# Neighborhood location and its association with place attachment and residential satisfaction

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## Abstract

**Purpose** – This paper aims to investigate the association of neighborhood location with place attachment and residential satisfaction.

**Design/methodology/approach** – First, the authors reviewed the literature on place attachment and residential satisfaction, and then generated a questionnaire based on the scales from the literature. The authors surveyed 135 respondents in two neighborhoods of Ankara, a metropolitan city in Turkey: one in the city center, the other in a suburb. To analyze the data, first, factor analysis, and later, multivariate analysis of variance and correlation tests were conducted.

**Findings** – The results indicated that place attachment and residential satisfaction were positively correlated, in congruence with the related literature; however, neighborhood location appeared to be associated only with residential satisfaction. The theoretical and practical implications of the results are discussed with respect to the recent issues on housing.

**Originality/value** – The effects of neighborhood location on place attachment and residential satisfaction (by comparing two different residential areas of the city) have not been adequately examined in earlier studies. The study results provide an understanding of the effectiveness of residential location on improving place attachment and residential satisfaction and contribute to the existing literature. Although the study findings may not be generalized to other locations in Turkey, this study contributed to the previous studies on place attachment and residential satisfaction by providing data from Turkish residents, which is less often examined.

**Keywords** Neighborhood, Place attachment, Residential satisfaction,
Built environment tectonics and technologies, Neighborhood location, Residential environment

**Paper type** Research paper

## 1. Introduction

There is much research on individuals' emotional connection to and residential satisfaction with their living environments (Altman and Low, 1992; Gifford, 2014; Lewicka, 2010, 2011). Place attachment has been examined at both the personal and community level (Anton and Lawrence, 2014; Brown and Raymond, 2007; Jorgersen and Stedman, 2001; Proshansky *et al.*, 1983). Residential satisfaction, or the assessment of the perceived quality of a setting

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(Stedman, 2002), is a significant indicator when evaluating the physical and social attributes of a residential environment in terms of how well it fulfills a person's needs. The present study aims to explore the role of neighborhood location on place attachment and residential satisfaction, specifically to investigate how living in or away from a city center may be associated with place attachment and residential satisfaction.

## 1.1 Place attachment

Altman and Low (1992) define place attachment as a symbolic bonding that gives a sense to places culturally and emotionally; this definition implies that one has symbolic and affective connections with an environment. It is interpreted as an emotional tie between people and places (Brown and Raymond, 2007; Hidalgo and Hernández, 2001). The dimensions of place attachment can be analyzed at two levels: social and physical attachment (Hidalgo and Hernández, 2001; Riger and Lavrakas, 1981). Social attachment includes social bonds, a sense of belonging and familiarity with other residents, while physical attachment may be affected by physical conditions, length of residence and homeownership (Riger and Lavrakas, 1981).

Place identity is related to social attachment. It indicates the cognitive and emotional significance of a place related to the experiences, emotions and interpersonal relations of people in that place (Williams and Vaske, 2003). It is an element of self-identity, which improves self-esteem and evokes one's sense of belonging to a community (Williams and Vaske, 2003). When people integrate their place-related thoughts, memories, values and experiences with their self-identity, they may better identify with their environment (Proshansky et al., 1983; Twigger-Ross and Uzzell, 1996). Breakwell's identity process theory states that there are four principles that influence identity: distinctiveness, continuity, self-efficacy and self-esteem. The places that promote these principles are more likely to positively influence identity structure (Breakwell, 1992; Speller, 2000).

Place dependence originates from the functional evaluation of a place in terms of how well it satisfies individuals' needs through allowing them to reach their goals (Shumaker and Taylor, 1983). It is related to the physical opportunities and characteristics of a place and indicates the conditions that are needed to fulfill and promote one's personal needs (Jorgersen and Stedman, 2001; Mandal, 2016).

Attachment to social environment is strongly associated with local bonding and the relations that individuals generate within their environments (Hay, 1998; Hidalgo and Hernández, 2001; Kyle and Chick, 2007; Raymond et al., 2010). Moreover, the scale of a place, such as homes, neighborhoods and cities, has been found to be influential on individuals' affective ties to places (Casakin et al., 2015; Hidalgo and Hernández, 2001; Lewicka, 2010). One's experiences in, and familiarity with, places can be effective in starting this emotional process (Roberts, 1996). Riger and Lavrakas (1981) claim that attachment comprises social bonds, the sense of belonging to the local environment as well as familiarity with that environment. The longer a person lives in a place, the higher the person's attachment to the place (Hammitt et al., 2006; Hummon, 1992; Raymond et al., 2010; Walker and Ryan, 2008). Being familiar with a place may allow individuals to feel safe, rooted and included in a community (Hammitt et al., 2006).

## 1.2 Residential satisfaction

There have been different approaches to the definition of "satisfaction" in terms of the relationships between people and places (Galster, 1987; Mesch and Manor, 1998; Stedman, 2002). The attitudes, meanings and knowledge related to the cognitive evaluation of an environment take a considerable role in the determination of place satisfaction (Stedman, 2002). Mesch and Manor (1998) define residential satisfaction as the assessment of the physical and

social characteristics of a place. Factors affecting residential satisfaction can be analyzed in terms of their individual, social and environmental aspects (Ibem and Aduwo, 2013). Personal or family attributes such as age, gender, income level and family size are related to individual factors (Fornara *et al.*, 2010; Hay, 1998; Zhang and Lu, 2016). The social atmosphere of a neighborhood, one's local involvement and one's social relations with neighbors as well as one's sense of community, privacy and safety are all important elements that provide social satisfaction for residents (Fornara *et al.*, 2010; Sirgy and Cornwell, 2002; Zhang and Lu, 2016). Elements related to one's built environment also have an impact on residential satisfaction; green open spaces and recreational areas, as well as architectural style, building quality and size are significant components (Sirgy and Cornwell, 2002; Zhang and Lu, 2016).

Based on the above, the conceptual framework of the study displaying the relationships between the place of residence, place attachment and residential satisfaction is presented in Figure 1. This framework emphasizes the multidimensionality of both place attachment and residential satisfaction, together with the interaction between them by considering the place of residence. In the present study, we consider the place of residence as an independent variable in terms of understanding the differences in the level of place attachment and residential satisfaction and the relationships between them.

In light of this research, we first aimed to explore how neighborhood location may affect place attachment and residential satisfaction. Furthermore, we investigated the relationships between place attachment and residential satisfaction. There is research indicating different predictors of place attachment, which are social and physical factors such as age, length of residence, homeownership status, type of housing and neighborhood ties (Clark *et al.*, 2017; Lewicka, 2010). Earlier studies also concentrated on residential satisfaction by indicating the effects of the socio-demographic profile, housing characteristics, built environment and behavioral approaches (Abdullah *et al.*, 2020; Zhang and Zhang, 2017). However, there is a gap in the literature in terms of understanding the effects of neighborhoods in urban and suburban areas that differ in the urban development process. Our research could contribute to the literature on both environmental psychology and urban design by analyzing the neighborhoods that have different urban transformation because of locations in the context of place attachment and residential satisfaction. Thus, the hypotheses of our study are:

*H1.* Regarding physical and social factors such as the distance and proximity to city centers and access to social amenities (Lewicka, 2011; Scannell and Gifford, 2010), we hypothesized that residents living in city centers have a higher level of place attachment when compared to those living in areas away from city centers.
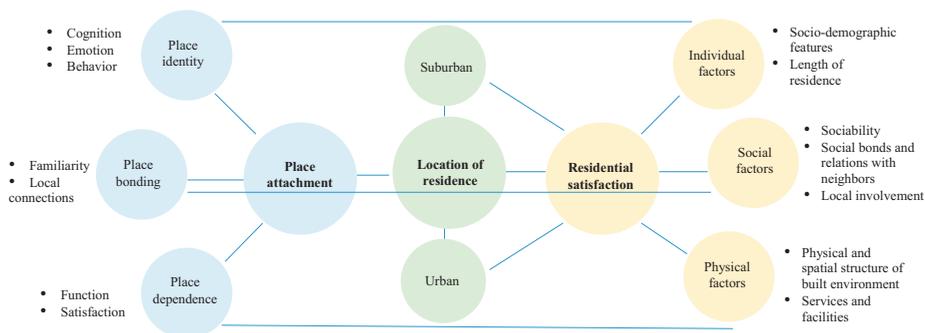


Figure 1.
The conceptual framework of the study indicating the relationships between the related variables

*H2.* In line with the literature, we hypothesized that residents living in city centers have a higher level of residential satisfaction when compared to those living away from city centers (Bonaiuto *et al.*, 1999; Fornara *et al.*, 2010; Hidalgo and Hernández, 2001).

*H3.* In accordance with findings on the relationship between place attachment and residential satisfaction (Bonaiuto *et al.*, 2003; Brown *et al.*, 2003; Hur and Morrow-Jones, 2008; Jorgersen and Stedman, 2001; Mesch and Manor, 1998; Poortinga *et al.*, 2017), we hypothesized that there is a positive correlation between place attachment and residential satisfaction.

## 2. Method

### 2.1 Sample

The respondents consisted of 75 women and 60 men from two neighborhoods in Çankaya, Ankara, Turkey; one neighborhood is located in the city center, and the other is 17 km away from it. We used non-random snowball sampling; this method was suitable to connect with respondents in the selected neighborhoods. Because of concerns regarding privacy, we did not ask the residents about their homeownership status, which may be a sensitive issue in Turkish culture. The age of the respondents ranged from 19–85 years ($M = 46.50$, $SD = 14.96$), with 2% having primary school education, 4% secondary school education, 19% a high-school diploma and the remaining 75% graduate degrees. Of the residents, 74% stated that they spent most of their lives in metropolitan areas. Moreover, 66% of the residents stated that they have been living in their neighborhoods for at least 10–20 years, or more than 20 years. We observed that the respondents had sufficient length of stay in terms of representing their neighborhoods.

### 2.2 The setting

We conducted the research in Ayrancı and Çayyolu neighborhoods from the district of Çankaya, one of the oldest residential areas of Ankara, which reflects the privileged and the contemporary identity of the Turkish Republic historically (Erkip, 2010). Ayrancı is located in the center of the city (Figure 2). The urbanization process of Ayrancı started in the early
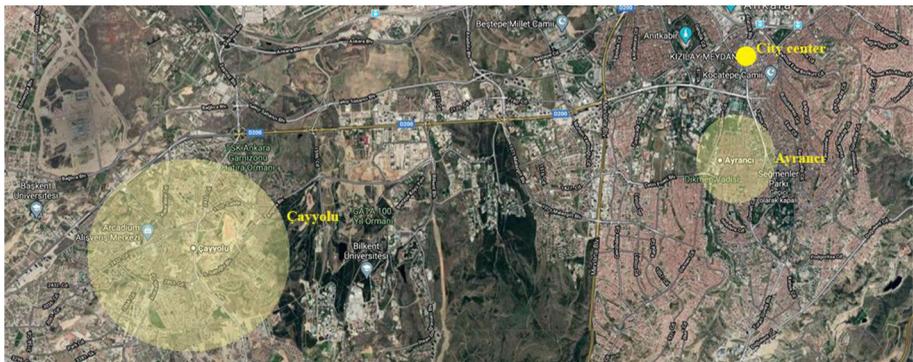


**Figure 2.**
Aerial view of Çayyolu and Ayrancı neighborhoods of Ankara

**Source:** www.google.com/maps

1950s, with the urban transformation according to Jansen Master Plan after the establishment of the republic in 1923 (Aslanoğlu, 2001). When Ankara became the capital of Turkey, new residential areas were generated rapidly in many areas of the city to meet the housing needs (Aslanoğlu, 1986). Especially, as the city develops in the south direction, many vineyards, including Ayrancı, become residential areas. The spatial value of Ayrancı has also increased because of its proximity to the Turkish parliament building and embassies, and this region has become a middle-upper-class neighborhood over time (Tuncer, 2014). Now, this neighborhood has five- or six-story traditional apartments with similar design attributes in terms of physical, environmental and aesthetic quality (Seles and Afacan, 2019). Various social and physical facilities and services provide convenience for the residents living there.

Çayyolu is located in the southwestern part of Ankara and 17 km away from the city center (Figure 2). The residential development of Çayyolu started with the Çayyolu Mass Housing Plan by the Ankara 1990 Metropolitan Master Plan and the Metropolitan Municipality of Ankara (Erişen, 2003; Gültekin, 2015). Çayyolu neighborhood includes various residential units. The housing projects for the middle-upper class, which started in the late 1970s, increased, and in the late 1980s, with the support of the local government and public institutions (Gültekin, 2015). Some of these residential units are the production of the cooperative system adopted in the late 1990s (Ünver, 2019). They had significant effects in terms of defining Çayyolu as a neighborhood and providing new residential areas for the middle and upper-middle classes of Ankara. Currently, the existing housing typology of the neighborhood varies between high-rise buildings, gated communities and single-family houses. The developments in the real estate market, the appearance of prominent construction companies and the founding of large shopping malls in the 2000s affected the physical and social facilities of this region over time (Gültekin, 2015).

As we wanted to investigate the effect of neighborhood location, we conducted the research in those two neighborhoods with different urban transformations because of their historical developments explained above as well as their locations with respect to the city center. We selected these neighborhoods because both are under the jurisdiction of Çankaya Municipality, and their demographic profile is similar in terms of socio-economic status.

### 2.3 Instrument and procedure

We obtained data through a questionnaire consisting of two scales (Fornara *et al.*, 2010; Lewicka, 2010): a *place attachment scale* and a *perceived residential environment quality and neighborhood attachment scale*. We developed the method of our study based on the previous research analyzing the residential quality and satisfaction by following quantitative methods (Bonaiuto *et al.*, 2003, 2015; Ferreira *et al.*, 2016). It would be efficient to use valid and reliable multi-item scales in terms of understanding the multidimensionality of place attachment and residential satisfaction (Fornara *et al.*, 2010). The place attachment scale included 12 items related to positive (e.g. "I miss it when I am not here") and negative (e.g. "I leave this place with pleasure") statements about the place. We used this scale because it has satisfactory reliability and has been tested previously in several studies (Lewicka, 2005, 2007). The perceived residential environment quality and neighborhood attachment scale included 66 items related to the physical and social evaluation of the neighborhood in terms of the built environment (e.g. "It is pleasant to see this neighborhood"), connection and transportation (e.g. "The city center can be easily reached from this neighborhood"), parks and green areas (e.g. "There are green areas for relaxing in this neighborhood"), commercial services (e.g. "There are all kinds of stores in this neighborhood"), educational services (e.g. "This neighborhood has good school facilities"),

sociability (e.g. "Social services are adequate in this neighborhood"), security (e.g. "Here at night there is the risk of dangerous encounters"), environmental health (e.g. "This neighborhood is generally not polluted") and neighborhood attachment (e.g. "This neighborhood is part of me"). The data were collected through face-to-face surveys in the selected neighborhoods. We asked respondents to rate each item listed using a seven-point rating scale (1 = strongly disagree, 7 = strongly agree). Participation was voluntary; respondents were informed that the data would only be used for research purposes and kept confidential. We also collected information involving participants' age, gender, level of education, socioeconomic status, length of residence and neighborhoods.

## 3. Results

First, a factor analysis was used to explore and identify the factor structures of place attachment and perceived residential environment quality. Next, we conducted a multivariate analysis of variance (MANOVA) to investigate the relationship of neighborhood location with place attachment and residential satisfaction. Lastly, we examined the correlations between place attachment and residential satisfaction.

### 3.1 Factor analysis of place attachment scale

We carried out a factor analysis with a varimax rotation for Lewicka's (2010) place attachment scale to identify the most influential dimensions. It yielded two factors explaining 52.03% of the variance (Table 1). We named the first factor "place identity." It emerged with an eigenvalue of 5.01, which accounted for 41.72% of the variance. It included three items about the cognitive significance of a place associated with the place identity. The internal consistency of this factor was 0.82. The second factor, named "place bonding," had an eigenvalue of 1.24 and accounted for 10.31% of the variance. It consisted of five items that measure the bonding of respondents by marking their positive and negative feelings about the place. The internal consistency of this factor was 0.81.

### 3.2 Factor analysis of perceived residential environment quality and neighborhood attachment scale

For residential satisfaction, factor analysis revealed 14 factors in the initial stage. To reduce the number of components we conducted a second-order factor analysis, which yielded two factors and two variables, explaining a total of 58.85% of the variance. The first factor had an eigenvalue of 3.73, which accounted for 26.67% of the variance. We named it "general evaluation of the neighborhood" (Table 2). The second factor emerged with an eigenvalue of 2.17, which accounted for 15.49%. We named the second factor "recreational/care services

| Statements | Factor 1<br>Place identity | Factor 2<br>Place bonding |
|---|---|---|
| I am proud of this place | 0.88 | |
| It is a part of me | 0.82 | |
| I feel secure here | 0.69 | |
| I know this place very well | | 0.76 |
| I do not like this place | | −0.75 |
| I miss it when I am not here | | 0.72 |
| I defend it when somebody criticizes it | | 0.70 |
| I leave this place with pleasure | | −0.58 |

Table 1.
Factors of place attachment and their loadings

and accessibility" (Table 2). The internal consistency of these factors was above 0.75. There were two variables that were not supported by enough items; therefore, we could not interpret them as factors. The first of these two variables had an eigenvalue of 1.3, which accounted for 9.52% of the variance. The two items loaded on this variable were "environmental health" and "aesthetics." The second variable had an eigenvalue of 1, which accounted for 7.17% of the variance. An item loaded on this variable was "building volume."

### 3.3 Investigating the difference in place attachment between locations
We conducted a MANOVA for 2 (place attachment variables: place identity, place bonding) × 2 (location: city, suburb) to explore the difference in the level of components of place attachment. We found no significant difference in terms of neighborhood location between the residents' level of place attachment ($F(2, 132) = 1.539$, $p > 0.05$). The residents living in the city center had a similar level of place identity ($M = 5.78$, $SD = 1.17$) when compared with those living away from the city center ($M = 5.42$, $SD = 1.18$). The level of place bonding of residents living in the city center ($M = 5.81$, $SD = 1.11$) was also similar to those living away from the city center ($M = 5.63$, $SD = 1.15$). According to the results above, we can state that $H1$ does not support the evidence in the literature (Anton and Lawrence, 2014; Lewicka, 2011) but does make a contribution because we found no difference in the level of place attachment between the neighborhoods.

### 3.4 Investigating the difference in residential satisfaction between neighborhoods
We also carried out a MANOVA for 2 (residential satisfaction variables: general evaluation, recreational care/accessibility) × 2 (location: city, suburb) to explore the difference between neighborhood locations in terms of residential satisfaction. The results showed a difference between the two neighborhoods in these dimensions ($F(2,132) = 54.29$, $p < 0.001$). The level of satisfaction between residents living in the city center was different ($M = 5.36$, $SD = 0.87$) compared to those living away from the city center ($M = 4.81$, $SD = 0.91$). We can infer that the results for residential satisfaction supported $H2$ because we found a difference in the level of residential satisfaction between the neighborhoods.

### 3.5 Correlations between place attachment and residential satisfaction components
Spearman's rank-order correlation results indicate that there is an association between place attachment and residential satisfaction (Table 3). It shows that there is a correlation between the general evaluation of the neighborhood and place identity and place bonding

| First-order factors | Factor 1 General evaluation | Factor 2 Recreational/care services and accessibility |
| --- | --- | --- |
| External connection and transportation | 0.72 | |
| Educational services | 0.63 | |
| Neighborhood attachment | 0.63 | |
| Upkeep | 0.60 | |
| Sociability | 0.60 | |
| Parks and green areas | | 0.69 |
| Social care | | 0.69 |
| Commercial services | | 0.67 |
| Social life and activities | | 0.67 |
| Parking and accessibility | | 0.57 |

**Table 2.** Second-order factors of residential satisfaction and their loadings

($r$(133) = 0.54, $p < 0.01$), and that there is a correlation between recreational/care services and accessibility and place bonding ($r$(133) = 0.22, $p < 0.01$).

We can state that the results in Table 3 support *H3* because we found a correlation between the factors of place attachment and residential satisfaction (as we expected).

## 4. Discussion

The present study aims to contribute to the literature involving the relationship between place attachment and residential satisfaction by investigating the role of neighborhood location. Our results provided supportive evidence for our hypotheses, as further considered below.

### 4.1 Comparison of place attachment and residential satisfaction in two residential areas

The levels of place identity and place bonding of respondents living in the city center were similar to those living away from the city center. Anton and Lawrence (2014), who conducted a study with urban and rural residents, indicate that the place of residence is closely related to place attachment because rural residents have a higher level of place attachment than urban residents. Our results indicated no difference between urban and suburban respondents. Place identity is a part of personal and social identity because people are likely to define themselves by feeling attached to a certain place (Bernardo and Palma-Oliveira, 2016). Feldman (1996) suggests that place attachment as a psychological construct connects the identity of a person to a place through ideas, feelings, values and behaviors; it becomes stronger through the daily experiences of a person in that place. We can infer that emotional ties, past experiences, memories and personal ideas may be influential in creating a social attachment to place. As stated in the literature, improving place identity is related to linking the cognitive elements of individuals (such as experiences, emotions, interpersonal interactions and memories) with self-identity (Proshansky *et al.*, 1983; Scannell and Gifford, 2010; Twigger-Ross and Uzzell, 1996; Williams and Vaske, 2003). Meanings and emotional perception of experiences acquired in an environment that satisfies the psychological needs of individuals can strengthen place identity (Ujang, 2017). These psychological and social issues are as effective as physical and spatial characteristics in creating place identity. Thus, the place of residence (in terms of distance to the city center) may not be effective in shaping place identity because the location is a physical quality that may influence place dependence. We can also state other factors that may affect place identity and bonding; length of residence and homeownership. Former studies indicated that length of residence is a significant predictor of place identity (Clark *et al.*, 2017; Ningning and Lijuan, 2017; Rollero and Piccoli, 2010). Of our respondents, 66% claimed that they have been living in their

**Table 3.**
Correlations between place attachment (i.e. place identity, place bonding) and residential satisfaction (i.e. general evaluation, recreational care services/accessibility)

| Components of factor analysis | Place identity | Place bonding | General evaluation | Recreational care services/accessibility |
|---|---|---|---|---|
| Place identity | 1 | | | |
| Place bonding | 0.58 | 1 | | |
| General evaluation | *0.54** | *0.54** | 1 | |
| Recreational/care services and accessibility | 0.10 | *0.22** | *0.24** | 1 |

neighborhoods for at least ten years. Their length of stay could be sufficient in terms of improving place identity and bonding with their neighborhoods. Based on these factors, we can state that place identity or place bonding could be evaluated independently of the urbanization process or physical characteristics of a neighborhood.

We found a difference in the levels of residential satisfaction between the two neighborhoods we examined. The factors influencing residential satisfaction such as general evaluation of the neighborhoods and recreational care services/accessibility created this difference. The literature suggests that the physical and social attributes of neighborhoods are the primary predictors of one's satisfaction with their residential environment (Fornara et al., 2010; Sirgy and Cornwell, 2002). Yet, not only the physical and social features, but also individual factors such as age, income level, family size have an impact on neighborhood satisfaction (Bonaiuto et al., 2015; Bonaiuto et al., 2003; Dinç et al., 2014; Fornara et al., 2010; Huang et al., 2015; Hur and Morrow-Jones, 2008; Parkes et al., 2002; Sirgy and Cornwell, 2002; Zhang and Lu, 2016). Our findings support the literature: the level of satisfaction with certain services (such as external connection and transportation, educational services, upkeep and sociability) was higher for the respondents living in the city center than for those living away from the city center. Easy accessibility to these services in the city center may affect residential satisfaction. This result supports the findings of previous research, which found that having facilities located close to one's place of residence may improve residential satisfaction (Hamovitch and Peterson, 1969; Sirgy and Cornwell, 2002). Moreover, according to our results, the level of satisfaction with recreational facilities (such as parks and green areas) was higher for the respondents living away from the city center. These amenities may be more satisfactory in suburban areas compared to city centers; residents living in these neighborhoods may have positive experiences with these physical conditions.

### 4.2 The relationship between place attachment and residential satisfaction
We found a significant correlation between the factors of residential satisfaction and place bonding in accordance with former studies (Bonaiuto et al., 1999; Brown et al., 2003; Fornara et al., 2010; Hidalgo and Hernández, 2001; Hur and Morrow-Jones, 2008; Stedman, 2003). We can claim that being satisfied with the physical and social attributes of one's residential environment can improve how one bonds with places and as well as their sense of community. There was also a significant correlation between place identity and the general evaluation of the neighborhood in terms of external connection and transportation, educational services, upkeep and sociability. We can emphasize that the general physical and social conditions of a residential environment may direct the residents to create place identity as they identify themselves with their neighborhood.

### 4.3 Limitations, strengths and suggestions for future studies
One limitation of the present study was that we did not consider the housing type when determining its influence on place attachment and residential satisfaction. There may be a difference in the level of attachment and satisfaction between residents living in apartments and those living in detached houses or gated communities, which may be examined in future studies. Socioeconomic status and homeownership can also make a difference in the level of place attachment and residential satisfaction. However, the residences in the examined areas of the city were of similar socioeconomic status, so we did not see the need to inquire about this issue because of its sensitive nature (Erkip, 2010). We also did not ask the respondents about the location of their work or considerations regarding commute for work. Apart from these, the neighborhoods we selected were not very distant from each other. These issues could be investigated in future studies in terms of understanding their effects on the

perception of satisfaction and place attachment. Moreover, whether our results can be replicated with other neighborhoods such as those in the rural regions of Ankara could be studied.

Despite the limitations expressed above, we consider that our study has considerable strengths. First, the effects of neighborhood location on place attachment and residential satisfaction (by comparing two different residential areas of the city) have not been adequately examined in earlier studies. Our results provide an understanding of the effectiveness of residential location on improving place attachment and residential satisfaction and contribute to the existing literature. Although our findings may not be generalized to other locations in Turkey, this research contributed to the previous studies on place attachment and residential satisfaction by providing data from Turkish residents, which is less often examined. Our study may also have implications for future research on place attachment and residential satisfaction. The neoliberal structure in Turkey since the 1980s created a decrease in welfare, polarization in social structure and an increase in cultural and social degeneration (Tanulku, 2012). As a result of this process, gated communities have emerged with the need of retirement from the urban life, enclosed personalized lifestyle, exclusiveness and security (Alkan-Gökler, 2017; Güzey, 2014; Tanulku, 2012). There are several studies analyzing place attachment in this context (Akçal, 2004; Bekleyen and Yilmaz-Ay, 2016; Edgü and Cimşit, 2011; Ergun and Kulkul, 2019; Kaba, 2018). The case settings we selected can provide a chance to see both traditional residential settings and gated communities in the urban and suburban context (Alkan-Gökler, 2017; Güzey, 2014; Özmen, 2020). A comparison study regarding gated communities in urban and suburban neighborhoods of Ankara or other metropolitans could provide different standpoints in terms of understanding how place attachment and residential satisfaction differentiate according to the housing and urbanization profile. Moreover, the analysis of these constructs in Turkey's mass housing projects (TOKI) that have become the prevalent type of housing could be another direction for further research. These projects are created by governmental urban transformation policies and offer low-cost and low-quality housing with their mass-produced architectural style and characteristics but have been criticized for their architectural quality (Gür and Dostoğlu, 2011; Işıkkaya, 2016). Thus, it could be interesting to analyze the level of place attachment and residential satisfaction in these housing projects, especially in suburban neighborhoods of Ankara.

## 5. Conclusion

The factors that influence place attachment and residential satisfaction have been discussed with related results and further implications. We found that there is no difference in the level of place attachment relative to neighborhood location. We may infer that because place attachment is an affective-cognitive process, one's emotional ties, past experiences, memories and personal perspectives may be more influential in creating attachment to places than physical features such as location or distance to the city center; the physical attributes of a neighborhood may not significantly promote the emotional ties of residents to their residential environment.

On the other hand, we found a significant difference in the level of residential satisfaction between the two neighborhoods. We can claim that neighborhood location, i.e. being in the city center or away from the city center, can be an effective factor in satisfaction with one's residential environment. In our research, we analyzed and evaluated residential satisfaction as a measure of residential quality; the scale we used covered the physical and social characteristics of the neighborhood. Because residential satisfaction is a construct related to comfort and quality rather than emotional bonding, a place's physical attributes and quality

have significant relevance in enhancing residents' satisfaction. Furthermore, we examined how place attachment is associated with residential satisfaction by correlating the factors related to place attachment with the factors related to residential satisfaction. Our results provide supportive evidence to the literature, and we can state that satisfaction with the physical and social opportunities with one's environment may be significant in influencing the affective bonds of individuals with their residential environment in terms of creating a sense of attachment.

In sum, our research points to the significance of neighborhood location by comparing the level of place attachment and residential satisfaction in different residential areas and provides further support that they are closely related but distinct constructs. Our findings may be beneficial for researchers as well as designers who want to investigate how physical, social and individual factors influence place attachment and residential satisfaction. The results of our study are expected to make a contribution to the literature as they provide a different perspective on this issue.

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