IDENTIFYING THE FACTORS OF SENSE OF BELONGING TO A PLACE IN TRADITIONAL TEXTURES
A CASE STUDY OF TRADITIONAL TEXTURE IN DEZFUL CITY

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Abstract. One of the important and effective concepts in regard to human and the environment is the sense of place which has been the focus of attention among many designers. However, few research has been done to examine the relationship between traditional texture of residential neighborhoods and the sense of place. Explaining the indices of the relationships between peoples' perceptions of their living environment and based on field research, this article has measured and compared them in one of the traditional neighborhoods in Dezful City. Field research and face-to-face interview with the residents of the neighborhood in order to evaluate the dimensions of sense of place and traditional texture and their mutual effect were done with descriptive statistics. This research shows that the sense of belonging to a place is the intersection of physical attributes, peoples' perceptions of the place and social structures and also proves that sense of and belonging to a traditional neighborhood are high and strong, affecting the mentality of the neighborhood's residents about the identity of places and belonging to them. The mentioned relationships have mutual direct and significant effect, being inseparable in creating the sense of collective belonging.

Keywords: Sense of place, neighborhood, belonging, traditional texture

INTRODUCTION
Physical environment and its effects on daily life of people is an issue which has been the focus of many experts' interest over recent years (canter,1977; cooper 1974). This issue in regard to architecture, due to its close relationship with the design of built environment, and especially in the 20th century, given the development of human societies, changes in life styles, people's settlement, and inefficient experiences of modernist architecture in the history of architecture, has risen in importance. The development of various projects which deal with assessment and analysis methods of architecture after operation (POE) confirms designers and planners' attention to built spaces and environments and attempts to recognize and promote their quality in response to human expectations and needs. One important concept in enhancing the quality of human environments is the sense of belonging to a place. This sense which is a key factor in forming relationships between users and the environment leads to high quality environments. However, the absence of a precise definition of this sense in design disciplines has created confusion and uncertainty among designers in recognizing and using design factors in order to create this level of meaning. Therefore, with the aim of identifying the sense of belonging and its constituents in design disciplines and based on the conceptual model proposed by Canter and Gustafson for the sense of place, we examined and explained the concept of the sense of belonging and its different dimensions from a variety of approaches (Matlabi, 2011: 28). This article investigated the notion of the sense of place and its importance in the life and relationships of people residing in the traditional neighborhood texture. In order to gain an in-depth understanding of this notion within traditional textures, it will at first be defined and the functions of traditional neighborhood in the city will be examined. Physical and space attributes of the neighborhood will also be taken into account, and then, after presenting the criteria of
collective belongings in traditional neighborhoods, it will be analyzed and studied using statistical analysis.

**Literature review**

Gerard Kyle et al. have examined the effects of place attachment in a recreational and hiking environment and its relationship with hikers' perceptions of social and environmental conditions in that setting (Kyle, 2004). In studying Seattle Public Central Library as a social place, he also examined the users' evaluation of the library as a physical place, a social place, and an informational place for the qualitative evaluation of the sense of place (Edwards, 2007). Elizabeth Brocato has attempted to present a model for the evaluation of the effects of the factors in public perceptions (physical design, environmental factors, employees' conditions, service quality and satisfaction) on the dimensions of the sense of belonging to a place in service environments (Brocato, 2006). Falahat, in studying and categorizing the contemporary mosques of Tehran architecturally, also examined and analyzed the effects of physical design of the mosques on the sense of place (Falahat, 2006). Habibi, using subjective approaches and carrying out a case study in Niavaran Street in Tehran as well, examined relationships among mental images, memories and the role of physical body in the realization and development of identity, meaning and sense of place in urban textures (Habibi, 2008). In spite of numerous studies done for evaluating place concepts in different textures and contexts as some of which were mentioned earlier, there is still a need for research into presenting a model for measuring and evaluating the sense of place in the texture of residential neighborhoods of a city and for the analysis of effective factors although considerable studies have already been conducted to assess the sense of place in (mostly) recreational environments or as interpreted by Oldenburg as third places (this concepts refers to a variety of places where people attend there when they are not home at workplace) (Oldenburg, 1999).

**Research methodology**

This is an applied-basic research. It has been carried out based on descriptive-analytical methodology and different documents related to the sense of place in traditional textures. In regard to theoretical studies, this research has drawn upon Persian and English books, related theses and some case studies of architecture conducted in Iran. The research test has been done according to the Delphi method. This method is a structured process of collecting and categorizing the existing knowledge of a panel of experts. This technique is done by administering questionnaires to some people and the controlled feedback of the received responses and opinions. The validity of the Delphi method depends on the scientific validity of the experts participating in the research. The theoretical results in the form of questionnaire are given to the experts of religious sciences and by scoring and accuracy assessment of the responses, the test is performed. These results are only for assessing the accuracy of the researcher's findings.

**The purpose of the study**

The purpose of this research is to explain dimension-ability and present a model for assessing and measuring the dimensions of the sense of place in traditional textures of neighborhoods. Explaining the fact that these are affected by perceptions of the citizens, and presenting an analytical model for measuring the dimensions of the sense of place being affected by their perceptions and mental images are some of the other objectives of this study.

**Significance of the study**

The significance of location-based studies, in terms of results, lies in the fact that the realization and development of the sense of place in facilitating coordination between the individual and the environment, using the environment better and satisfaction as well as the sense of belonging to a place are studied (Falahat, 2006), the results which leads to responsible behaviors toward the environment, and the importance of location-based research in traditional textures is based
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on deeply connected relationships which exist between the sense of place and sense of belonging to a place, and collaborative behaviors of citizens in the processes of sustainable development and improvement in living and residential conditions (Uzzel, 2002).

Research questions
In this regard, there are a variety of questions including:

- How does the quality of citizens' perceptions and mental images affect the dimensions and items of the sense of place?
- What is the analytical model to measure the dimensions of the sense of place which are affected the items of the sense of place?
- How do citizens' perceptions and mental images affect the dimensions of the sense of place in the texture of traditional neighborhoods?

Concepts, viewpoints and theoretical foundations
Relying on phenomenological definitions, one can claim that the nature of "place" is more specific than the more general concept of "space"; a specificity which is the result of the attribution of meaning, social interactions, and interconnectedness with memories and in short considering identity for place. On the other hand, "place" collocates with security and stability while "space" goes with openness, freedom and instability. Norberg Schulz, in his studies which are significantly influenced by Heidegger's philosophy, has mentioned essential and basic differences between place and place and its usage even in everyday language. He mentions that in daily conversations while we refer to places as names like square, school, complex and city, we point to spaces as topological relations such as before, after, under and on. The nature of space from Tuan's point of view (Tuan, 1974) goes with movement and the nature of place collocates with stop and pause. He considers every pause as potentially making a space turn into a place and introduces space as the opportunity to move between places. In fact, place is a defined part of general and undefined space, which is formed in certain relationships with human, and his/her perception, emotion and experience. Place has been defined as a center of meaning and a focus of attention (Tuan, 1974), which is based on human experiences, social relationships, emotions and cognition. The most widely used definition which is given for "place" also states that it is the outcome of the components of the physical body, human activities and social and psychological processes focused on the physical body (Relph, 1976). Place, in a more transparent definition given by Canter, has been defined as a part of environmental experience and a combination of actions, conceptions and physical attributes (Canter, 1977).

The neighborhood
This research is concerned with one of the traditional neighborhoods in Dezful. Since fewer people of this neighborhood have moved from this place out of their area, it has been chosen for our research.
The concept of the sense of place

The sense of place creates such a link between the individual and the place that one considers him/herself as a part of the place and based on his/her experiences of sings, meanings and functions, he/she regards a function for the place. This function is unique and different for him/her and as a result the place is important and respectable for him/her. A place, due to the fact that it may be the place of a social relationship and a common experience among people, creates a sense of belonging and attachment (Pakzad, 2009: 319). A collection of individual and collective narratives which happen in line with a place are effective in social attachments (Habibi, 1999: 20). A part of one's personality which forms his/her social identity is the place with which he/she is identified, so that one can call it self-identity with space and in this respect, social processes are more important in creating the sense of belonging to a place than physical quality (Reza Zadeh, 1999: 239). In environmental psychology, place attachment refers to the relationship between individual or collective cognition and an environment and in terms of identity, place attachment is the relationship between one's identity and social environment. The sense of belonging (belongingness) and place attachment are a higher level of the sense of place, which play a key role in any situation and space in order for one to enjoy and continue his/her presence in the place (Falahat, 2006: 60). In this situation, one regards a role for the place which makes it important and respectable for him/her. Place attachment is the relationship between one's identity and social environment where he/she lives and it arises in a cultural environment. Cross argues that relationships with the environment and place attachment are carried out through a variety of links existing among people and the place (Cross, 2005).

As place attachment increases with prolongation of one's residence in a place, it largely depends on one's interaction with other people (Relph 1988:33). The process which is created as a result of spiritual and psychological attachments with the environment is made of familiarity, emotion, excitement and memory (Cross, 2005). Research shows that the criteria for collective
memories, which play an effective role in creating the sense of collective belonging to a place, fall into two major categories: "the formation of events and social interactions" and "recording and transferring memories", each of which are divided into two sub-categories: "social and political structure" and "spatial and physical structure" (Mirmoghtadaee, 2008: 5). Sub-criteria influencing "the possibility of events and social interactions to take place” related to social and political structure of the city includes social and environmental security, ethnic variety, social classes, historic events, public ceremonies, and sub-criteria related to spatial and physical structure are: access to public places and resorts, within neighborhood scale. Sub-criteria of "recording and transferring neighborhood memory” related to "social and political structure” of the neighborhood are: residence continuity, and sub-criteria influencing "spatial and physical structure” are: conservation of historic areas, old buildings and neighborhoods, urban reminders, and local names (Mirmoghtadaee, 2008: 5).

The events and elements of a neighborhood which are also old are engraved on the collective mind of the neighborhoods' residents and are turned into specific, exciting and memorable emotions which evoke a specific spiritual and psychological attachment. Therefore, in all spaces of the traditional neighborhood, generations’ memories are engraved on them since there is residence continuity. The wall, corner, or passage are not just physical wall, corner or passage but they are the storehouse of our collective memories, of our culture, of current traditions and the place of imagery for our city's people (Habibi, 2008: 20).

The places of the neighborhood we go to are the roots of our familiarity with the spaces of traditional neighborhood through which the neighborhood is formed and paves the way for the residents' spiritual and psychological attachments. Based on some studies, extroverted societies need a higher level of environmental stimulation (Canter, 1971: 127). Moreover, extroverted society and people are more inclined toward having a territory and prefer having courtyard houses (Lang, 2004: 170). Thus, the presence of central courtyards as well as blind alleys and simple walls without openings in traditional neighborhoods provide the appropriate conditions for being in harmony with psychological characteristics of the residents (Pirbabaie, 2011: 23).

Another effective factor is the role of rituals, myths or traditions in creating the sense of belonging and sustainability in the place. Relph regards the disappearance of rituals as the death of the place (Relph, 1976: 207). For example, the annual celebration of Ashura provides not only an attachment for the residents of the neighborhood but the people who have moved from there also choose their previous neighborhood to celebrate this day. Of the structural and physical factors which have created memories and psychological attachments in the traditional neighborhoods are extreme dissimilarity among its constituents which, in turn, lead to a specific legibility distinguish, structurally and physically, each neighborhood from another one. Mental images and memories of every one in regard to the elements of the neighborhood may be different. But these different elements play a key role in giving a character and identity to the neighborhood. Meanwhile, the role of traditional neighborhood's markers cannot be ignored. These markers are media through which traditional neighborhoods are characterized. The load of memories these markers contain become more evident when other elements of traditional neighborhood, unlike today's neighborhoods, also establish a strong spatial and physical relationship among with the markers. These markers may be shrines, mosques, neighborhood center, trees, etc. Spaces, links and applications such as neighborhood center or mosques which have a higher outer manifestation have created more collective memories for the residents of the neighborhood. Individual and collective behaviors in a place are the result of principles and values which have their roots in its people's beliefs and worldview. The morea place is compatible spatially and physically with religious principles, basics, values, do's and don'ts of the community members, the more is the sense of belonging to a place. The beliefs of the community members are related to do's and don'ts which can lead to moral and ideological attachments if they are manifested in social and spatial structures of the place (Pirbabaie, 2011: 24). The concept a place and features of human effects suggest is derived from cultural criteria and worldview of the society. All human behaviors, effects and living environment are
affected by the culture and worldview of that community (Nasr, 2000: 7). Place attachment increases as one's residence prolongs, especially when he/she lives where he/she was born. Therefore, residence continuity and birth are vital factors in creating place attachment (Relph, 1976:73). The process, arising in this kind of attachment, is birth, life, death and its continuity; the present and future. The past, arising in this kind of attachment, is its birth, life, death and continuity; the past, present and future. The past whose memories occupy the mind, the present which is temporary and in which the presence is not possible, and the future which lays the ground for high aspirations (Habibi, 1999: 17). One's life who resides in a neighborhood begins with his/her birth. Traditional neighborhood is a complement to the history of its residents whose historical and family roots can be traced back to that neighborhood. What has reinforced this matter in traditional neighborhoods is the ground for residence continuity in them, having led to social ties and friendships in the neighborhood. The residents of a neighborhood are no longer citizens in today's life but they have a sense of belonging to the place due to permanent residence. Neighborhood in the past is the place of one's everyday life and the role each individual takes is influenced by shared values in the neighborhood. Therefore, neighborhood is one's haven of the past, present and future in its body and history. The closer the features of our living environment are to the features of the environment where we were born and have grown up, the more compatible it is with our ideals (Bachelard, 1969: 51). Hence, place attachment becomes more important when the place is not only related to the past and present but also the future. Every person places some symbolic values and specific mental functions on his/her neighborhood, understanding of which is difficult for strangers (Hanssen, 2004: 21). Traditional neighborhood, by uniting humans, grants them a shared identity and strengthens the foundations of the society and this is a role which becomes possible only due to human's birth in the neighborhood as the permanent place to live (Pirbabaie, 2011: 24). To be used in the studies related to the sense of place, "place" is specifically regarded as an attitude approach (Jorgensen, 2001). And this range of studies focuses on constituent dimensions of the sense of place; place attachment, place identity and place dependence as corresponding elements of cognitive, emotional and behavioral dimensions (mazloumi 2010).

The sense of place has been regarded as covering other concepts (Shamai, 1991). However, differences become deeper where there seems to be no uniformity even among researchers over the structure of evaluation models and which concepts are generic and which ones are specific (mazloumi 2010).

In one of the most important differences in terms of form, the concept of place attachment has been defined as including other concepts and the main criterion for the quality of relationship between human and place and other concepts (place identity and place dependence are considered as its elements, dimensions and subsets (Williams, 1989). In contrast, place attachment is sometimes discussed in line with two other elements and under the general concept of the sense of place and it only reflects the emotional dimension of the relationships between human and place, not its totality (Jorgensen & Stedman, 2001).

**Place identity**

Place identity (character of place) refers to a component (influenced by the complex pattern of relationships including ideals, beliefs, preferences, emotions, values, conscious and unconscious behavioral attitudes) which describes people's identity in regard to a physical environment (Porshansky, 1987). Therefore, place identity refers to a dimension of the relationship between human and place, which allows people to express and emphasize identity. We interpret place identity in the environment of an urban neighborhood as a reflection of beliefs and cognitive kind one has from his/her neighborhood (mazloumi 2010).

The evaluation and measurement of place character in residential neighborhoods may contain judgments about basic concepts of Breakwell's identity process model; continuity, distinctiveness, self-efficacy (self-effectiveness), and self-esteem (Breakwell, 1992).
Distinctiveness refers to inclination toward being unique and different, continuity suggests inclination to maintaining identity in place and over time, and self-esteem here is interpreted as one's relationship with a group or an environment (Twigger, 1996). Thus, judgments that people make based on propositions for evaluating and measuring distinctiveness, efficacy and unpleasantness in the environment or from being attributed to an environment of a neighborhood can provide an appropriate model for evaluating "place identity" (Mazloumi, 2010).

**Place attachment**

Place attachment in the environment of a residential neighborhood can be regarded as a reflection of the residents' emotional evaluations about the environment. Contrary to the assumptions of some researchers who think that place attachment is only a product of social interactions, a large number of studies show that emotional attachment take place toward a physical environment and social environment (Jorgensen, 2001; Kyle, 2005). As far as some studies show, the sense of belonging to a physical environment can also happen independent of social interactions (Hidalgo, 2001).

**Place dependence**

Place dependence focuses on to what extent and how good, in terms of quality, this dependence can provide access to people's behavioral objectives in comparison with possible and available alternatives (Jorgensen & Stedman, 2001). Therefore, a place can, due to performance values, create importance and dependence for people. Dependence on a place in the environment of urban residential neighborhood also refers to behavioral element in attitude approaches toward the sense of place and is related to residents' positive evaluation of a residential neighborhood in terms of success and performance features in regard to one's behavioral preferences in the environment for other available alternatives (Mazloumi, 2010).

**Constituent elements of the sense of belonging in design**

**Individual cognitive-perceptual factors**

As mentioned earlier, the sense of belonging is a complex combination of meanings, symbols and environmental qualities a person or a group perceives of a certain place consciously or unconsciously. These meanings which are majorly dependent on one's emotional relationship with the environment are manifested physically in design. Ones' recognition and perception of a place is a primary condition for creating the sense of belonging to a place. Therefore, legible and physically distinguished environments are desirable for the users and one gains a better perception and recognition in them. Physical attributes such as determining privacy and ownership, and neighborhood are the most important factors of one's accurate perception of the environment in which he/she, based on his/her abilities and motivations, explores and experimenting the environment (Matlabi, 2006).

**Social factors**

Just in proportion as cognitive-perceptual factors are important in forming the sense of belonging as the first step in this path, so are social variables such as culture, symbols and social sings are of high importance, so that before 1978 the role of social factors in forming this sense were mostly examined and physical variables were not dealt with. Scholars like Rapoport, Proshansky, Rogers and Lavrakas have emphasized the role of physical factors, however; they have also stated that what show the physical environment as the ground for social interactions are in fact shared environmental symbols as well as environmental capability in providing and developing this dimension of human needs. In fact, all humans have social needs and in the pyramid of human needs, they are in search of belonging to relatives and friends. At this stage of the sense of belonging, the environment acts as the ground for social and cultural activities where people discover and interpret physical attributes based on their own perceptions and morphology system and collectively decode the environment. Of these factors, physical
attributes such as forms including, shapes, texture and color emanating from social strata of the environment play the role of connectors for the users each of which have been obtained based on cultural data over the history of environmental architecture and contains a specific meaning (Matlabi, 2006).

**Environmental-physical factors**

This group of factors, based on place-behavior theory in environmental psychology, classify the environment into two important factors of activity and body. The prevailing activities in an environment are defined based on social factors, actions and public interactions and body along with the variables of the form and constituents organization, as the most important factors in forming the sense of belonging to the environment, are evaluated. Physical attributes, through creating environmental distinctiveness, inner and outer relationships in spaces, make the sense of belonging. Shape, size, color, texture and criterion as the features play an effective role in forming the sense of belonging. The kind of organization and arrangement of physical elements is also another effective factor. On the other hand, physical elements, through congruity and the ability of meeting human needs in the place, are effective in creating the sense of belonging. In design, each variable; color, shape, texture, criterion and the kind of organization based on human needs and providing the kind of activity needed in spaces assumes special, which shows the capability of the environment developing the form of the performance (Matlabi, 2006).

**Data analysis**

In the questionnaires administered to the subjects the aim of which were to examine the items and indices of the research, the respondents were asked to answer the questions. Below, the demographic situation of the respondents is examined. As table 14-1 shows, male gender (around 72%), female gender (around 27%) have the highest (74) and lowest (28) frequencies respectively.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Frequency percentage</th>
<th>Cumulative percentage</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>74</td>
<td>72.5</td>
<td>72.5</td>
<td>72.5</td>
</tr>
<tr>
<td>Female</td>
<td>28</td>
<td>27.5</td>
<td>27.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

As table 14-2 shows, the respondents fall into four age ranges the highest frequency of which is the one above 35 years of age. Figure 14-2 also indicates the frequency of the respondents in terms of their ages.

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Frequency percentage</th>
<th>Cumulative percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-25</td>
<td>7</td>
<td>6.9</td>
<td>6.9</td>
</tr>
<tr>
<td>25-30</td>
<td>6</td>
<td>5.9</td>
<td>12.7</td>
</tr>
<tr>
<td>30-35</td>
<td>24</td>
<td>23.5</td>
<td>36.3</td>
</tr>
<tr>
<td>Above 30</td>
<td>65</td>
<td>63.7</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

As table 3-14 shows, work experience of 10-15 (31%) and work experience of over 15 (3%) have the highest (32) and lowest (3) frequencies among the respondents respectively.
Table 13-4. Frequency distribution and percentage of work experience among respondents

<table>
<thead>
<tr>
<th>Work experience</th>
<th>Frequency</th>
<th>Frequency percentage</th>
<th>Cumulative percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>29</td>
<td>28.4</td>
<td>28.4</td>
</tr>
<tr>
<td>5-10</td>
<td>38</td>
<td>37.3</td>
<td>65.7</td>
</tr>
<tr>
<td>10-15</td>
<td>32</td>
<td>31.4</td>
<td>97.1</td>
</tr>
<tr>
<td>Above 15</td>
<td>3</td>
<td>2.9</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

As the table below shows, associate's degree had the highest frequency (40) with 39% while bachelor's degree and above this degree had the lowest frequency (12) with around 12% among the respondents.

Table 14-4. Frequency distribution and percentage of degrees among respondents

<table>
<thead>
<tr>
<th>Degree</th>
<th>Frequency</th>
<th>Frequency percentage</th>
<th>Cumulative percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diploma and below</td>
<td>18</td>
<td>17.6</td>
<td>17.6</td>
</tr>
<tr>
<td>Associate's</td>
<td>40</td>
<td>39.2</td>
<td>56.9</td>
</tr>
<tr>
<td>Bachelor's</td>
<td>32</td>
<td>31.4</td>
<td>88.2</td>
</tr>
<tr>
<td>Master's and above</td>
<td>12</td>
<td>11.8</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>102</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Inferential data analysis

In this kind of analysis, statistics are calculated using the values of the sample. Statistic is a term which is used in relation to the sample and examines a feature of the sample. For example, mean, variance or sample ratio are statistics. Statistic varies from one sample to another sample. Parameter is a number which expresses a feature of a population. For example, mean, variance of a population are parameters. Although parameters are constant in a population, they are ambiguous and with the help of statistics are estimated based on statistical methods, which is called inference or statistical inference (Sadaghiann&Ebrahimi, 2002).

Examination of goodness of fit for dimensions and elements

This part will examine the data in order to make a decision about using parametric tests or nonparametric tests. Therefore, data normalization is dealt with.

The hypotheses related to this part are:
H0. Data are normally distributed.
H1. Data are not normally distributed.

The above hypotheses for the criteria of this research were examined using Kolmogorov – Smirnov test the result of which has been presented in table 5-4.

As it can be seen, the value of significance level (divided by two) is above 0.025 in all variables. Moreover, the Z-score is also below 1.96. Thus, at a significance level of 95%, there is no strong evidence against the null hypothesis and hypothesis 1 is accepted. So the data of both questionnaire are normally distributed.
Table 5-4. Kolmogorov – Smirnov test to examine goodness of fit.

<table>
<thead>
<tr>
<th>Number</th>
<th>Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>Mean 20.3636</td>
</tr>
<tr>
<td></td>
<td>Standard deviation 1.41897</td>
</tr>
<tr>
<td>Maximum</td>
<td>Absolute 0.164</td>
</tr>
<tr>
<td></td>
<td>Positive 0.110</td>
</tr>
<tr>
<td></td>
<td>Negative -0.164</td>
</tr>
<tr>
<td>Kolmogorov – Smirnov statistic</td>
<td>1.216</td>
</tr>
<tr>
<td>Significance level (two-sided)</td>
<td>0.104</td>
</tr>
</tbody>
</table>

Examination and testing research hypotheses

Since statistical data are normally distributed, parametric tests are used to analyze the data. In this research, we use the correlation coefficient test to examine each hypothesis. When the sample is large, parametric tests can be used even if the population is not normal. But how large a sample should be is a matter of controversy among statisticians. If the variable is not too abnormal, parametric tests can be used in a sample size of 30 or larger. The only difference between these two tests is that nonparametric tests are less powerful than their parametric counterparts. Therefore, using each of these tests does not cause problems in large samples (Jandaghi, 2004).

According to what was mentioned above, in this part, we will examine the hypotheses using one-sample t test and Friedman test.

Hypotheses

The variable of hypothesis 1: place identity

H0: In experts' view, the factor of place identity has no positive effect on traditional textures.
H1: In experts' view, the factor of place identity has a positive effect on traditional textures.

The significance of the hypotheses has been expressed as below:

\[
\begin{align*}
H_0 &: \mu \leq 3 \\
H_1 &: \mu > 3
\end{align*}
\]

Table 4-4. One-sample t test (hypothesis 1)

<table>
<thead>
<tr>
<th>Hypothesis 1</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place identity</td>
<td>102</td>
<td>15.4857</td>
<td>3.03287</td>
<td>0.51265</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis 1</th>
<th>Test value = 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T</td>
</tr>
<tr>
<td>Place identity</td>
<td>24.355</td>
</tr>
</tbody>
</table>
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To analyze hypothesis 1, one-sample t test has been used.

Since p-value (significance level) is below $\alpha = 0.05$, there is a significant difference between the obtained mean and the mean of Likert scale (3) in which case, the t-statistic should be considered. And given that the t-statistic symbol is positive, the results are toward larger than the mean of Likert scale. That is; the results are above the mean of Likert scale (3).

Since this mean has taken in place in H1, it can be said with 95% confidence level that H1, the first hypothesis of the research, is accepted. In experts' view, the factor of place identity has a positive effect on traditional textures.

**The variable of hypothesis 2: emotional attachment**

H0: In experts' view, the factor of emotional attachment has no positive effect on traditional textures.

H1: In experts' view, the factor of emotional attachment has a positive effect on traditional textures.

The significance of the hypotheses has been expressed as below:

\[
\begin{align*}
H_0 : & \mu \leq 3 \\
H_1 : & \mu > 3
\end{align*}
\]

**Table 5-4. One-sample t test (hypothesis 2)**

<table>
<thead>
<tr>
<th>Hypothesis 2</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional attachment</td>
<td>102</td>
<td>19.6571</td>
<td>3.466362</td>
<td>0.58546</td>
</tr>
</tbody>
</table>

To analyze hypothesis 2, one-sample t test has been used.

Since p-value (significance level) is below $\alpha = 0.05$, there is a significant difference between the obtained mean and the mean of Likert scale (3) in which case, the t-statistic should be considered. And given that the t-statistic symbol is positive, the results are toward larger than the mean of Likert scale. That is; the results are above the mean of Likert scale (3).

Since this mean is related to H2, it can be said with 95% confidence level that H2, the second hypothesis of the research, is accepted. In experts' view, the factor of emotional attachment has a positive effect on traditional textures.

**The variable of hypothesis 3: place dependence**

H0: In experts' view, the factor of place dependence has no positive effect on traditional textures.

H1: In experts' view, the factor of place dependence has a positive effect on traditional textures.

The significance of the hypotheses has been expressed as below:
HAYATY, SAKINEH

\[
\begin{align*}
H_0 : & \mu \leq 3 \\
H_1 : & \mu > 3
\end{align*}
\]

Table 6-4. One-sample t test (hypothesis 2)

<table>
<thead>
<tr>
<th>Hypothesis 3</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place dependence</td>
<td>102</td>
<td>9.9429</td>
<td>2.97976</td>
<td>0.50376</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis 3</th>
<th>Test value = 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Place dependence</td>
<td>13.784</td>
</tr>
</tbody>
</table>

To analyze hypothesis 3, one-sample t test has been used. Since p-value (significance level) is below $\alpha = 0.05$, there is a significant difference between the obtained mean and the mean of Likert scale (3) in which case, the t-statistic should be considered. And given that the t-statistic symbol is positive, the results are toward larger than the mean of Likert scale. That is; the results are above the mean of Likert scale (3).

Since this mean is related to $H_3$, it can be said with 95% confidence level that $H_3$, the third hypothesis of the research, is accepted. In experts’ view, the factor of place dependence has a positive effect on traditional textures.

The variable of hypothesis 4: social bond

H0: In experts' view, the factor of social bond has no positive effect on traditional textures.
H1: In experts' view, the factor of social has a positive effect on traditional textures.

The significance of the hypotheses has been expressed as below:

\[
\begin{align*}
H_0 : & \mu \leq 3 \\
H_1 : & \mu > 3
\end{align*}
\]

Table 7-4. One-sample t test (hypothesis 4)

<table>
<thead>
<tr>
<th>Hypothesis 4</th>
<th>Number</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Standard error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social bond</td>
<td>102</td>
<td>8.6857</td>
<td>1.92157</td>
<td>0.32480</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hypothesis 4</th>
<th>Test value = 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>T</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Social bond</td>
<td>17.505</td>
</tr>
</tbody>
</table>

To analyze hypothesis 4, one-sample t test has been used. Since p-value (significance level) is below $\alpha = 0.05$, there is a significant difference between the obtained mean and the mean of Likert scale (3) in which case, the t-statistic should be considered. And given that the t-statistic symbol is positive, the results are toward larger than the mean of Likert scale. That is; the results are above the mean of Likert scale (3).
Since this mean is related to H4, it can be said with 95% confidence level that H4, the fourth hypothesis of the research, is accepted. In experts' view, the factor of social bond has a positive effect on traditional textures.

**Ranking social elements from respondents' point of view**

In this part, the four main hypotheses and items of the research are ranked based on the obtained results. For this purpose, Friedman's analysis of variance by ranks is used. With the help of this test, the above-mentioned items will be examined in terms of uniformity while being different in regard to importance. The hypotheses related to this question are as follows:

H0: In terms of importance, all factors are equal.
H1: in terms of importance, at least two factors are not equal.

In table 14-8, given that the significance level is below 0.05, it can be concluded that the null hypothesis is rejected and at least two factors, in terms of importance ranking, are not equal.

**Table 14-8**

<table>
<thead>
<tr>
<th>Number</th>
<th>102</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi square</td>
<td>92.398</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>3</td>
</tr>
<tr>
<td>Significance level</td>
<td>0.000</td>
</tr>
<tr>
<td>a. Friedman Test</td>
<td></td>
</tr>
</tbody>
</table>

In the second output which is shown in table 9-4, the table contains the mean of the main items ranks based on which one can claim that the higher the mean of the rank is, the more important the factor is. Given the obtained results, the factor of emotional attachment has the highest priority while social bond has the lowest priority.

**Table 9-14**

<table>
<thead>
<tr>
<th>Factor</th>
<th>Mean rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Place dependence</td>
<td>3.00</td>
</tr>
<tr>
<td>Emotional attachment</td>
<td>3.93</td>
</tr>
<tr>
<td>Place identity</td>
<td>1.77</td>
</tr>
<tr>
<td>Social bond</td>
<td>1.30</td>
</tr>
</tbody>
</table>

**CONCLUSION**

As the analysis of the questions shows, emotional attachment has the highest rate and effect in creating the sense of belonging to a place. Social factors and structures which are effective in emotional attachment such as one's familiarity with the neighborhood, his/her memories in that place, neighborhood relations, holding rituals play a key role in creating emotional attachment. The sense of belonging to a place and living environment is the result of the residents' beliefs, mental images, physical and environmental features, and their interactions. The sense of belonging is, in a sense, emanates from length of residence in a place and their mentality (beliefs, traditions, etc.) and it is also related to body, neighborhood design, and organization in terms of attitude toward the environment. As a result, traditional neighborhood is a place which contains not only one's needs but also his/her needs in regard to others as well as his/her psychological needs. Designers and urban planners are supposed to do their tasks according to human needs (individual, social, psychological).
REFERENCES

Identifying the factors of sense of belonging to a place in traditional textures
A case study of traditional texture in Dezful city


