



Residents Desire to Stay in a Place: Evidences from Iran's New Towns*

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ABSTRACT: The policy of creating new towns in developing countries like Iran has been implemented to provide housing, reduce high migration rates to major metropolises and be incorporated within regional developmental policies. These new towns in Iran, however, face some problems. One of the most important challenges these towns deal with is that unwillingness of the residents to stay there after the improvement of their economic situations. Urban planners cite various reasons for this phenomenon, including the excessive dependence of these towns on metropolises and low quality urban services and facilities. However, the low level of residents' social capital accounts for one of the main factors for reduced place attachment and desire to stay in a place. This research studies the relation between the three concepts of social capital, place satisfaction and place attachment and their effects on residents' desire to stay in a new town. The investigation was completed using structural equation models and confirmatory factor analysis. The model was tested on a sample of 383 residents of Andisheh New Town, located 30 kilometers west of Tehran. The findings reveal that the indicators of social capital directly affect place satisfaction and place attachment. These three indicators explain the desire to stay in a new town. Therefore, this model provides a conceptual framework for research on social capital, place satisfaction and place attachment. Social development strategies can also be used as a planning tool to enhance place attachment and population stabilization in new towns. Therefore, apart from improving the objective conditions of the environment, social capital and place attachment can be effective factors for the population stabilization strategy.

Keywords: Social Capital, Place Satisfaction, Place Attachment, Structural Equation Model, Andisheh New Town.

INTRODUCTION

The migration of rural populations to urban areas contributed to Iran's rapid urbanization after the Iranian Revolution and the war between Iran and Iraq. The declining employment opportunities and living conditions forced rural populations to migrate. One of the policies to manage these changes was the planning, design and establishment of New Towns at the periphery of large cities and their jurisdictional areas (Ziari, 2006). However, the one-dimensional physical and technocratic approaches to the planning of Iranian New Towns have forced these towns to deal with a variety of challenges, e.g. lack of identity, livability, dynamism, mobility, social

capital and absence of residents in public places. The residents of New Towns are not interested in staying in these places, particularly if their economic conditions improve allowing for typical leave of these towns (Gharakhlou & Panahandehkhah, 2009; Harati, 2010; Ziari, 2006). Many studies on Iranian New Towns reveal the low place satisfaction in these towns (Bahrapour & Modiri, 2015; Meshkini et al., 2015) because, the sense of belonging in these places has not been developed in these New Towns due to their residents' not staying for long periods (Bahrapour & Modiri, 2015).

In the literature review, many researchers have studied

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the relation between social capital, place attachment and individuals' behavior (eg. Devine-Wright & Clayton, 2010; Scannell & Gifford, 2010; Kyle & Graefe, 2005). Researchers consider the lack of social networks and local interactions among residents, as well as low level of trust as the main indicators of social capital, which result in decreased levels of place satisfaction and place attachment (De Donder et al., 2012; Chen & Dwyer, 2017; Dallago et al., 2009). Residents' unwillingness to stay in New Towns derives from these issues. The goal of this article is to recognize this relation between social capital, place satisfaction, place attachment and desire to stay in a place. This recognition allows city managers to establish useful policies for New Towns to encourage residents to continue residing there.

The main hypotheses are:

Hypothesis 1: Increasing social capital can lead to a higher level of place satisfaction.

Hypothesis 2: Increasing place satisfaction can be increased by the place attachment.

Hypothesis 3: Increasing in place attachment lead to increase in the tendency to stay in the place.

These hypothesis are examined by using structural equation model.

CONCEPTS, THEORIES AND VIEWS

The Relation between the Three Main Concepts of this Research (Social Capital, Place Satisfaction and Place Attachment)

Barati and Yazdan Panah (2011), in their research on the Pardis New Town in Iran, have examined the relationship between social capital, place satisfaction and urban quality of life. Based on the findings of this research, they determined that paying attention to social development policies in the urban management strategies of Pardis could increase the place satisfaction and quality of life. Ultimately, the desire of inhabitants to stay in Pardis has increased over time.

Chen & Dwyer (2017) also argue that the concept of place attachment is one of the most important factors in behavioral research within the tourism field. They examine the effect of the level of place satisfaction on place attachment in Sydney, Australia and the impact of these two concepts on Tourism planning and development strategies. The results of this research indicate that a clear relationship exist between these two concepts. According to this study, place satisfaction strongly predicts residents' intention to stay or leave, while place attachment more strongly influences residents' word of mouth, representative behavior and participation in

tourism planning for a destination.

Ramkissoon & Mavondo (2015) have pointed out in their research that in most studies, place attachment serves as a factor by which place satisfaction can be explained. However, in their research, they have instead studied this relationship in reverse. The results indicate that the level of place satisfaction is both directly and indirectly (through the pro-environmental behavioral intention (PEB) indicator) affected by the level of place attachment.

Zenker & Rütter (2014) state that place satisfaction significantly affects the level of place attachment and that these two factors well explain the place brand attitude and positive citizenship behavior.

Lee (2003) has researched the level of loyal behavior in the competition between places for attracting tourists and emphasizes the importance of the quality of facilities and services for success. He has also studied its impact on the level of place satisfaction, noting that this satisfaction creates place attachment and, consequently, loyalty among visitors.

Halpenny (2006) has concluded that an individual's level of satisfaction at Point Pelee's national park in Canada had an overall positive effect on place attachment.

On the other hand, with regard to the relationship between social capital and place attachment, many studies have examined the impact of place attachment on the level of social capital.

For example, De Donder et al. (2012) explore the relationship between social capital and the sense of insecurity. In their research, place attachment is considered alongside concepts such as social ties and civic participation as the main indicators of social capital. Dekker (2007) shows that the relationship between social capital and neighborhood attachment forms a conceptual framework for encouraging participatory in urban areas.

Dallago et al. (2009), in a study conducted in 13 different countries, have paid attention to the differences of the sense of security between men and women within these different countries. They have shown that despite the different indices used in different countries, an increase in place attachment consistently leads to an increase in the sense of security within a given neighborhood. Based on this quantitative study, place attachment is related to the communication between neighbors and the promotion of social networks which are social capital indicators

According to the above mentioned studies, the conceptual relationships between the variables of this research are supported by the theoretical literature. Therefore in the following section, after introducing the indices of measuring the conceptual structures of the research and considering the theoretical relationship



between the concepts, a conceptual model of the research has been proposed.

Place Attachment

Researchers and scholars define place attachment in many various ways. There is a general consensus of place attachment as a multidimensional and interdisciplinary concept (Halpenny, 2010; Scannell & Gifford, 2010; Ramkissoon et al., 2013a). There have been increasing studies on place attachment and several disciplines have been involved in defining this concept, including environmental psychology, urban management, tourism and social studies (e.g. Halpenny, 2010; Kyle et al., 2005; Ramkissoon et al., 2014; Raymond et al., 2011; Vaske & Kobrin, 2001; Lewicka, 2011).

In general, place attachment can be defined as the bond that is developed between the individuals and their meaningful environment (e.g. Giuliani, 2003; Low & Altman, 1992; Shumaker & Taylor, 1985; Kyle et al., 2003; Scannell & Gifford, 2010).

Low & Altman (1992) define the concept as an individual's cognitive or emotional connection to a particular setting. According to the main characteristics of the concept of place attachment, it can be described as the desire to maintain closeness to the object of attachment (Ainsworth & Bell, 1970; Bowlby, 1980; Giuliani, 2003). Adding this concept to the previous definition of place attachment, we can define it as follows: a positive affective bond between an individual and a specific place, with the main tendency of the individual to stay close to a place (Hidalgo & Hernandez, 2001; Yuksel et al., 2010; Giuliani, 2003).

The most exhaustive model of place attachment is the one proposed by Scannell and Gifford (2010). They base their model of place attachment on three dimensions: person, psychological process and place. The person dimension of place attachment refers to actors that individually or collectively determine meanings. The psychological dimension deals with the affect, cognition and behavior defining the attachment. The place dimension emphasizes the characteristics of a place, including spatial level, specificity and the prominence of social or physical (both built and natural) elements (Scannell & Gifford, 2010).

Accordingly, this research defines place attachment through three criteria, each of which are fundamentally different. Person, psychological process and place are considered within these variables. These three criteria are "Place Dependence", "Place Identity" and "Place Affect". Place dependence relates to how that particular place serves as the best location for residents based on their activities, e.g. their everyday needs (retail, education,

health and therapeutic needs, working, walking, etc.) and the local facilities (Stokols et al., 1981; Williams et al., 1992; Hammitt, 2000; Scannell & Gifford, 2010; Ramkissoon et al., 2013b; Stedman, 2002). Place identity refers to the relation between the place and a resident's personal identity (Prohansky, 1978; Williams et al., 1992; Ramkissoon et al., 2013b; Stedman, 2002). For example, residents may strongly identify with a particular place because of its unique qualities. This uniqueness can result from an indigenous culture, nature, history, etc. Place affect considers the emotional link that residents develop with a particular place (Ramkissoon et al., 2013b; Stedman, 2002).

Place Satisfaction

"Place satisfaction is defined as a multidimensional judgment of the perceived quality of a place that includes the individual's needs for the physical characteristics of a place, its services and social dimensions" (Stedman, 2002; Yuksel et al., 2010; Ramkissoon et al., 2013a).

This concept plays an important role in understanding the behavior of residents and visitors. Resident and visitor satisfaction plays a key role to the success of a place in today's competitive world (Bosque & Martin, 2008). Therefore, scholars assume place satisfaction as a consequence of successful place making (Oliver, 1996).

Zenker et al. (2013) through the Citizen Satisfaction Index (CSI) model, argues that four distinct basic factors affect the overall satisfaction of a place: "Urbanity & Diversity", "Nature & Recreation", "Job Chances" and "Cost-efficiency". "Urbanity & Diversity" can be understood as a kind of metropolitan quality of a place. This factor refers to the openness and tolerance of a city, a variety of cultures and subcultures, the energy of a city, the urban image of a city, a variety of shopping opportunities and a wide range of cultural activities (theatre, nightlife and etc.).

"Nature & Recreation," on the other hand, refers to the number of parks and open spaces, the tranquility of a place, access to water, low pollution levels and a wide range of outdoor-activities. "Job Opportunities" relates to the professional networks in the city, general economic growth of the particular region, good jobs with advancement opportunities and the general level of wages. Finally, "Cost-efficiency" includes the general costs of living, housing market and availability of apartments and houses (Zenker & Rütter, 2014; Zenker et al., 2013).

Within these studies, three aspects of place satisfaction are assessed: overall satisfaction, satisfaction of services and facilities of the place and satisfaction relating to an individual's experiences (Stedman, 2002; Ramkissoon et al., 2013)



Social Capital

Scholars and theorists such as Jamie Coleman (1988), Baker (1999), Francis Fukuyama (1995), Putnam (2001) and Bourdieu (1986) all provide different definitions of social capital. For example, Pierre Bourdieu identified three types of capital: social, economic and cultural capital. He considered social capital as a form of capital which focuses on the communication and participation of the members of a community that, along with cultural capital, can serve as a means for achieving economic capital (Bourdieu, 1986).

According to this view, social capital is a tool. In other words, from Bourdieu's point of view, social capital cannot lead to the growth of economic capital; it is not practical. Unlike Bourdieu, James Coleman gives a practical definition for social capital where it is likened to a source for community members to achieve their goals and interests. Thus, Coleman considered social capital as "Human Capital" (Coleman, 1988).

Putnam (2001) defined social capital as a set of concepts, such as trust, norms and networks, which influence the communication and participation of community members and provide them with mutual benefits. He considered social capital as a means to achieve political and social development in various political systems. He primarily emphasized the concept of trust. As can be seen, definitions of social capital vary, but the core idea in all of them is that social networks have value (Layden, 2003). In general, it can be defined as a series of networks together with shared norms, values and understandings which facilitate co-operation within or among groups. Leyden (2003) measured social capital by defining four key aspects of social capital:

how well residents knew their neighbors, their political participation, their trust or faith in other people and their social engagement. In this research, these aspects are defined under four criteria according to Layden (2003) and Putnam (2001): neighborhood solidarity, civic participation, social network and trust.

RESEARCHM ETHOD

Methodology and Analysis Technique

This study uses a quantitative approach. In order to achieve the main objective of this research to find the relationship between social capital, place attachment, place satisfaction and desire to stay in the place. It also utilizes the equation structural model.

Amos (V. 19) is one of the most commonly used SEM software applications, (Nachtigall et al., 2003; Ramkissoon et al., 2013b). This model specified the overall fit of the measurement and structural models using the maximum likelihood method of estimation (Anderson & Gerbing, 1988).

In this research, several model fit indices have been used. These indices include the chi-square ($p < 0.05$), Relative Chi-square ($1 < \chi^2/df < 2$), the root mean square error of approximation (RMSEA < 0.07), goodness of fit index (GFI > 0.95), Adjusted Good of Fit Index (AGFI > 0.95), comparative fit index (CFI > 0.95) and normed fit index (NFI > 0.95). (Joreskog & Sorbom, 1989; Bentler, 1990; Bentler & Bonett, 1980; Mulaik et al., 1989; Byrne, 2001; Hair et al., 2010; Ramkissoon et al., 2013b; Hu & Bentler, 1995; Tabachnik & Fidell, 2007; Steiger, 2007)

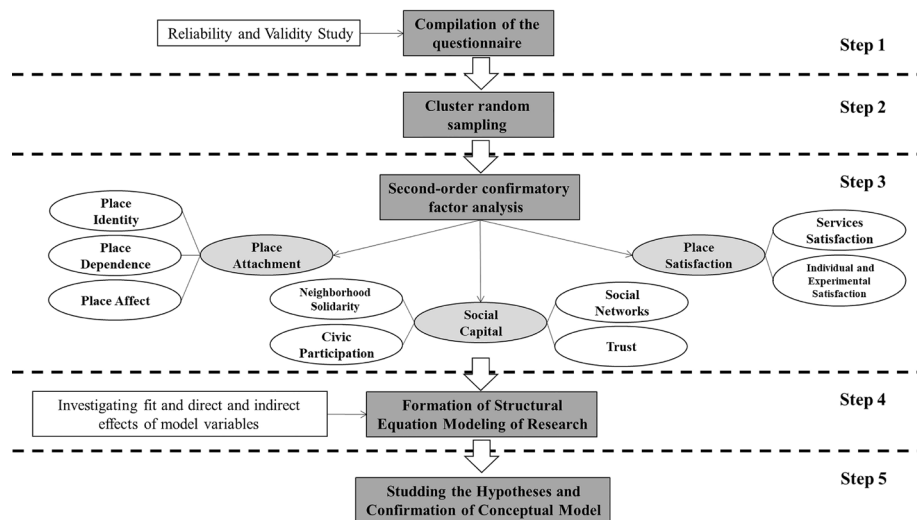


Fig. 1. The Research Steps



Data Collection Method

A closed questionnaire was used to collect the required data for each of the variables. The sample size based on Andisheh New Town population of 116,062 (results of the census of the year 2017), and the Cochran formula, with a confidence coefficient of 98%, is 383. These 383 questionnaires were completed by residents of Andisheh. Seventeen questionnaires were eliminated because of missing data (Hair et al., 2010) in order to avoid statistical bias (Schafer & Graham, 2002). In the sample survey, there is a more or less equal proportion of female (54%) and male (46%) respondents. More than half of the respondents were under the age of 40. The age distribution is 9% (18-24 years), 41% (25-34 years), 32% (35-44 years), 12% (45-54 years), 4% (55-64 years) and 2% (65 years and more).

For the place attachment construct, three variables are defined in this study: place dependence (three questions), place identity (three questions), place affect (three items), which were derived from Kyle et al. (2004) and Yuksel et al. (2010). For measuring place satisfaction, three items were derived from Ramkissoon et al. (2013a) and Ramkissoon & Mavondo (2015). Social capital has four

dimensions including civic participation (three questions), trust (three questions), neighborhood Solidarity (three questions) and social networks (three question) (Leyden 2003; Li et al., 2005). For measuring the desire to stay in the place, one direct question was defined. Each question was designed on a 5-point Likert scale (1 being inappropriate, 5 being completely appropriate).

STUDY AREA

Andisheh New Town is located 30 km west of Tehran, sited and designed to attract overflow populations from Tehran by the New Towns Development Company of Iran. According to the latest comprehensive plan of the city (1982), this city has been planned and designed for a population of 118,000. The current population of the town is 116,062 in 2017 (The results of the census of 2017) and has a total area of about 1400 hectares.

This city has six districts. The first district is called Andisheh County and is built before the Islamic revolution (1979). It is one of the neighborhoods of Shahriyar, located out of Andisheh New Town boundary; also the district six has not yet been built. Therefore the scope of research is limited to districts 2, 3, 4, and 5 (Fig. 2).

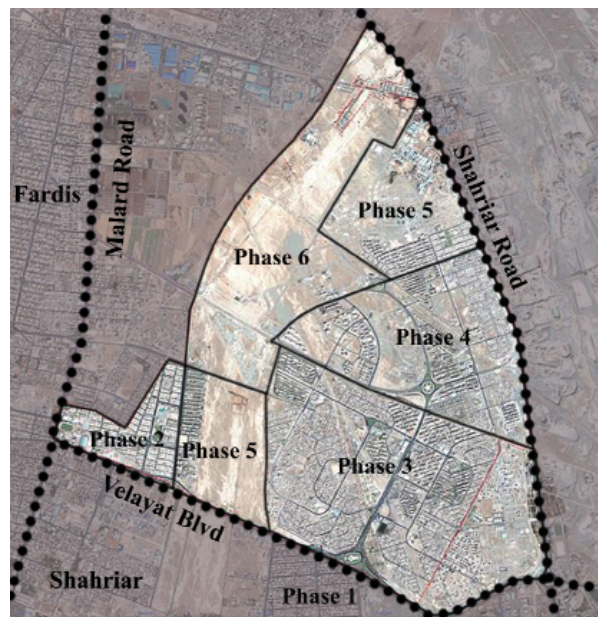


Fig. 2. The Research Area

The status of social capital, place satisfaction and the place attachment in Andisheh New Town are represented for the four districts of the town (Fig. 3). As shown in this figure, all three indices in the study area are below

the average (3). So it shows that social capital, place satisfaction and the place attachment are weak among residents of Andisheh.

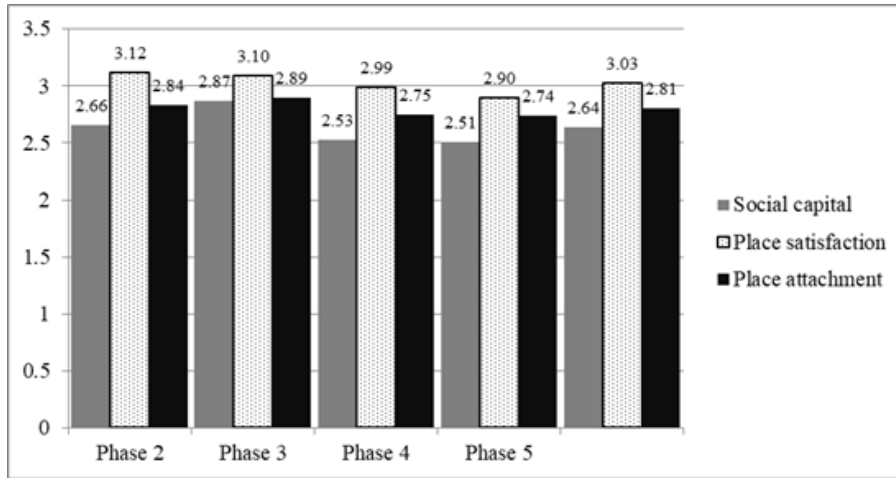


Fig. 3. The Status of Social Capital, Place Satisfaction and Place Attachment in Different Phases of Andisheh New Town

THE MODELING PROCESS

Based on the hypotheses, the following conceptual model has been designed for the research (Fig. 4). In the following model, the thicker lines represent the main hypotheses of the research. The dashed line are those

which analyze the correlations between variables and identify the direct and indirect effects. Analyzing these relations provides more detailed information regarding the interaction of different concepts in this research.

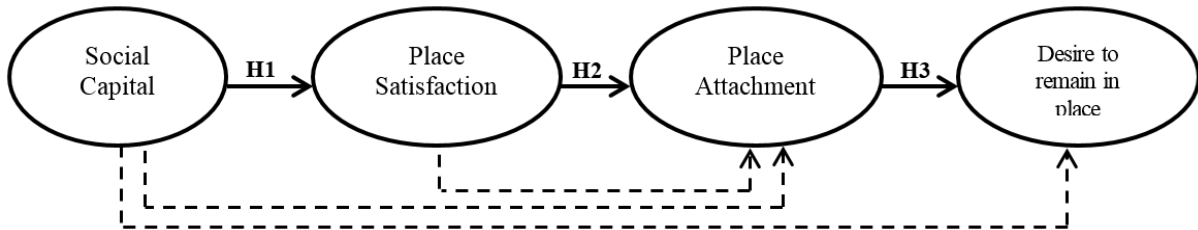


Fig. 4. Conceptual Model of Research

The first step in this research was to design a confirmatory factor model for assessing social capital based on the four sub-dimensions of neighborhood solidarity, civic participation, social network and trust. Then, the fitness of the defined measurements for each sub-dimension has been calculated. This step was also completed for place attachment and place satisfaction. In the second step, the structural equation model was designed based on the results obtained from the previous step. This model investigates the relationship between the main variables of this research and examines the hypotheses of the research.

In this section, the results from the evaluation of different variables are presented and the hypotheses are examined by the structural equation model. For this

purpose, the confidence level, goodness of model fit indices and factor loading of this model have been calculated. In Table 1, the mean of each question (variables and indicators) are presented for Andisheh New Town. The Likert scale has been used in analyzing the questionnaire of this study and are therefore discrete. By calculating their mean, they convert to continuous variables. The mean of the data has been analyzed in the following way: ($\mu \leq 1.8$ Very inappropriate, $1.8 < \mu \leq 2.6$ inappropriate, $2.6 < \mu \leq 3.4$ relatively appropriate (moderate), $3.4 < \mu \leq 4.2$ appropriate variable, $4.2 < \mu \leq 5$ completely appropriate).

According to this analysis, most of the variables in Andisheh New Town are within moderate and inappropriate conditions.

**Table 1. The Status of Each Item**

ID	Constructs and Items	Mean	Standard Deviation	Status
Place Attachment				
Place Identity				
PI1	I feel my local area is a part of me	2.97	0.66	Moderate
PI2	I identify strongly with my local area	2.86	0.71	Moderate
PI3	Living in my local area reveals a lot about who I am	3.01	0.74	Moderate
Place Dependence				
PD1	My local area is the best place for doing what I like	2.78	0.79	Moderate
PD2	No other place can be compared to my local area	2.80	0.67	Moderate
PD3	I would not substitute any other area for doing the types of things that I do in my local area	2.99	0.70	Moderate
Place Affect				
PA1	I am very attached to this place (city).	2.54	0.83	Inappropriate
PA2	I feel a strong sense of belonging to this place (city) and its facilities.	2.67	0.84	Moderate
PA3	This place (city) means a lot to me.	2.63		Moderate
Place Satisfaction				
Overall Satisfaction				
PS1	I am very satisfied with my life in Andishe (or local area).	3.21	0.90	Moderate
Satisfaction of Services and Facilities				
PS2	Andishe (or this local area) excels in satisfying my needs.	2.89	0.71	Moderate
	The services provided at Andishe (or this local area) are very satisfactory.	3.09	0.65	Moderate
Individual and Experimental Satisfaction				
PS3	Living in Andishe (or this local area) is usually a very satisfying experience.	2.92	0.79	Moderate
Social Capital				
Neighborhood Solidarity				
NS1	In general, how well do you feel you know your neighbors?	2.58	0.98	Inappropriate
NS2	In case of problems, how much can you count on the help of your neighbors?	2.43	0.76	Inappropriate
NS3	How much do you communicate with your neighbors?	2.66	0.68	Moderate
Civic Participation				
CP1	I interact with others to solve neighborhood problems.	2.74	0.78	Moderate
CP2	I would like to send comments and suggestions on the issues of the neighborhood to the officials.	2.43	0.80	Inappropriate
CP3	I would like to participate in the city council elections.	2.51	0.83	Inappropriate
Social Network				
SN1	I am a member of many social groups (For example NGOs, voluntary groups, benevolent groups and others).	2.50	0.74	Inappropriate



SN2	I have many friends that I meet routinely.	2.66	0.77	Moderate
SN3	Is there anyone to help me out in a crisis?	2.71	0.72	Moderate
Trust				
T1	I think most people try to be helpful.	2.71	0.72	Moderate
T2	I think most people are fair.	2.88	0.76	Moderate
T3	In general, how much do you trust other people?	2.90	0.82	Moderate
Desire to Remain in a Place				
RP1	If your economic situation were to improve, would you still want to stay in this place?	2.89	0.69	Moderate

In this part of the research, the Confirmatory Factor Analysis model has been used for the indicators of the research. All sub variables well explain the latent variables in the research according to fit indices, confidence and regression coefficients. Thus, different variables considered well underline the various levels of social capital. Therefore, solidarity neighborhoods, civic engagement, social networking and trust as sub- variables well support the social capital variable (Fig.5).

Different measurements have been considered for the

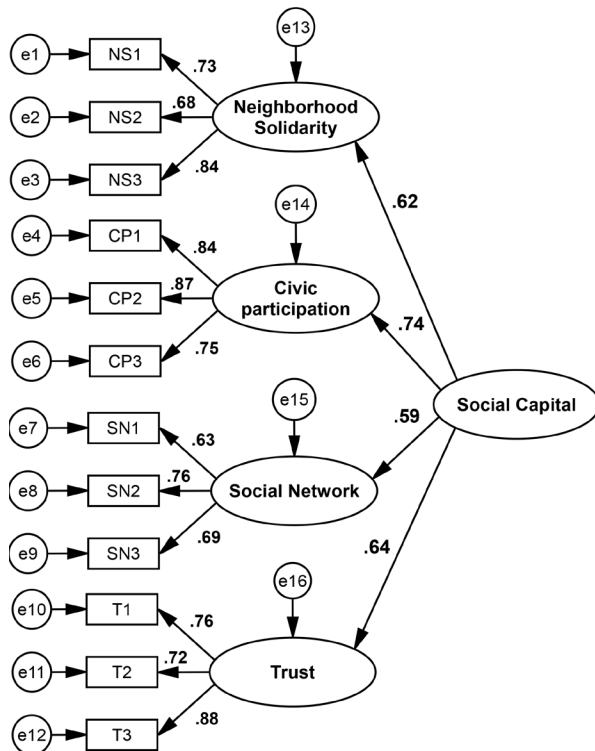


Fig. 5. Second-order Confirmatory Factor Analysis Attachment

three sub-variables of place identity, place dependence and place affect and also their support. These three sub-variables also well explain the place attachment variable (Fig. 6).

Second-order confirmatory factor analysis has been used for social capital and place attachment indicators. However, we use the first-order confirmatory factor analysis for the place satisfaction, given that it is directly measured by observed variables. Results show that three sub-variables of place satisfaction well support it (Fig. 7).

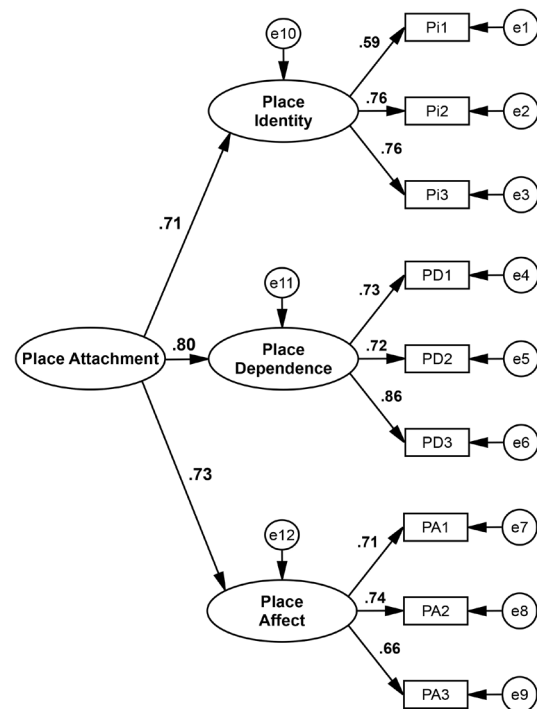


Fig. 6. Second-order Confirmatory Factor Analysis of Place of Social Capital

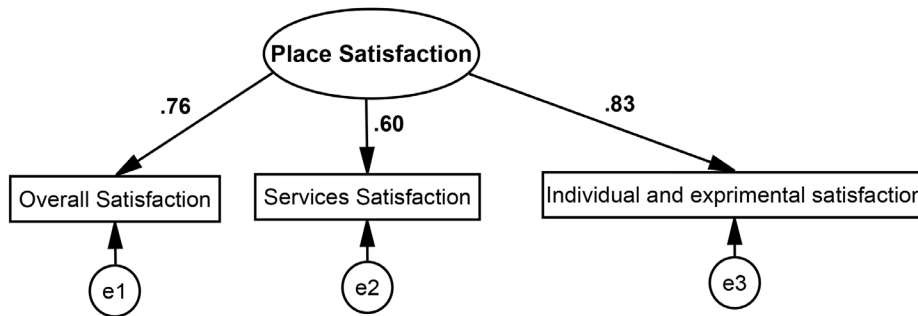


Fig. 7. First-order Confirmatory Factor Analysis of Place Satisfaction

According to the results obtained from the previous steps (the confirmatory factor analysis models), and considering the conceptual model of the research, the structural equation model was well designed.

In this model, as shown in Fig. 8, the structural relations between the three main latent variables of the research (social capital, place satisfaction and place attachment) as well as the desire to stay in a place (as an

obvious variable) have been evaluated.

The important point in drawing the model is that the desire to stay in a place only contains one measurement and therefore is not considered as a latent variable. But, if it is presented as an obvious variable in the model, the software considers it as one of the indicators of social capital and thus considered it as a latent variable with only one obvious variable.

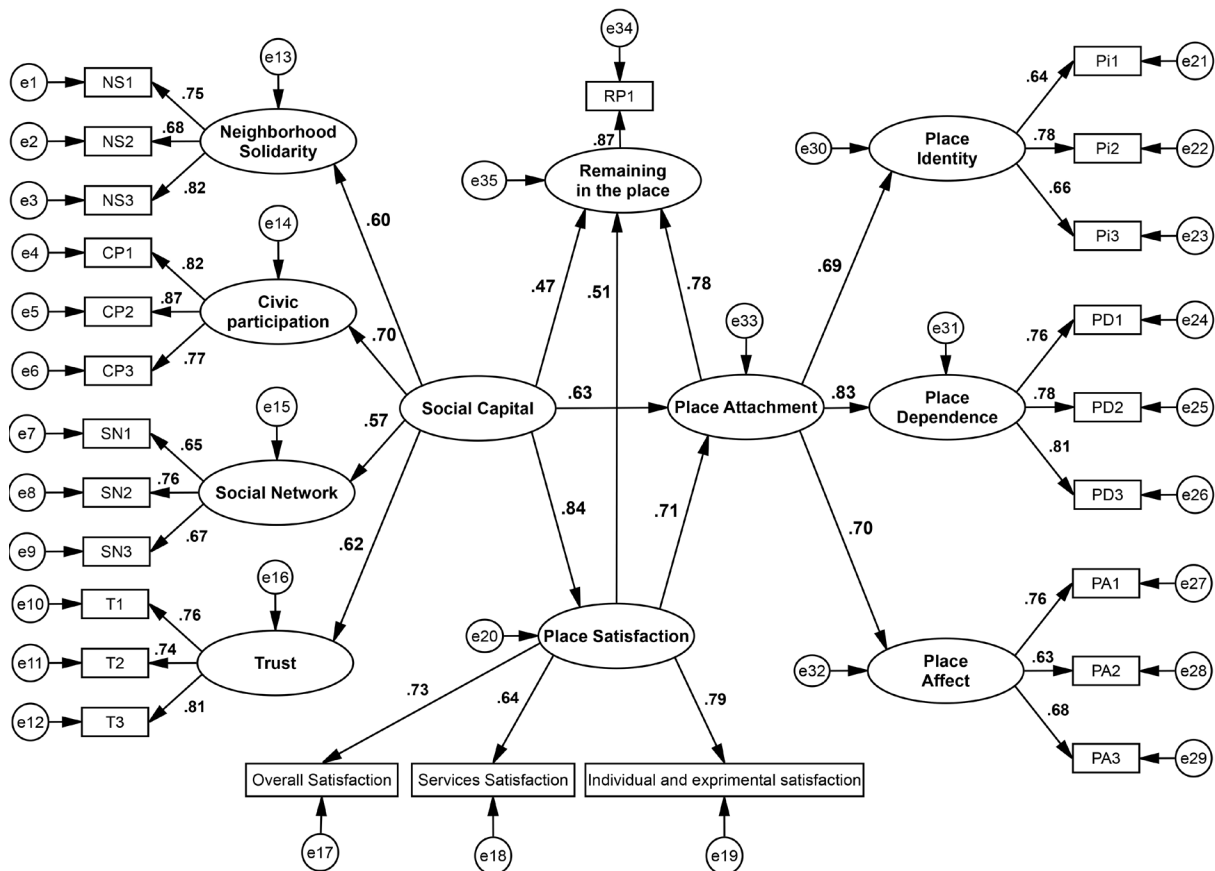


Fig. 8. Structural Model of Research



Before analyzing the regression weights in this model, the confidence level of the drawn relations and paths and the fitting of this model should be considered. All fitting

indices are categorized into Absolute Fit Indices and Incremental Fit Indices in an acceptable range. (Table. 2)

Table 2. Goodness-of-fit Measures for the Structural Equation Model

Fit Index	Explain	Acceptable Threshold Levels	Value
Absolute Fit Indices			
χ^2	Chi-square	with an insignificant p value ($p > 0.05$)	P= 0.328
χ^2 /df	Relative Chi-square	2:1	1.86
RMSEA	Root Mean Square Error of Approximation	Values less than 0.07	0.000
GFI	Goodness Fit Index	Values greater than 0.95	0.973
AGFI	Adjusted Good of Fit Index	Values greater than 0.95	0.968
Incremental Fit Indices			
NFI	Normed Fit Index	Values greater than 0.95	0.961
CFI	Comparative Fit Index	Values greater than 0.95	0.975

Each of the relationships in the above model should be within an appropriate level, or in other words, their P-value indices should be within an acceptable range

($P < 0.05$). The confidence level and standardized regression weights are shown in Table 3.

Table 3. Standardized Regression Weights and P-value Index

Tested relationships			Standardized Regression Weights	P- value
Place Satisfaction	<---	Social Capital	0.838	0.002
Place Attachment	<---	Social Capital	0.633	0.000
Remaining in The Place	<---	Social Capital	0.466	0.001
Place Attachment	<---	Place Satisfaction	0.714	0.016
Remaining in The Place	<---	Place Satisfaction	0.508	0.009
Remaining in The Place	<---	Place Attachment	0.779	0.008

This table only includes the relationships between the main variables of the research. In the output of the model, the internal relations of the measurement is also estimated. All P-values are in an acceptable range, and relations are confidence, too.

It should be noted that the confidence level of the indirect paths in this model has also been calculated through the software. The results show the significance of the five indirect paths between the research main variables.

capital on increasing the amount of place satisfaction (Total Effect = 0.844), the positive impact of increasing the place satisfaction on increasing the place attachment (Total Effect = 0.709) and the positive impact of increasing the place attachment on desire to stay in the place (Total Effect = 0.788).

DISCUSSION AND IMPLICATION

According to table 4 and the significant levels of relationships, the hypotheses of this study were proven. The study shows the positive impact of increasing social

**Table 4. Direct, Indirect, and Total Effects of Various Research Variables**

Tested relationships	Direct Effect	Indirect Effect	Total Effect		
Place Satisfaction	<---	Social Capital	0.844	-	0.844
Place Attachment	<---	Social Capital	0.628	0.598	1.226
Remaining in the Place	<---	Social Capital	0.473	1.388	1.858
Place Attachment	<---	Place Satisfaction	0.709	-	0.709
Remaining in the Place	<---	Place Satisfaction	0.511	0.552	1.063
Remaining in the place	<---	Place Attachment	0.778	-	0.788

This model also explains other relationships among the research variables. Another relation studied in this research deals with the impact of place satisfaction on the desire to stay in a place. In fact, the model indicates that place satisfaction affects the desire to stay in the place (Total Effect = 1.06). Therefore, improving place satisfaction is a way to maintain and stabilize population in New Towns. We should consider different and multi-dimensional strategies to be defined for the promotion of place satisfaction. Experiences have shown that the objective dimensions of citizens' quality of life are just one aspect of the level of place satisfaction. In fact, intangible dimensions such as social relationships, social communications, environmental psychological and so on are the other most important factors in promoting the place satisfaction among residents and visitors.

Another indicator that affects whether individuals stay in a place or not is social capital. The promotion of social capital influences the desire to stay in a place through several different ways. First, social capital leads to increasing place attachment. Therefore, the promotion of place attachment is a prelude to social communication. Social capital also affects place satisfaction by providing various economic, social, individual and interaction opportunities for citizens in a particular location. Place satisfaction is one of the factors which motivates residents to stay at where they are living.

This model can illustrate the planning, design and management priorities that could motivate people to stay in Andishe New Town. Based on this model, social capital has the greatest impact on the rate of desire to stay in place (Andishe), both directly and indirectly (1.858). Civic participation has the greatest impact on social capital. Therefore, encouraging the promotion of civic participation can be one of the most important strategies to encourage residents to maintain their inhabitation in the city and reduce overall immigration. This research can be continued by studying the relationships between various variables of satisfaction, social capital and place attachment to explain the priority strategies according to

the goals of the place.

CONCLUSION

By considering social capital as a four-dimensional construct (including trust, civic participation, social networks and neighborhood solidarity) and by reviewing its relationship with place satisfaction and place attachment as a three-dimensional constructs (including place affect, place dependence and place identity), this study provides a framework for retaining populations in a particular settlement.

This model can provide a basis for further research, evaluation and planning, especially in places and settlements which are facing the problem of immigration or retaining their existing population (for example, New Towns in countries like Iran).

Research concepts including "Social Capital", "Place Satisfaction" and "Place Attachment" have been properly selected according to the second-order confirmatory factor analysis. This means that the indicators and measurements considered for each concept are good explanations for them. Additionally, the conceptual model of the research has been confirmed with regard to the observed estimates in the structural equation model and the fitting index of this model.

According to the structural equation model of this research, the hypothesis of the relationship between social capital and place satisfaction has been confirmed. Therefore, as the social capital of citizens increases, the place satisfaction they experience will also increase, as Barati and Yazdan Panah (2011) and Manzo (2014) proved this relationship in their researches.

In fact, increasing social communication within an area, including neighborhood solidarity, local and informal social networks, rising civil participation, as well as increasing levels of interpersonal, organizational and public trust (Bonaiuto et al., 1999), can lead to an enhancement of place quality in different economic, social and physical dimensions. On the other hand,



the promotion of social capital increases community attachment (as the arena of the emergence of this capital). This relation is observed in the structural equation model of the research.

Another hypothesis of this research is that there is a direct and positive relationship between place satisfaction and place attachment according to the structural equation model of this research. Accordingly, higher place satisfaction leads to a greater place attachment and hence a greater willingness to remain and live in a particular place. In fact, place satisfaction is the mental dimension of place quality and relates to the objective dimensions of place quality. This relation was shown in Brown's (2003) article. He proved the relation between residential satisfaction and place attachment (Brown et al., 2003).

This scenario implies that greater and better the facilities, infrastructure, visual quality and the types of access of a place will result in a higher level of place satisfaction. But these are only some of the factors which explain satisfaction. Based on the first hypothesis, social capital -as one of the intangible dimensions of place- can be considered as one of the most important factors to explain place satisfaction and plays an important role in increasing place attachment.

Finally, the third hypothesis of this research was also confirmed according to the structural equation model. Therefore, by increasing the level of place attachment, it can be expected that the probability of desire to remain in a place will also increase. Clark (2017) represented the relationship between place attachment and the decision to stay in the neighborhood in his research (Clark et al., 2017).

Therefore, in order to increase the desire to stay and live in New Towns such as Andisheh New Town, apart from the promotion of the objective qualities of the place, special attention should also be given to the intangible features such as place attachment and place satisfaction, each of which are influenced by social capital.

So, efforts should be taken to improve interactions between citizens and the urban environment, and to facilitate social activities and encourage participation - which is, of course, required to raise awareness and trust, especially of the organizations and institutions of urban management and public. Besides improving the objective conditions of the environment, these measures can be an effective factor for the population stabilization strategy.



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