorn, 2000, p. 1). Due to the low quality of its urban building stock, the earthquake alarmed Istanbul residents and planning authorities, and thus, providing a convenient opportunity for changes to the urban infrastructure (Okten et al., 2021). Between 1999 and 2012, several neighborhood redevelopment projects were implemented using the newly established legislative framework. However, most were highly controversial as they resulted in massive displacement in a process characterized as state-led gentrification (Kocabas & Gibson, 2011).

In 2012, a new legislation (Disaster Law 6306) empowered the Ministry of Environment and Urbanization. Accordingly, the Ministry could declare the infrastructure of any neighborhood as risky in terms of earthquake resistance, permit new redevelopment projects and expropriate land, when necessary, regardless of the residents' consent. This new legal context encouraged profit-oriented redevelopment projects in the formerly "gecekondu" neighborhoods, which in time turned into inner-city areas with enormous rent increases (Okten et al., 2021). The ambiguous land tenure structure in these areas put the developers at a more advantaged position in negotiations with the residents and accelerated the gentrification process.

Meanwhile, Beyoğlu District Municipality announced a redevelopment plan for Okmeydanı. Even though the complicated decision-making process aimed at restricting such development due to the legal status of the area, it opened doors for the legalization of the earlier structures. It presented some of the residents with an important opportunity to legalize their land tenure. Nevertheless, the land's unclear legal status and the doubt that the 40,000 residents of Okmeydanı would equally benefit from this opportunity led to a court case in which the Chamber of City Planners together with the main opposition party in the parliament sued the planning authority, and the project was annulled in 2014.

Finally, in 2016, the Council of Ministers declared Okmeydanı, according to Disaster Law 6306, a disaster risk area. As a result, the local government was again authorized to prepare and implement an urban redevelopment project for the district. According to the







Fig. 3 The first visual of the planned development in 2017 (left) (Source: Beyoğlu Municipality official web site, https://beyoglu.bel.tr, access date 31 January 2018) and the project images that have started recently (right) (It is stated by the government that in the first phase, which is planned to be completed in 18 months, 778 residences and 161 workplaces will be built and the beneficiaries will pay the difference over the cost in instalments over 20 years. Source: Beyoğlu Municipality official website, https://beyoglu.bel.tr/ana-kateg ori/okmeydani-kentsel-donusum-projesinde-ilk-temel-atildi/, access date 8 January 2023) in Okmeydani

official figures, the project covers an area of 165 ha. and affects around 100,000 residents. Catered to the needs of (new) dwellers, it envisions the neighborhood as a center for tourism and shopping (Fig. 3).

Residents partly contested and partly accepted the intended redevelopment because of the legalization process, which past governments left incomplete. Residents without deeds perceived the project as the long-awaited opportunity to receive a title deed, whereby, for the tenants, it meant displacement. Approximately 40.000 residents occupying the historic preservation area in the neighborhood had concerns. Yet, the project did not indicate clearly whether their land claims would be recognized at all and, if so, on what terms and where those households would be relocated (Okten et al., 2021). Against this background, the Okmeydanı Neighborhood Association took the redevelopment project to the administrative court.

With its 820 members, the Association was active in creating awareness about the project and mediated the conflicting interests that it triggered with property owners and tenants. Both litigation processes and the project's implementation are at the moment ongoing. Within the scope of the project undertaken by the central government, some residents resist the demolition and eviction decisions and do not consent to the process. Their objection is based on claims that include the violation of property rights, lack of rental assistance, and imposed top-down process.

Another issue that needs to be addressed in this context is the residents' ethnically, politically, and spatially diverse composition. The demographic formation of Okmeydam was mainly structured by the two waves of migration during the 1970s and 1980s. The Alevi population came to the district after the 1970s, followed by the Kurdish population that was displaced from their villages in Southeast Anatolia. Besides, various revolutionary leftist groups with close ties to these disadvantaged Alevi and Kurdish populations played important roles in the establishment of many gecekondu settlements like Okmeydanı, in terms of securing the settlers' land from destruction and state interventions and providing basic needs for the new incomers (Lees et al., 2018; Yonucu, 2018).



In addition, the vertical growth of Okmeydanı especially in the 1980s/90s was possible thanks to the dwellers who built multiple storey buildings with the involvement of small-scale constructors from the Black Sea region, who would subsequently own some of the floors they built (Rivas Alonso, 2022). This meant further diversification of the demographic make-up of the neighborhood with the inclusion of a Sunni population with progovernment tendencies. The composition further changed with the migration of different Sunni groups, precarious workers, and external migrants from the middle east. The neighborhood's central location, its relatively reasonable rents, and the presence of ubiquitous textile workshops (mainly employing informally) attracted those in precarious situations.

Yet, precarity as a common life experience is not enough to unite these diverse populations. Instead, the ethnic and religious composition including Alevi, Kurdish, and Sunni segments of the society is a source of warring factions. Conflicts and street clashes in the neighborhood in which police is involved are not uncommon. Given its history of revolutionary groups and especially after the Gezi protests<sup>1</sup> in 2013, Okmeydanı has in fact become over the decades a place of struggle where the tension created by social polarization and state violence is salient (Rivas Alonso, 2022; Yonucu, 2018).

While these different groups dwell in different parts of the project area, the resistance against the process is less visible among the more conservative pro-government groups residing in the neighborhood. Accordingly, there is a duality in the perception of the conflicts and police violence in the neighborhood. While some feel that the neighborhood needs immediate renewal and purge, others believe that the tension is being escalated as part of a scheme to convince the opponents of the project about the necessity of the redevelopment.

Having said that, the pursuit of gentrification in Okmeydanı, under the guise of improving the area, is closely tied to the goal of reshaping its image. This desire for a new urban image is highlighted by statements such as that of former Beyoğlu mayor Ahmet Misbah Demircan, who said "We will turn Okmeydanı into Champs-Elysees." as Aksoy (2012, p. 106) noted.

## 3 Theoretical framework: concepts and hypotheses

## 3.1 Reproduction of place and attachment to the place

Since the second half of the 1980s, many cities worldwide have witnessed a neoliberal urbanization process within the globalization trend and due to the post-Keynesian transformation. During this process of global economic integration, cities that were able to establish necessary urban images and attract capital have come to the fore (Keyder & Öncü, 1993; Sassen, 2001). Lefebvre's writings on urban theory emphasized the state's role in the reproduction and transformation of urban space and suggested that regulatory strategies of state institutions embody powerful tools of intervention that have sociospatial effects (Brenner, 2000). On the one hand, competition among cities to create the most favorable environment for rapidly expanding global investments began, and

<sup>&</sup>lt;sup>1</sup> Gezi Protests were a series of nationwide protests in Turkey that began on May 28, 2013, initially to contest the urban development plan for Istanbul's Taksim Gezi Park. The protests were sparked by government plans to demolish the park to make way for a shopping mall and quickly grew into a broader anti-government movement.



mega-projects and infrastructure investments aimed at attracting the upper-income group to the center. On the other hand, neighborhoods under the pressure of gentrification led to displacements and further intensified emerging inequalities, and, as such, created conflicts over space.

Previous research on conflicts over space and disputed urban projects have used Lefebvre's spatial theory (Allen & Pryke, 1994; Carp, 2008; Leary, 2009, 2013; McCann, 1999). Few studies used the gap between conceived and lived space to evaluate public engagement and spatial practices (Ng et al., 2010; Tang et al., 2012). With reference to Lefebvre, Ng et al. (2010) emphasizes the importance of opposing the imposition of conceived spaces and the hegemony of the state in urban development over lived experiences of the inhabitants. Glucksberg (2017) sheds light on the social implications of state-led urban redevelopment plans, particularly with regards to the displacement and disruption of communities. Despite these negative effects, Glucksberg also highlights the strong attachment that some displaced residents still hold towards their former homes and neighborhoods.

It is worth mentioning Stedman's (2002) study in which he investigates motivations to engage in place protective actions and behaviors. Stedman (2002) reports a correlation between engagement and higher place attachment and lower satisfaction in lived space. He also highlights those concerns may arise when places are threatened. Moreover, studies by Gotham and Brumley (2002), August (2014), and Colacios et al. (2020) show that urban conflicts and social stigmas within a neighborhood can strengthen the bonds among residents. Finally, Lefebvre's theory is also pertinent, as Merrifield (2006) argues, the greater the discrepancy between the conceived and lived space, particularly in state-led urban redevelopment, the more intense the reaction from residents will be.

## 3.2 Determinants of place attachment and its measurement

There is a growing body of literature indicates place attachment as a concept that underlies the bonds that people establish with their physical and social environment (Altman & Low, 1992; Hidalgo & Hernández, 2001; Lee & Jeong, 2021; Rollero & Piccoli, 2010). Place attachment has a multiscalar perspective starting from the dwelling to the neighborhood (Watt, 2021), including familiar places, people or lifestyles (Brown & Perkins, 1992; Brown et al., 2003; Rubinstein & Parmlee, 1992) or common interests, shared values, and history (McMillan & Chavis, 1986; Pretty et al., 2003).

Scholars investigating the relationship between residents and the lived space often employ the concepts of place attachment and place identity (Hernández et al., 2007; Lewicka, 2005; Rollero & Piccoli, 2010). There are various perspectives on how these concepts are defined, with some researchers emphasizing their similarities, while others focus on their distinctions. For instance, Hernández et al. (2007) and Rollero and Piccoli (2010) emphasize the differences between the two concepts, while Lalli (1992), Kyle et al. (2005) and Gokce and Chen (2021) view them as components of one another.

Place attachment is expressed as the bond that individuals establish with their physical environment, where they have the inclination to live in that specific place rather than anywhere else and where it fulfils their certain instrumental needs (Anton & Lawrence, 2016; Hidalgo & Hernández, 2001; Rollero & Piccoli, 2010). Place identity, however, is often mentioned as the cognitive dimension of the relationship between individuals and their environment that refers to residents' feelings and whether they identify themselves as part (or member) of a specific physical space. Besides, people are likely to establish a



strong connection with the places that support their self-identity (Colacios et al., 2020; Dahl & Sorenson, 2010; Hernández et al., 2007; Hidalgo et al., 2021).

Nevertheless, few empirical studies reveal that in informal settlements or deprived neighborhoods where the housing conditions and built environment is unsatisfactory, daily interactions between residents may reinforce their attachment to the place (Akbar & Edelenbos, 2020; Bailey et al., 2012; Li et al., 2019; Lombard, 2014).

In addition to these theoretical and empirical approaches, the determinants used in the evaluation of the place attachment and place identity are diversified (Rollero & Piccoli, 2010). Several studies concerning people's relationship with place verify and empirically assess the impact of social bonds (Mesch & Manor, 1998; Rollero & Piccoli, 2010). Existing evidence demonstrates that social factors, like having acquaintances in the neighborhood or living close to relatives and friends, enhance attachment to a place and are considered significant factors influencing the decision of where to live (Corcoran, 2002; Mesch & Manor, 1998; Rollero & Piccoli, 2010). Trust, shared values, feeling safe in the neighborhood, and social cohesion are also known factors that predict place attachment (Alawadi, 2017; Anguelovski, 2013). Bailey et al. (2012) for instance, consider individuals as strongly attached residents when they are eager to engage in solving the problems of the neighborhood and help neighbors or people with whom they feel that they share the same values.

In addition to social bonds, Riger and Lavrakas (1981) consider physical bond as one of the determinants of place attachment. In general, the variable of physical bond is measured by length of residence (Bailey et al., 2012; Knez, 2005; Lewicka, 2005; Rollero & Piccoli, 2010) and property ownership (Riger & Lavrakas, 1981). Thus, we can infer, as also stated by Mesch and Manor (1998), that the critical factors that interpret the individual's attachment to the neighborhood in the literature are social and physical bonds (home ownership, length of residence, social relations).

## 3.3 Hypotheses

Based on the theoretical framework, we explore the nature of the relationship between residents' attitudes towards the conflicting and imposed urban redevelopment project (conceived space) and their place attachment in Okmeydanı. In addition to suffering from the conflicting and ambiguous redevelopment process and struggling with the increasing stigmatization in the media, residents of Okmeydanı, with diverse ethnic and social backgrounds have different perceptions of the conceived space. This, in turn, leads to different identification with the neighborhood and differentiates their attitudes towards the project.

Therefore, we aim to have a better understanding of the impact of the process on the attitudes of residents based on two aspects: interest in the project and concern about the project. Concerns are measured through the worries and perception of the possible negative effects of the project. Interest uncovers the willingness of individuals to participate in the process and their motivation to be informed. From this perspective, the paper hypothesizes that residents with higher levels of place attachment would be more interested in and concerned by the spatial intervention and consider it adverse and a threat of displacement. Besides, the relationship between social, physical bonds and place identity which were considered to be influential factors for place attachment and the attitudes of individuals were also examined.



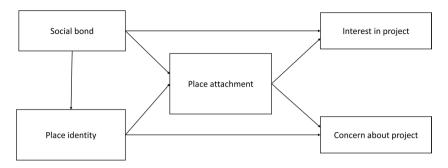


Fig. 4 Hypothesized Model of determinants of respondents' attitudes towards the project

Place identity is expressed an essential element contributing to individuals' plans to stay in the neighborhood. With reference to Hernández et al. (2007) and Rollero and Piccoli (2010), place identity and place attachment are interpreted as distinct, yet linked concepts influenced by social bonds. These components are different but correlated; therefore, we identify the relationship of social bonds with place identity, place attachment, and attitude toward the project through a model that merges the main variables for the measurement of the concepts with regard to the literature. Thus, drawing upon the theoretical and empirical insights, our hypotheses between place attachment, place identity, social bond, and residents' attitudes toward the conceived space are formulated according to the following relations (Fig. 4):

- H1 The relation between place attachment and interest in project
- **H2** The relation between place attachment and concern about the project
- **H3** The relation between social bond and place attachment
- **H4** The relation between social bond and place identity
- **H5** The relation between social bond and interest in the project
- **H6** The relation between place identity and place attachment
- **H7** The relation between place identity and concern about the project

The paper deploys path analysis to test these hypotheses. Developed as a method of decomposing correlations to interpret causal connections between sets of variables (Lleras, 2005), path analysis allows us to evaluate the relationship between independent and dependent variables.

Given that multiple regression analysis is necessary to estimate relationships, path analysis requires interval-level data for all variables used in the model (Lleras, 2005). Consequently, the relationship between respondents' physical bond, operationalized as property ownership and length of residence (measured and categorized on a nominal scale), on the one hand, and their attitudes towards the project, on the other, was assessed using a decision tree analysis:



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Determinants	Description	Survey questions	Authors	Cronbach's alpha
Physical bond	The physical aspects of attachment, measured by the length of time spent in the neighborhood as a resident or as a property owner	Length of residence Property ownership	Okten et al. (2021), Anton and Lawrence (2014), Lewicka (2005), Mesch and Manor (1998), Hummon (1992)	I
Social bond	The individuals' interaction with people living in the neighborhood (familiarity, community attachment)	Number of relatives, friends, and people that participants can entrust their keys within the neighborhood  "I feel safe in this neighborhood"	Lewicka (2011), Baygloo (2017), Buta et al. (2014)	0.637
Place identity	The feeling of belonging consists of the person's attachment to the physical environment, seeing it as a part of their own personal identity	"Okmeydanı reflects my identity"  "Okmeydanı is the place for me"  "I will defend Okmeydanı against its negative portrayal in the media"  "I want my children to continue to live in this neighborhood"  "Living in Okmeydanı has shaped my life"  "We are all like a family in this neigh- borhood"  "Everyone in this neighborhood respects each other's beliefs and lifestyle"	Brown and Raymond (2007), Lewicka (2005, 2011), Huang et al. (2018), Baygloo (2017), Stedman (2002), Bailey et al. (2012)	0.895
Place attachment	The concept implies emotional bond between people and places; emphasizing the willingness to continue to live there	"I would like to continue living in this neighborhood after the redevelopment project"  "Leaving Okmeydanı after a redevelopment project will change my life a lot"  "If I could realize the value of my property, I would gladly leave"	Bonaiuto et al. (2002), Bonaiuto et al. (2003), Anton and Lawrence (2014), Lewicka (2005), Hidalgo and Hernández (2001), Gokce and Chen (2021)	0.654



Table 1 (continued)				
Determinants	Description	Survey questions	Authors	Cronbach's alpha
Concern about the project Interest in the project	Concern about the project The renewal project which is a state-led intervention is defined as the conceived space. Concerns were measured by examining the project's perceived potential negative impacts. Interest is measured to reveal the willingness of individuals to be informed be informed be informed in the project process and their motivation to be informed in the project process in the project. "We can make this neighborhood nice without this redevelopment project" "I want to be a part of the redevelopment project" "I don't have anything to do with the redevelopment project" a state-led "I will be greatly affected financially by The answers to these questions reveal the individuals' perceptions the project process and their motivation to be informed "We can make this neighborhood nice without this redevelopment project" "I don't have anything to do with the redevelopment project" a state-led "I will be greatly affected financially by The answers to these questions reveal the individuals' perceptions the project process and their motivation to be informed "Y don't have anything to do with the redevelopment project" a state-led "I will be greatly affect the most from the project process and their motivation to be informed "I don't have anything to do with the redevelopment project" a state-led "I will be greatly affect the most from the project process and their motivation to be informed "I don't have anything to do with the redevelopment project" a state-led greatly affect the project process and their motivation to be informed "I don't have anything to do with the redevelopment project" a state-led greatly affect the project process and their motivation to project process and their motivation to be informed and provided in the project process and their motivation to project process and their motivation to project process and their motivation to project process and the redevelopment project."	"I will be greatly affected financially by the project"  "Tenants will suffer the most from this project"  "Workplaces will suffer the most from this project"  "We can make this neighborhood nice without this redevelopment project"  "I want to be a part of the redevelopment process in the neighborhood"  "I don't have anything to do with the redevelopment project"	The answers to these questions were elicited by the researcher group to reveal the individuals' perceptions of the project process	0.634



**Table 2** Descriptive statistics of respondents

Variables	Categories	Frequency	%
Sex	Female	232	55.4%
	Male	187	44.6%
Age	18–35	147	35.1%
	36-50	158	37.7%
	50+	114	27.2%
Education level	No education	32	7.6%
	Primary school	207	49.4%
	Secondary school	61	14.6%
	High school	78	18.6%
	Bachelor	35	8.4%
	Master and Ph. D	6	1.4%
Income	Low	100	23.9%
	Medium	299	71.4%
	High	4	1.0%
	NA	16	3.8%
Property status	Owner	198	47.3%
	Tenant	177	42.2%
	No rent payment	44	10.5%

**H8** The relation between physical bond and interest in the project

**H9** The relation between physical bond and concern about the project

The hypothesis is that tenants were more likely to be apathetic to a spatial intervention because they were less attached to their neighborhood, given that the law in Turkey does not protect tenants against displacement during urban redevelopment processes. Besides, the length of residence that is assumed to affect place attachment and identification with space (Hernández et al., 2007; Mesch & Manor, 1998; Rollero & Piccoli, 2010) would have an influence on the attitudes towards the project. Accordingly, as a complementary analysis to measure the relationship between nominal variables and attitudes toward the project, decision tree analysis enables us to identify the difference between groups using visual classification and categorical results.

## 4 Methodology and data

As part of a larger research project, the authors of this paper collected quantitative data during comprehensive fieldwork in Okmeydanı in 2016. A questionnaire was conducted with 419 households at a confidence level of 95%. Spatial probability sampling in each street in the project area was used to select the sampling units of the household survey. In each household, one individual eligible to vote was interviewed.

Based on the survey data, the paper examines the residents' attributes towards the project, and the degree of their attachment to the neighborhood. The respondents' answers



were measured on a five-point Likert scale (from completely disagree to completely agree), allowing an exemption on the questions that were intended to elicit the respondents' physical bonds to the neighborhood.

Table 1 shows the determinants and description of the variables, and their relationship with the result of the reliability test (Cronbach's alpha), which was used to assess the internal inconsistency of the variables on the Likert scale.

The hypothesized relations were tested using SPSS Amos 26.0 and SPSS Statistics 26 software (IBM, Armonk, NY). Apart from the statistical analysis, open-ended questions on the negative and positive aspects of the project provided information about the perceptions of the respondents.

## 5 Findings

Table 2 illustrates some of the socioeconomic characteristics of the respondents. 70% of our respondents are poorly educated and completed at most their secondary school education, and 4.1% are illiterate. Only 30.3% are active in the labor market. Around three-quarters of the respondents are married with children, and 70% are born in cities other than İstanbul. Fewer than half (47.3%) of the surveyed own the apartment in which they live and 42.2% are tenants. This is significantly lower than the household data released by the Turkish Statistical Institute (TUIK) in 2017, indicating that 57.3% are owners and 26.3% and tenants. It can be claimed that change in ownership is quite new in Okmeydanı, considering that half of the tenants were residing in Okmeydanı, at the time of the survey, for fewer than 5 years and half of the owners had lived there for more than 28 years.

## 5.1 Role of place attachment and identity in the attitudes towards conceived space

Due to the inconsistent government practices concerning land tenure and planning since 1961, the residents of Okmeydanı gradually slipped into an ambiguous state of semi-formality. While tentative deed-like documents issued by the government indicated that their existence was recognized by authorities, on the one hand, the lack of a building authorization implied a constant threat of eviction, on the other. Accordingly, the last redevelopment project was partly contested and partly accepted by residents (Okten et al., 2021). Therefore, the residents' interests and concerns about the redevelopment were questioned. Besides, each variable in Table 1 is measured to evaluate how they perceive the possible effects of the project or their willingness to be involved in the process in relation to their attachment to Okmeydanı.

The average score of interest in the project is 3.19 (SD=1.12, range 1–5), while the concern about the project is measured 3.81 (SD=0.87). With the inclusion of financial concerns into the variable, the level of concern is even higher. This is due to the high levels of agreement with the relevant statements (76.7% agreed on "I will be very affected financially by the project"). The high levels of concern are attributed to displacement, on the one hand, and to the new social organization (new residents) that the new urban environment would bring, on the other. Besides, financial burden of moving to another neighborhood or apartment, particularly for tenants, and the uncertain amount of money for those with deed-like certificates are among the important reasons behind this concern.



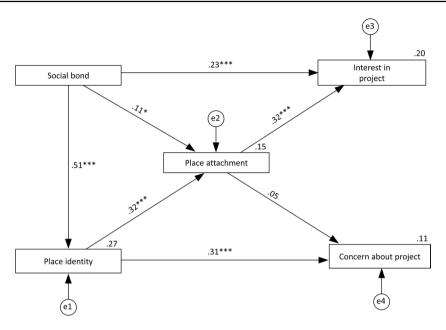


Fig. 5 Concern and interest prediction model: standardized regression weights, variances, and correlations

This brings us to their attachment to the place which scores  $3.50~(\mathrm{SD}=0.97)$  and implies a connection between residents and places with an emphasis on the willingness to continue to live there. Only 26.5% of the respondents agree with the statement: "If I could realize the value of my property, I would gladly leave", and 2/3 of respondents did not agree with the statement "I don't have anything to do with the redevelopment project". These findings reveal a general interest in the project and a willingness to stay in Okmeydanı. Residents identify themselves with Okmeydanı with a significant score  $(3.40;~\mathrm{SD}=1.05)$  and a high level of attachment to their residential environment. They see Okmeydanı as part of their identity, and 66.7% of our respondents approved that "they were like a family in the neighborhood". This high level of approval to the statement is likely to be related to the neighborhood's migration history and that Okmeydanı is the destination for several waves of migration from the same villages. Moreover, this also accords with earlier observations in the literature, which show that length of residence in the neighborhood leads to increased familiarity (Blokland et al., 2022; Hernández et al., 2007; Rollero & Piccoli, 2010).

At the outset of the analysis, we tested the hypotheses in Fig. 4 using path analysis. The estimated parameters given in Fig. 5 indicate that the whole set of variables explain 11% of concern about the project and 20% of interest in the project.

While social bonds have a significant impact on residents' identification with the neighborhood ( $\beta$ =0.51), they influence the interest in the project ( $\beta$ =0.23) and place attachment ( $\beta$ =0.11) as well. Place attachment is also predicted by place identity ( $\beta$ =0.32). Place attachment is measured with the willingness to continue to live in the neighborhood, and 67% of the respondents agree with the statement, "I would like to continue living in this neighborhood after the redevelopment project".

Concern about the project is influenced by place identity, yet place attachment makes no significant contribution. Apparently, their concerns have similarities with the general anxiety state in the neighborhood. The surveys echo the fear of being forced out of the



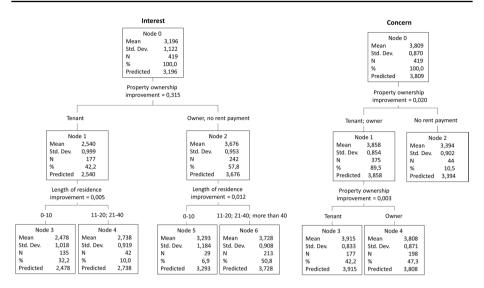


Fig. 6 Findings of the classification and regression decision tree model

neighborhood at the end of the redevelopment process. The knowledge about other informal neighborhoods' redevelopment processes seems to foster the fear of being displaced. 42% of the respondents who are tenants are fully aware of the impact of the project, although their attachment to the place or their interest in the project process is low. According to the relevant legislation on neighborhood renewal, tenants are not eligible to claim any kind of right to stay in the neighborhood. Nevertheless, their identification with the place shapes their response to change and their attitudes toward the project.

## 5.2 The relationship between physical bonds and engaging in the redevelopment process

The decision tree analysis was conducted to determine how individuals' physical bonds (property ownership, length of residence) influence their interests or concerns about the project. Two variables of the physical bond were divided into subgroups based on a nominal scale to analyze the mean differences.

The findings of the analysis which can be followed in Fig. 6 indicate that the length of time that they lived in the neighborhood and not being a tenant<sup>2</sup> which are the components of physical bonds influence individuals' interest in a spatial intervention project. Entitlement to land has a significant impact, while having a title deed to land is the essential legal instrument to have a voice in urban operations. However, Glucksberg (2017) presents a tenant profile, based on her fieldwork in London, who has the right to negotiate in the regeneration project. Although the project resulted in demolition and displacement, she associates their engagement with tightly organized tenants' movement. In contrast to her findings, our findings show that the absence and ignorance of tenants' rights in redevelopment plans in Turkey creates behavioral despair and, as such, is likely to lead to feelings of helplessness

<sup>&</sup>lt;sup>2</sup> Property ownership was categorized according to three sub-groups. "No rent payment" category refers to the ones who live in a house owned by their family or close relatives.



and hopelessness among tenants, which in turn can make them less likely to be engaged in the redevelopment process.

Moreover, the highest interest scores are obtained from respondents who are long-time residents residing in Okmeydanı for over 11 years. However, regarding the concerns about the project, the difference between tenants and property owners is not significant. This discrepancy could be attributed to the awareness of people about the consequences of stateled redevelopment projects. Despite their dissatisfaction with the low quality of life and houses, they point out the "need for an urgent renewal in the neighborhood". With reference to the earthquake risk, low quality of buildings, and lack of essential urban facilities, they feel coerced to give consent to the project. However, they are concerned that the influx of new residents will negatively impact the lived space in the neighborhood.

#### 5.3 Discussion

Our study aims to determine the residents' attitudes towards the state-led urban redevelopment process in relation to the respondents' place attachment and identification with the neighborhood. To this, the fieldwork examines and analyzes the relationship between residents' interest in or concern about the state-led redevelopment project and their attachment to the place, place identity, and physical and social bonds in Okmeydanı.

In doing so, our analysis makes five important contributions. First of all, our findings partially corroborate those of the previous empirical research in housing and neighborhood studies, linking place attachment with urban redevelopment. In accordance with previous research, we have also demonstrated that attachment to the place can help predict individuals' attitudes toward spatial changes (Anton & Lawrence, 2016; Bonaiuto et al., 2002).

Second, the most prominent finding to emerge from this study is that tenants have less interest in the redevelopment process. Mesch and Manor (1998) argue that homeowners are prone to interact with other residents in the neighborhood and have a higher level of place attachment, which contributes to their interest in the lived space. In this context, while our finding is in line with studies and empirical findings focusing on the positive relationships between place attachment and engagement (Anton & Lawrence, 2016; Baygloo, 2017), it also differs from them due to the legal framework in Turkey that completely excludes tenants from such processes. Another key factor shaping residents' interest in a spatial intervention is the physical bond. Therefore, tenants are less willing to be involved, however, living in a neighborhood for a long time had an impact on their interest in engaging in the process of change. Although tenants highlight their financial concerns more than property owners, there is no significant difference in the average concern score between tenants and property owners. Rather than attachment, identification with the neighborhood is the component that influences concerns about the project. The factors that shape their worries rest in the perception of potential threats and the negative effects of these interventions.

Third, the findings also demonstrate that having acquaintances affects residents' identification with the neighborhood, their place of attachment in the form of willingness to stay, and their interest or willingness to engage in the redevelopment processes (Anton & Lawrence, 2016; Baygloo, 2017). Moreover, the factor that determines individuals' level of concern about the project is their identification with the place rather than the risk of leaving the neighborhood. These findings carry similarities with Stedman (2002) that the existing urban conflicts regarding spatial redevelopment may as well strengthen the bonds among residents in a neighborhood.



Forth, the diverse ethnic, and religious origin or social and physical conflicts in Okmeydani don't impair residents' attachment and identification with their neighborhood. And last, but not the least, along with their expectations from the redevelopment, such as improving the social and physical environment and increasing their quality of life, residents of Okmeydani are aware of the possible risks that may arise in the process. This finding shows that the information-sharing efforts of the neighborhood association reached most of the residents and resulted in apathy or concern. This is a novel finding that is absent in the existing literature.

## 6 Conclusion

In conclusion, this study contributes to our understanding of place attachment and place identity in informal settlements. Revisiting Lombard's (2014) argument that consideration of informal settlements in urban studies is limited, our research sheds new light on residents' attitudes towards a redevelopment project and their relation to place attachment, and their social and physical bonds and place identity in an informal neighborhood. Overall, the findings strengthen the prevailing idea in the literature that daily interactions between residents reinforce their place attachment in deprived, declining settlements where the quality of life is compensated by place identity (Akbar & Edelenbos, 2020; Bailey et al., 2012; Li et al., 2019; Lombard, 2014).

As an informally produced built environment, Okmeydanı has become over the decades an arena for state-led intervention where both social and physical reproduction processes are realized. Interactions between the lived and conceived space has the potential to change the ownership, occupation, and control over space through state-led gentrification. Since the Okmeydanı urban redevelopment process started in 2016, the detailed construction plan was made for a plot only in November 2022 after a long-term reconciliation process with the residents in the affected area. Notwithstanding the relatively limited sample from 2016, this study offers valuable insights for further research in Okmeydanı such as the long-term effects of the ongoing process and the changing interest and concerns.

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### Declaration

**Conflict of interest** The authors declared no potential conflicts of interest with respect to the research, authorship and/or publication of this article.

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