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Evaluation of the Effects of High-Rise Building Components in Residential Complexes of Shiraz by Radar Chart

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Abstract

Urgent population growth as well as the avoidance of horizontal expansion of cities have made the high-rise building phenomenon necessary as a solution to the problem of land scarcity. On the other hand, paying attention to the human and environmental factors influencing planning and design can improve the quality of life in these high-rise buildings. In this regard, the purpose of this study is to identify effective factors of high-rise buildings on the living culture of Shiraz and to examine the status of each of these components on the residential culture. This is an applied research study, enjoying a descriptive-survey method. The data collection tool in the research is a questionnaire given to the residents of the Derak residential complex and the residential complex of oil company staffs. Data were analyzed by using SPSS software and the results of the surveys were presented in the form of diagrams. The results indicate that there is a significant relationship between the factors affecting the creation of high-rise and residential culture. By providing solutions, it is also possible to promote a culture of dwelling in such settings.

Keywords: Urbanization; High Places; Residential Culture; Derak Residential Complex; Oil Company Staffs Complex; SPSS

1. Introduction

The lack of land and particularly the unreasonable growth of its prices across the country, on the one hand, and increased demand for housing in metropolises like Shiraz, on the other, led politicians to adopt the rules for increasing congestion and high-rise in the 24/10/1990 and emphasize the general policy of encouraging the high-rise buildings, implementation of a pattern of

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separation with high-rise building requirements and encouraging the aggregation of parts in modernization areas (Rahnema & Razaghian, 2013) (quoted by the Supreme Council for Urban Development and Architecture of Iran, 18: 2009). Thus, living in high places without regard to some of their social abuse consequences was imposed on communities, since land removal does not only reduce the price of land per unit, but also affect the type of ownership to each residential unit as well as the type of household lifestyle. In addition, it creates a kind of social life that depends on its adaptation to social cultural teachings (Pourdiehimi, 45: 2012). Consideration of cultural and residential issues will ultimately lead to a life based on peace and social sustainability, which will enable us to see the establishment of favorable housing complexes for residents in the future (Monjezi & Keshavarz, 2017).

Accordingly, this paper tries to analyze the effective components of high-rise building on the residential culture, using data obtained from two selected residential complexes.

1.1. The main purpose of the research

1. Efforts to promote a residential culture with respect to the factors affecting the creation of high-rise buildings in Shiraz.

2. Analysis of effective components of high-rise building in residential culture in Shiraz.

1.2. The necessity and importance of the research

Necessity: along with the basic needs of humans like food and clothing, one of the most important needs of the human community is housing (Malekabadi et al., 2016). The people of each period will speak in their particular language and understand the architecture in the same language. Ancient language is a living language that feeds on life, day to day issues of society, technology and science of the day. If the presence of architecture in life and issues of an era diminishes, this poverty of presence will also be transferred into language and culture.

On the contrary, this is true so that if the language and culture of a nation dwindles or even attacked by foreign language and culture, the architecture of that nation will also be transformed. Therefore, culture and architecture are two inseparable parts that affect each other unintentionally. Recognizing the effects of architecture and culture on each other is of particular importance because a culture survives which has a sufficient basis against the alien culture and architecture is the true means of measuring the culture of a nation (Momeni & Masoudi, 2015).

Importance: a culture is a relationship between man and the environment. With the help of culture, human beings are closely intertwined and the nation comes into existence with the intellectual commonality that originates from this culture (Momeni & Masoudi, 2015). Architecture is a real measure of the culture of a nation. The culture of each society responds to the formation of space. If the culture is defined as the set of traditions and behavior of the consciousness of a society that moves toward a goal, everything is almost part of culture. Architecture is also the actions and reactions of human beings (Fatehi & Karimi, 2016).

2. Meaning and Concepts of Keywords in the Research

2.1. Residence

In a situation where human life is more and more abandoned in cadizism, residence is also diverted from its qualitative concept. This definition, “residence is nothing but a ceiling overhead and a few meters below the ground”, represents getting away from the quality and desirability of

residential space and paying attention only to the material dimension of residence (Varesi & Karimi, 2017).

The first concept that takes place after hearing the word '*residence*' in the human mind is to reside in one place (Rashneu & Saeedi, 2012).

Housing is an institution created to meet a complex set of goals. Housing is, on the other hand, a social phenomenon, the order and type of space as well as its form is influenced by cultural, social and economic factors. The main purpose of housing is to create an environment that is consistent with the human lifestyle. In addition to meeting individual needs, housing must also be able to meet the social needs of the individual (Pourdiehimi, 2012).

Table 1 Summary of the ideas of theorists on the concept of residence

| Theorist | Theoretical view of the concept of residence |
|-----------------|---|
| Nurburg Schultz | Residence represents a meaningful link between humans and the perceived environment. This link originated from an attempt for identity, that is to say, a sense of belonging. |
| Yarahmadi | Residence is a process in which a person transforms the "place" into "home", and deals with the four main sources of thinking, namely, God, himself, heaven and earth. |
| Fazeli | Residence is a collection of values and meanings that define what the concept of a home is in a group or nation and how to make a home, what kinds of rituals are inside the house and what else are out and... It is responded by being in each community which is in fact a subset of the whole culture of society. |
| Yashlar | Residence is considered the home to be a dream and quietness is necessary to dream comes true. |
| Robert Gifford | Hut is a collection of richly evolving cultural, demographic and psychological meanings that we attach to a physical structure and has six characteristics: shelter, ordering, identity, solidarity, symbiotic warmth and suitable with psychological needs. |

(Source: Authors, 2017)

2.2. High-Rise Building

When it comes to high-rise building, everyone seems to have the same idea, while this is not the case, and not only among the general public, but also among experts, there are different views about the high-rise building definition.

While this is relative, important factors such as time, place, person's perceptions of the environment and the height of adjacent buildings, etc., are involved. For example, at the point where all houses are villas, a 5-floor building looks tall and in a city like Chicago, if a building does not look small or does not overlap with nearby buildings, it should have dozens of floors (Rasaghian et al., 2011).

In general, there are two defining frameworks for high-rise buildings that are:

1. Definition based on the determination of the height of buildings
2. Definition according to the characteristics of the building or the possibility of its establishment in the city and region.

In this regard, various definitions have been made; in the first definition, for example, the fire equipment (which is 23 meters in Iran according to the 122 issue) and the necessity of using elevators in building for residents (in Iran, buildings of more than 4 floors need elevators and are considered to be high-rise building) are considered.

Within the second definition, it is possible to say that the main characteristic of these buildings is that the design or operation of the building is influenced by the symbol of its height (Azizi & Motavaseli, 2012).

2.3. Culture

The term '*culture*' has taken different meanings and concepts in its historical course.

Ralph Linton considers culture as a combination of acquired behavior that is transferred by members of a certain community from generation to generation and shared among individuals (Khakpour & Sheikh Mehdi, 2011).

Edward Tyler has defined it as follows: “culture is a complex set involving knowledge, beliefs, arts, laws, habits and any other abilities that man has acquired as a member of the community” (Emami, 2009). The definition of Edward Barnett Taylor, the great English anthropologist, in 1871, in the first sentence of the book “elementary culture” is that: culture is a combination of knowledge, religion, art, law, morality, ability and habit that a person has acquired from the community (Salehi Milani & Mohammadi, 2011).

Table 2 Definition of culture

| Definition of culture | Year | Theorist |
|---|-------------|-----------------|
| The culture of the set is an integral part of the modes of thinking and action that is more or less distinct and is shared by many people and shared between them (Gay Rocher,1989) | 1989 | Gay Rocher |
| Culture is a model of the basic assumptions and beliefs that a social group has created in order to discover or create the way to solve two fundamental problems of adapting the external environment (the way to survive) and creating inner coherence (the way to stay together). This template has been validated on the course of this group's journey and proved to be useful. As a result, it is transmitted to the next generation as a proper way of perception, thinking, feeling and behavior (Schein,2010) | 2010 | Schein |
| Culture is the lifestyle of group which is formed based on the material and spiritual achievements of the community. The achievements that have been made in history are still valid and are current in the lives of the individual and group (Fallahi,2013) | 2013 | Fallahi |
| Includes man-made objects, techniques, social orientations, perspectives, and goals that are determinants of behavior that are underlying it (Rooh Alamini,2014) | 2014 | Herscovitz |
| A collection of handcrafts, goods, technical processes, thoughts, habits and heritage values, and a unique reality (Ashuri,2014) | 2015 | Mallnouski |

(Source: Authors, 2017)

2.4. Residential Culture

One of the most important aspects of living is the ability to get identity through life into the center of the residential culture. In the sense of identity, which divides into individual and social identities; individual identity is shaped in a person' residence and as stated “residence can also be regarded as determining position and authentication” (Schultz, 2015).

Residential culture means the attention to the rules and requirements of life in the collective environment, i.e. the biological complex has meaning and concept and avoiding it causes social problems. In this situation, people have to give up a part of their freedom to enjoy a quiet and peaceful life, and accept duties in exchange of the rights they find (Shokouhi, 2012).

2.5. Relationship between culture and architecture

What we have mentioned as culture (laws, values, etc.) is only part of the culture of every society. Culture has another dimension, called the material dimension and the meaning of it is buildings, factories and so on. In fact, these are also part of a community. Because they are rooted in values, beliefs, and so on, in which the circle of communication between culture and architecture appears (Momeni & Masoudi, 2015).

The orientation of the cultures is always based on the human nature and thought and this path is effective in shaping the residential space and the emergence of architecture, since this space is an issue as a human need and these needs are always responded in the path of divine intellect and nature (Fallahi, 2013).

3. Research Methodology

This research is applied in nature and the research method is a documentary-analytical survey. The data gathering procedure is divided into two categories: library and field. Library methods were used in order to collect information about the literature and the history of the research and for gathering data, a field survey questionnaire was used to collect information.

Therefore, a set of questions was arranged and distributed to study the effect of high-rise building components on the primary residential culture. Data were analyzed by SPSS software. The statistical population of this study was randomly selected within the sample site. The questionnaire reliance factor (i.e. Cronbach's alpha) was calculated to measure the reliability. The closer the coefficient to 1, the more reliable the questionnaire would be. The validity of the questionnaire was also ascertained before the data analysis.

4. Society and Statistical Sample

The statistical population in this research is residents of Derak residential complex located in the 6th district of Shiraz, and residents of residential complex of the oil company staffs located in Shiraz municipality district 1. To determine the sample size, Cochran sampling method was used. The Cochran formula is calculated in equation 1 (Habibi, 2012).

$$n = \frac{\frac{t^2 PQ}{d^2}}{1 + \frac{1}{N} \left(\frac{t^2 PQ}{d^2} - 1 \right)} \quad (1)$$

n = sample size

N = population volume (population, city, province, etc.)

Z or t = error percentage of acceptable coefficient of confidence

P = relative proportion of population without definite attribute

$q = (1-p)$ = proportion of population without definite attribute

d = the degree of assurance or optimal probability of accuracy.

In this research, N (proportion volume) is considered as all inhabitants of Derak residential complex and the oil company complex. The sample size was calculated by taking into account the maximum P and Q values (.5) and with an error rate of .88 of 257 people, of which 181 belonged to the Derak complex and 76 related to the staff of the oil company complex.

5. Content of the Questionnaire and Determination of its Reliability

The content of the questionnaire, in addition to questions about gender and the level of education and age, includes 15 questions about assessing the impact of high-rise building compounds on the inhabitant's residential culture. Residents' preferences are set as 5-point arbitration on a Likert scale. Cronbach's alpha method was used to assess the reliability of the questionnaire. According to Table 3, the obtained result is 0.711 showing internal consistency and appropriate reliability.

Table 3 Determine the reliance of questionnaire

| No. of questions | Cronbach |
|------------------|----------|
| 15 | 0.711 |

(Source: Authors, 2017)

Since the Cronbach's alpha coefficient is .71, the questionnaire has a satisfactory reliability and we can be sure of the internal solidarity of the questions. In order to ensure the validity of questionnaire, it was scrutinized by several expert professors and then was distributed to the sample after confirmation. After analyzing the internal consistency of the questions, the questionnaire was analyzed. Based on the findings of the factor analysis, the value is equal to .658, which indicates that the sample size is suitable for factor analysis and Bartlet's value is 12345.438 and a significant level of .99% indicates that the correlation of the variables is appropriate for factor analysis (Table 4).

Table 4 Characteristics of a cloth

| Amount | | Statistical index |
|----------|-------------------|-------------------|
| 0.658 | | Index KMO |
| 1275.438 | Statistics | Bartlet test |
| 105 | Degree of freedom | |
| 0.000 | Significant level | |

(Source: Authors, 2017)

6. Analysis of Information

In this research, for analyzing the obtained data, firstly, the variables of the research were analyzed using descriptive statistics, frequency indexes and percentages (according to Table 5). Then in the inferential part, by using the t-test and weighing and drawing the spider diagram (Radar), the research questions were studied. To test the hypotheses, SPSS software was used.

Table 5 Distribution of the statistical sample in Derak residential complex

| Frequency percentage | Frequency | Category | Index |
|----------------------|-----------|-------------------------|-----------|
| 52.5 | 95 | Male | Gender |
| 47.5 | 86 | Female | |
| 5.5 | 10 | 16-20 years | Age |
| 20.4 | 37 | 21-30 years | |
| 39.2 | 71 | 31-40 years | |
| 10.5 | 19 | 41-50 years | |
| 19.3 | 35 | 51-60 years | |
| 5 | 9 | 61 years and above | |
| 5.5 | 10 | Education under Diploma | Education |
| 13.3 | 24 | Diploma | |

| | | | |
|------|----|----------------|--|
| 11 | 20 | Higher-Diploma | |
| 36.5 | 66 | Bachelor | |
| 29.3 | 53 | Master and PhD | |
| 4.4 | 8 | Un-answered | |

(Source: Authors, 2017)

Table 6 Distribution of the statistical sample in Oil Refinement Company Staffs

| Frequency percentage | Frequency | Category | Index |
|----------------------|-----------|-------------------------|-----------|
| 43.4 | 33 | Male | Gender |
| 56.6 | 43 | Female | |
| 0 | 0 | 16-20 years | Age |
| 13.2 | 10 | 21-30 years | |
| 51.3 | 39 | 31-40 years | |
| 21.1 | 16 | 41-50 years | |
| 14.5 | 11 | 51-60 years | |
| 0 | 0 | 61 years and above | |
| 2.6 | 2 | Education under Diploma | Education |
| 15.8 | 12 | Diploma | |
| 7.9 | 6 | Higher-Diploma | |
| 10.5 | 8 | Bachelor | |
| 11.8 | 9 | Master and PhD | |
| 51.3 | 39 | Un-answered | |

(Source: Authors, 2017)

In order to investigate the relationship between the factors affecting the creation of high-rise building and residential culture, Pearson correlation coefficient was used, the results of which are presented in the following Table 7.

Table 7 Correlation coefficient between factors affecting the creation of high-rise spaces and residential culture

| Residential complex | Factor | Residential culture | | |
|------------------------------|---------------------------------|---------------------|-------------------------|--------------------|
| | | Number | Correlation coefficient | Significance level |
| Derak | Physical needs | 181 | 0.386** | 0.000 |
| | Safety and quietness | 181 | 0.586** | 0.000 |
| | Social balance | 181 | 0.709** | 0.000 |
| | Social identity | 181 | 0.565** | 0.000 |
| | Discipline and self-development | 181 | 0.585** | 0.000 |
| Oil refining company's staff | Physical needs | 76 | 0.772** | 0.000 |
| | Safety and quietness | 76 | 0.809** | 0.000 |
| | Social balance | 76 | 0.610** | 0.000 |
| | Social identity | 76 | 0.447** | 0.000 |
| | Discipline and self-development | 76 | 0.772** | 0.000 |

(Source: Authors, 2017)

The correlation coefficient between physical needs, the need for safety and quietness, social balance, social identity, discipline and self-development and the duration of residence at Derak complex were .386, .586, .709, .565, .585, and in the oil complex they were .772, .809, .610, .447, .772, respectively. This indicates a good correlation between factors affecting the creation of high-rise building and residential culture.

This correlation is significant because its p level in all dimensions in both complexes is less than .05. Therefore, it can be said that there is a significant relationship between factors affecting the creation of high places and residential culture.

6.1. Calculating the high-rise building effective components on Shiraz residential culture in Derak and oil company complexes

To compare the general factors and components with each other, the weight of the factors is first calculated, and then the spider diagram is plotted. The weighted average method is used to calculate the operating weight. First, the value of each of the Likert scale options is multiplied by its relative frequency. Then the sum of these products gives the calculated value of the components. The resulting number is redistributed to the total score of the components and the weight of that component is obtained. This is done for all components. Finally, to draw the status chart of components in the two complexes, it is necessary to first calculate the final score; this score is obtained through the obtained average multiplication in weight of that component. To come then, in order to obtain the final score, final scores of all components of that factor are added together. The general factors and their components are grouped as follows.

Table 8 General factors and their components

| |
|--|
| Physical needs |
| Density |
| Proportion |
| Human scale |
| Permeability |
| The need for safety and quietness |
| Security |
| Social monitoring |
| Comfort |
| Access network |
| Social interaction |
| Social participation |
| Presence |
| Public place |
| Social identity |
| Urban management |
| Discipline and self-development |
| Sense of belonging |
| Liveliness and pleasant |
| Unity and social order |

(Source: Authors, 2017)

6.2. Investigating the Status of affective high-rise building components on Shiraz residential culture in Two Residential Complexes, Derak and oil Refinement company staffs

After collecting data, we can compare residents' opinions in order to examine the current status of the factors and the influential factors affecting the residential culture. In order to examine the conditions for the general influential factors on the residential culture, the weight values of each component must be multiplied by the mean of the scores to earn the final weighted average, which

will be the final score, and the resulting values will be converted into a five-dimensional scale to allow us to provide a guide to the status of components that affect residential culture. It can be compared based on the final score obtained from each of the components by a radar chart. The chart of the components is illustrated by the general factors as the following Equation (Asgharpoor, 2008).

$$w_i = \frac{a_{ij}}{\sum_{k=1}^n a_{kj}} \tag{2}$$

Table 9 Final scores of physical needs component

| Name of component | Components of physical needs | Average value of component | Weight of each component | Final score | Final score in 5-scale | Status |
|-----------------------------|------------------------------|----------------------------|--------------------------|-------------|------------------------|-------------------------|
| Derak | Density | 3.15 | 0.217 | 0.684 | 2.995 | Requires more attention |
| | Proportion | 3.56 | 0.245 | 0.874 | 3.825 | Acceptable readiness |
| | Human scale | 3.27 | 0.256 | 0.954 | 4.177 | Acceptable readiness |
| | Permeability | 4.07 | 0.280 | 1.142 | 5 | Acceptable readiness |
| Oil refining company staffs | Density | 2.75 | 0.214 | 0.590 | 2.869 | Requires more attention |
| | Proportion | 3.12 | 0.243 | 0.760 | 3.693 | Acceptable readiness |
| | Human scale | 3.30 | 0.257 | 0.850 | 4.132 | Acceptable readiness |
| | Permeability | 3.63 | 0.283 | 1.029 | 5 | Acceptable readiness |

The results of Table 9 indicate that, from the viewpoint of the respondents, for the components of physical needs in both complexes, the highest weights belong to the components of permeability and human scale.

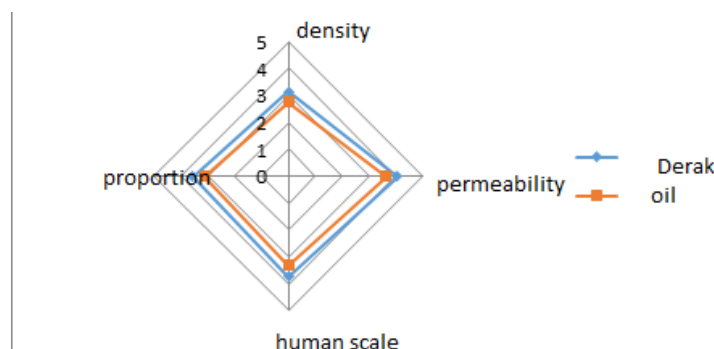
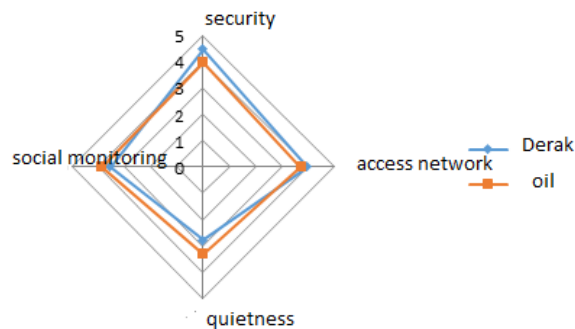


Fig 1 Comparison of the components of physical needs in two Derak complex and oil company complex staffs

Table 10 Final scores of safety and quietness needs components

| Name of complex | Safety quietness components | Average value of component | Weight of each component | Final score | Final score in 5-scale | Status |
|-----------------------------|-----------------------------|----------------------------|--------------------------|-------------|------------------------|------------------------------|
| Derak | Security | 4.48 | 0.303 | 1.359 | 5 | Acceptable readiness |
| | Social monitoring | 3.54 | 0.239 | 0.849 | 3.121 | Requires more attention |
| | Quietness | 2.78 | 0.188 | 0.523 | 1.952 | Requires immediate attention |
| | Access network | 3.96 | 0.268 | 1.062 | 3.906 | Acceptable readiness |
| Oil refining company staffs | Security | 3.99 | 0.268 | 1.070 | 5 | Acceptable readiness |
| | Social monitoring | 3.87 | 0.260 | 1.007 | 4.703 | Acceptable readiness |
| | Quietness | 3.30 | 0.221 | 0.732 | 3.420 | Requires more attention |
| | Access network | 3.71 | 0.249 | 0.925 | 4.322 | Acceptable readiness |

Therefore, the results of Table 10 indicate that, from the viewpoint of the respondents, the highest weights is for the security and access component in Derak complex for safety and quietness components. Besides, the complex of staff of the oil refining company has earned the highest weight of security and social monitoring components.

**Fig 2** Comparison of the components of safety and quietness needs in two Derak complexes and oil company staff complex**Table 11** Final scores of social interaction component

| Name of complex | Social interaction components | Average value of component | Weight of each component | Final score | Final score in 5-scale | Status |
|-----------------------------|-------------------------------|----------------------------|--------------------------|-------------|------------------------|------------------------------|
| Derak | Social participation | 2.72 | 0.294 | 0.800 | 2.233 | Requires immediate attention |
| | Presence | 2.45 | 0.265 | 0.649 | 1.811 | Requires immediate attention |
| | Public place | 4.07 | 0.440 | 1.792 | 5 | Acceptable readiness |
| Oil refining company staffs | Social participation | 3.07 | 0.339 | 1.043 | 5 | Acceptable readiness |
| | Presence | 2.93 | 0.324 | 0.950 | 4.554 | Acceptable readiness |
| | Public place | 3.03 | 0.335 | 1.016 | 4.870 | Acceptable readiness |

The results of Table 11 indicate that from the viewpoint of respondents, Derak complex has the highest weight in public places index for the components of social interaction and in the oil company’ staff, the most weights are the components of social participation and public places.

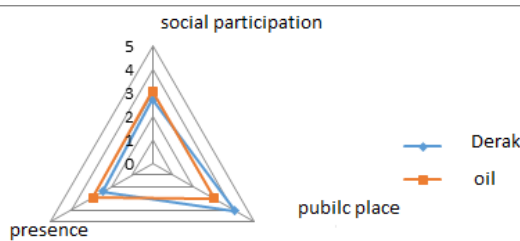


Fig 3 Comparison of components of social interactions in Derak complex and oil refining company staff complex

Table 12 Final scores of Discipline and self-development component

| Name of complex | Discipline and self-development components | Average value of component | Weight of each component | Final score | Final score in 5-scale | Status |
|-----------------------------|--|----------------------------|--------------------------|-------------|------------------------|----------------------|
| Derak | Sense of belonging | 2.53 | 0.354 | 0.897 | 5 | Acceptable readiness |
| | Liveliness and pleasant | 2.33 | 0.326 | 0.761 | 4.240 | Acceptable readiness |
| | Unity and social order | 2.27 | 0.318 | 0.722 | 4.025 | Acceptable readiness |
| Oil refining company staffs | Sense of belonging | 3.37 | 0.332 | 1.118 | 4.455 | Acceptable readiness |
| | Liveliness and pleasant | 3.57 | 0.351 | 1.255 | 5 | Acceptable readiness |
| | Unity and social order | 3.21 | 0.316 | 1.015 | 4.042 | Acceptable readiness |

The results of Table 12 indicate that, from the viewpoint of the respondents, for the components of discipline and self-development, both complexes have obtained the most weights in components of a sense of belonging and liveliness and pleasure.

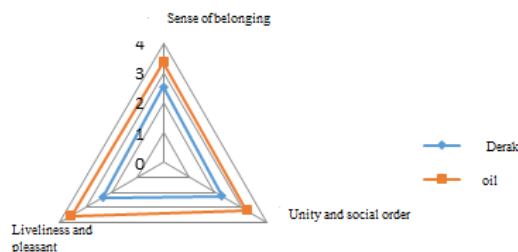
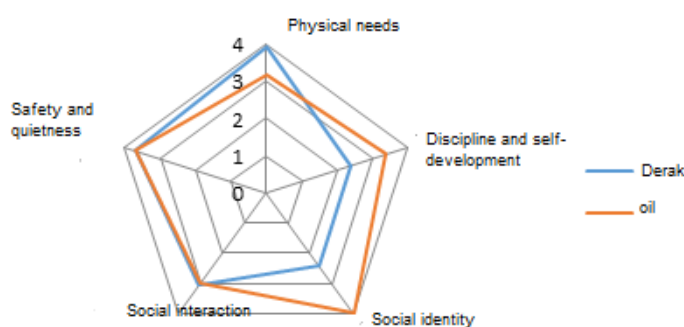


Fig 4 Comparison of components of discipline and self-development in Derak complex and oil refining company staffs complex

Table 13 Comparison of high-rise building effective factors on residential culture in Derak and Oil refining company staffs complex

| Name of complex | Factors | Final score | Status |
|-----------------------------|---------------------------------|-------------|------------------------------|
| Derak | Physical needs | 3.94 | Acceptable readiness |
| | Safety and quietness | 3.69 | Acceptable readiness |
| | Social interaction | 3.08 | Requires more attention |
| | Social identity | 2.44 | Requires immediate attention |
| | Discipline and self-development | 2.38 | Requires immediate attention |
| Oil refining company staffs | Physical needs | 3.17 | Requires more attention |
| | Safety and quietness | 3.72 | Acceptable readiness |
| | Social interaction | 3.01 | Requires more attention |
| | Social identity | 3.97 | Acceptable readiness |
| | Discipline and self-development | 3.38 | Requires more attention |

The results of Table 13 indicate that from the viewpoint of respondents, for effective factors in the residential culture in the Derak complex the most weights are indicators of physical needs and the need for the safety and quietness, and in the staff of the oil company complex, the most weights are the indicators of social identity and safety requirements and quietness. The results also show that, in view of the respondents, the mean of physical needs and social interaction in the Derak complex is greater than that of the oil company's staff, and also the average need for safety and quietness, social identity and order and self-development in the oil company staff complex is greater as compared with the Derak complex.

**Fig 5** Comparison of High-rise building Effective Factors in Residential Culture in Derak and oil refining company staff complex

The effective components guide for Shiraz residential culture is described in Table 14:

Table 14 Statues guide for the factors and effective components in residential culture

| Average range | Status |
|---------------------|------------------------------|
| <2.5 average 0< | Requires immediate attention |
| ≤ 3.5 average 2.5 ≤ | Requires more attention |
| < 5 average 3.5 < | Acceptable readiness |

7. Conclusion

Today, housing is one of the key issues in the construction and development of cities. In Iran, along with the growth of urbanization and population growth and the lack of suitable land for

construction, the construction of high-rise buildings has been necessary to meet this growing need for housing.

Considering that housing has a decisive role in shaping the culture of society, it is possible to take valuable steps by observing a residential culture in increasing the quality of life and society.

According to the analysis, the assumptions of the research are as follows:

There is a significant relationship between the components that affect the creation of high-rise spaces and residential culture.

In this regard, it is possible to come up with solutions to improve the residential culture in the residential space, including:

- providing collective space in order to expand social relationships and fostering thoughts
- creating space for recreation and liveliness.
- embedding the building blocks in such a way that there is less visibility on each other
- embedding index elements such as columns, flooring and color
- using of sound insulation in the interior and exterior walls of the building to control the sound
- designing pathways by changing the nature of materials through considering safety issues
- establishing laws and supervising the implementation of laws with the participation of residents in the selection of management and the board members of the complex

In total, in the comparative study between the studied complexes, the following results were obtained:

Regarding the physical needs and the need for safety and quietness in the residential Derak complex and the factors of social identity and the need for safety and comfort in the staff of the oil refining company complex, there is the highest level of acceptable readiness. The physical needs and social interactions in Derak complex are higher than those of the staff of the oil refining company complex; the safety and security, social identity and self-development among the staff of the oil refining company complex is higher as compared with Derak complex. In Derak complex social interaction as well as the physical needs, interaction, discipline and self-development need more attention, and more important are discipline, social identity and self-development that require immediate attention in the residential Derak complex.

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