

# Systematic Review of Research Trends in Lifestyle and Housing

<sup>1</sup>Mahsa Zarrabi, <sup>2</sup>Seyed Abbas Yazdanfar, <sup>3</sup>Seyed Bagher Hosseini

<sup>1</sup>Ph.D. Candidate, Faculty of Architecture, Iran University of Science and Technology, Tehran, Iran.

<sup>2</sup>Associate Professor, Faculty of Architecture, Iran University of Science and Technology, Tehran, Iran.

<sup>3</sup>Associate Professor, Faculty of Architecture, Iran University of Science and Technology, Tehran, Iran.

Received 17.11.2020; Accepted 25.01.2021

**ABSTRACT:** The concept of lifestyle was initially used in psychology and sociology, but its features gradually gained entry into other fields of study, including housing. Various studies have been conducted on applying housing lifestyle in Iran, as in other countries. In this study, the structure and contents of lifestyle research in the field of housing have been compared to Iranian research. To achieve this goal, 45 English and 13 Persian articles were thoroughly studied by the systematic review method. The CASP checklist was used for validity and quality control. The results of this analysis show that there are different views on the methodological approaches so it is suggested to use mixed methods. Housing lifestyle studies can be divided into four types of micro and macro scale design, residential preferences, energy consumption in the building, and the meaning of housing. Research on the international scale in the field of meaning and energy consumption is less than design and residential preferences. This is more evident in Iranian studies and should be further studied in the field of housing planning, residential preferences, and building energy. The number of lifestyle factors in international studies is broader than in Iranian studies. However, there is a gap in the field of subjective lifestyle and its psychological issues.

**Keywords:** *Lifestyle, Home, Design, Residential Preference, Housing policy.*

## INTRODUCTION

Lifestyle is a term that is widely used but has not been given a single definition. For example, Rothacker views culture as a way of life that emerges from the more uncomplicated status of communal life and transforms into higher statuses of cultural styles (Ansbacher, 1967). Consumption is an issue that has been linked to lifestyle in recent years. Sobel refers to a lifestyle as a pattern of consumption that encompasses one's preferences, tastes, and values (Bosserman, 1983). Lifestyle is also defined as motivations, behaviors, and attitudes to align with the group (Coreil et al., 1985). Veal (1993) considers it a distinct pattern of personal and social behavior that characterizes an individual or a group characteristic.

By expanding lifestyle research in diverse contexts, this literature also emerged in the built environment studies, especially housing studies. For example, Mickelson's research has shown that residents in different areas of cities exhibit very different patterns of activity and interpersonal relationships. In his view, these variations, which reflect the different values

of roles and have components of activity and interaction, are called "lifestyle" (Michelson & Reed, 1970). Rapport is a theorist who points to the connection between house form and lifestyle. In his view, the house is the material expression of the lifestyle and is shaped by the system of activities (Rapoport, 1969, 104). Lawrence defines lifestyle as one of the cultural parameters in defining what makes a house a home (Lawrence, 1987). However, lifestyles are said to have become more important in the choice and housing design, investment in residential properties, and theories of research and marketing in the late twentieth century (Æro, 2006; Gram-Hanssen & Bech-Danielsen, 2004). For example, in related theories to marketing and Residential Preferences in traditional studies, economic and demographic factors were the most important determinants of residential choice. Nevertheless, today, lifestyle variables are suggested as a mediator between the translation of social characteristics, and demographic characteristics in determining consumer preferences (Hustad & Pessemier, 2011; Michelson & Reed, 1970).

\*Corresponding Author Email: [yazdanfar@iust.ac.ir](mailto:yazdanfar@iust.ac.ir)

Economists' need to predict future demand patterns in sophisticated markets has led to the introduction of lifestyle groups. This trend is used in real estate studies to illustrate market potentials (Gröger et al., 2011). Varadi and Lippman identified six lifestyle clusters based on demographic characteristics and attitudes toward ownership versus tenancy. Some of the housing features, such as ownership, type of structure, or location have been included in lifestyle studies (Weiss, 2000, 305). Bell distinguishes between family (value in family life), occupation (upward vertical mobility), and consumption (desire for a high level of living now). He concludes that child and family orientations, rather than job considerations, are the primary motivations for middle-class respondents to move to the suburbs (Tallman & Morgner, 1970). Besides, the lifestyle of families who move into the occupational profession is usually in the vicinity of urban facilities because they want to spend their leisure time as efficiently as possible. Recently, co-operatives, builders, and other social housing projects have explicitly focused on specific lifestyles, with research focused primarily on house builders in the UK to sell homes (Kriese & Scholz, 2012). Finally, another reason for conducting lifestyle research is organizational goals, mostly rented (social) housing. Some theorists believe that living in a neighborhood where people have a similar lifestyle can lead to a more significant commitment to the neighborhood and communication and greater mutual understanding (Jansen, 2011). It has been argued that the concept of lifestyle in housing literature has many different uses and components. Jansen (2011) introduces approximately 40 different typologies of lifestyle that more than 20 of them are specific to the housing field. She states that most typologies are made by commercial companies based on the views of sociological researchers such as Bourdieu and others. Although her review research presents an overview of lifestyle research in housing, it does not provide a detailed picture of the lifestyle research components, housing components, and research methods. In addition to the research in the world in this field, this literature has been also discussed in Iran. Given the breadth of the lifestyle approach in housing studies, in addition to understanding the process of knowledge in this area, the following questions arise: what are the criteria for evaluating the lifestyle in the field of housing? What elements of lifestyle architecture have been analyzed with lifestyle? Moreover, what gaps are there about this topic? Also, by comparing the research process in Iran with the other world studies from different dimensions, the strengths and weaknesses of the studies can be identified and can be a guide for future studies. Therefore, to provide a more accurate understanding of these questions, a systematic review of this research was selected.

## **MATERIALS AND METHODS**

The purpose of this study is practical, and its approach is a systematic review. Understanding the trends of housing

research focusing on their quantitative and qualitative knowledge in Iran and the world has been one of the goals of this article. For this purpose, to better understand the problem of lifestyle in housing, on the one hand, the research structure in terms of time trend, geographical distribution, methodology, and methods of data collection and on the other hand, the content of research in terms of thematic categorization as well as identifying the components of housing lifestyle by content analysis method were examined. All analyses were performed at both internal and external levels. In this way, the content of the articles was generally recognized at the internal level and the comparison of international studies with Iranian studies was done at the external level.

English-language articles between 1980 and 2019 in the Sage pub, Taylor & Francis, Web of Science, and Scopus databases were searched using combinations of keywords including "lifestyle," "way of life," "housing," "dwelling," and "home." Articles in Persian that were indexed in Noormags and SID databases at the end of 1398 were added.

After an initial search of the databases, a total of 1423 English articles and 37 Persian articles were obtained. Subsequently, 1330 English articles were removed for repetition in the databases and after the title review. Therefore, the abstract of the remaining 93 articles was studied. At this point, 34 articles that were not sufficiently related to the subject under study were removed. Also, 14 articles were eliminated because of the increased quality of the reviewed articles. Only articles were reviewed that were published in more reputable journals. Finally, 45 English articles were selected for full reading and conceptual coding. Among the 37 Persian articles, 24 articles were removed after removing duplicates, the title review, and the full-text review. Therefore, a complete reading of the remaining 13 articles was performed. Figure 1 shows the details of this process.

The CASP instrument with ten criteria was used to assess the validity and quality control. To achieve this purpose, the articles were submitted to an expert, and the quality assessment was carried out with the CASP checklist. Then the results were evaluated by a coefficient of agreement between two coders with the Kappa index and SPSS software. Since the kappa coefficient results are above 0.65, the agreement coefficient can be said to be at an acceptable level.

## **RESULT AND DISCUSSION**

### **Systematic Analysis of Research Structure**

#### **Time Trend of Studies**

The increasing number of Iranian and international studies since the late 1990s indicates the growing importance of lifestyle research in housing research. This upward trend has been significant in recent years in both International and Iranian studies (Fig. 2). Although lifestyle research in housing has been considered since the early 21st century, scientific research in Iran has begun with a delay of about thirty years.

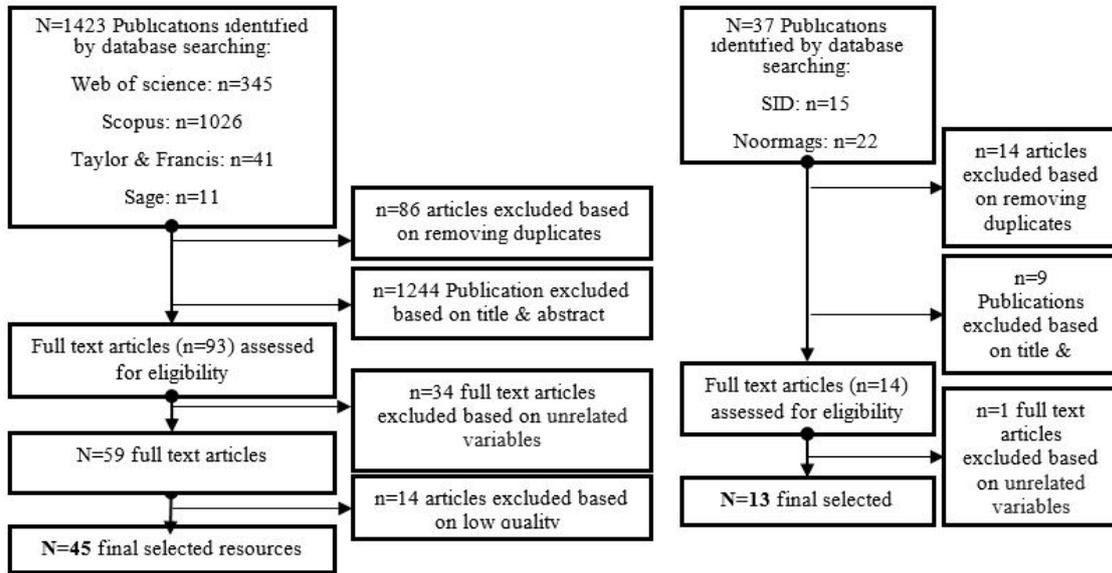


Fig.1: Flow diagram of Literature search

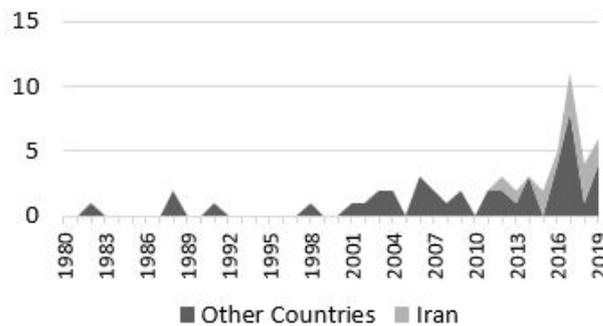


Fig. 2: Time course of lifestyle Studies in housing

### Geographical Distribution

The most English-language lifestyle research in housing has been conducted in Europe, East, and Southeast Asia respectively. The pioneer countries in this field are the Netherlands and the United Kingdom. However, a wide range of countries in the world has entered this study field (Fig. 3,4). It is noteworthy that this study has examined only valid and quality articles that have evaluated lifestyle variables in housing. So the number of studies in different countries are much higher than this.

### Methodological Features

Research has been analyzed methodologically, research method, and data collection tool (Table 1).

Figure 5 shows the upward trend of using qualitative methods in recent years. Although the research was initially qualitative, at the beginning of the 21st century, as the number of studies in this field increased, quantitative research was also applied. Both the quantitative and qualitative approaches have been used in international research in the housing lifestyle, but in Iran, the focus has been on the qualitative method (Fig. 6).

The most common research methods of descriptive-analytical qualitative research are through interviews and quantitative research are surveyed by questionnaires (Table 2). The only example of mixed-method research observed in this field is a study conducted either an interview or analysis with simulation software.

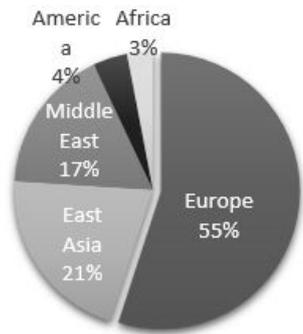


Fig. 3: Geographical distribution of lifestyle research in housing

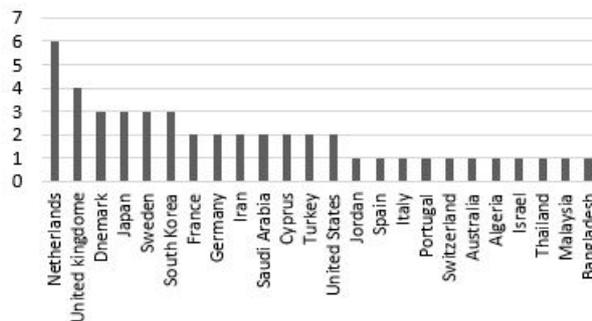


Fig. 4: Frequency of lifestyle studies in housing by country

Table 1: Division of research methodology.

| Methodology         | Publication citationS   |
|---------------------|---|
| Quantitative Method | ÆrØ, 2006; Andersen, 2011; Becchio et al., 2016; De Lauretis et al., 2017; Farley et al., 2019; Frenkel et al., 2013; Hooimeijer & Schutjens, 1991; Jansen, 2012; Jeong & Ban, 2014; Karabag & Fellahi, 2017; Le Gallic et al., 2018; Lindberg et al., 1988; Malkawi & al-Qudah, 2003; Mavrogianni et al., 2014; Minami, 2016; Pozas & Espada, 2016; Salama, 2006; Salama et al., 2017; Sararit et al., (2018; Stimson & Minnery, 1998; Thøgersen, 2017; Weggemans, 1987  |
| Qualitative Method  | (Ahmed, 2011; Amado et al., 2017; Beamish et al., 2001; Dincyurek & Turker, 2007; GhaffarianHoseini et al., 2014; Gram-Hanssen & Bech-Danielsen, 2004; Grundström & Molina, 2016; Günçe et al., 2008; Habibi, 2017; Hacıhasanoglu & Hacıhasanoglu, 2006; Hejjs et al., 2009; Kamalipour & Zaroudi, 2014; Karsten, 2007; Kriese & Scholz, 2012; Kwon & Kim, 2017; Lawrence, 1982a; Nasir et al., 2019; Ozaki, 2002; Scheiner & Kasper, 2003; West & Emmitt, 2004; Willén, 2019; Yun, 2019)<br><br>(Abdollahzadeh & Arzhmand, 2013; Afshari & Pordeihimi, 2015; Afshari et al., 2016;) Ebrahimi et al., 2017; Ebrahimi et al., 2017; Hosseini et al., 2018; Maddahi & Memarian, 2019; Mohamadhoseini et al. 2019; Raesi, 2018; Yazdanfar et al., 2014; Yazdanfar & (Naserdoust, 2019; Yazdanfar & Zarrabi, 2016 |
| Mixed-Method        | (Maddahi et al., 2019)  |

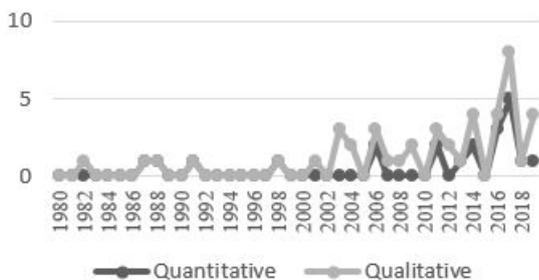


Fig. 5: Time course of lifestyle Studies in housing by methodology

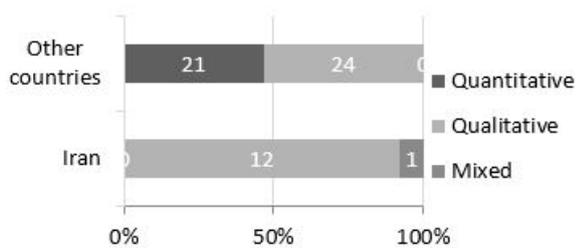


Fig. 6: Frequency of lifestyle studies in housing by methodology

Table 2: Lifestyle research methodology in housing

| Methodology         | Method                         |                         |                    | Data gathering   |
|---------------------|--------------------------------|-------------------------|--------------------|--|
| Quantitative Method | Survey<br>N=10                 | Simulation<br>N=6       | Correlation<br>N=5 | analysis<br>The questionnaire, Interview, Simulation software          |
| Qualitative Method  | Analytical descriptive<br>N=17 | Content analysis<br>N=6 | Ethnography<br>N=8 | N=3<br>Interview, Observation, Focus group, photography, and Documents |

The main discrepancy between quantitative and qualitative investigation can be found in their results. The studies looking for the factors related to residence priority or detecting residents' selections have used quantitative evaluation. Also, the studies that have worked on the relation of the physical factors with the kinds of lifestyle by clustering the residents' lifestyle, have converted the lifestyle criteria to quantitative parameters. The studies which have environmental and energy concerns according to the lifestyle are in this group either. However, the investigations aiming to study the evolution of lifestyle and physical changes related to that and the investigations which

have tried to explain the influential factors on the physical factors, have used the qualitative approach.

In general, at the evaluations based on quantitative factors, the emphasis has been more on location in neighborhood-scale and house type in the scale of housing form. In contrast, qualitative approaches seek to study the meaning of housing and people's behavior using field research. These studies have more concentrated on interior spaces. The function, spatial organization, and public-private zoning factors have been more studied in qualitative research (Fig. 7).

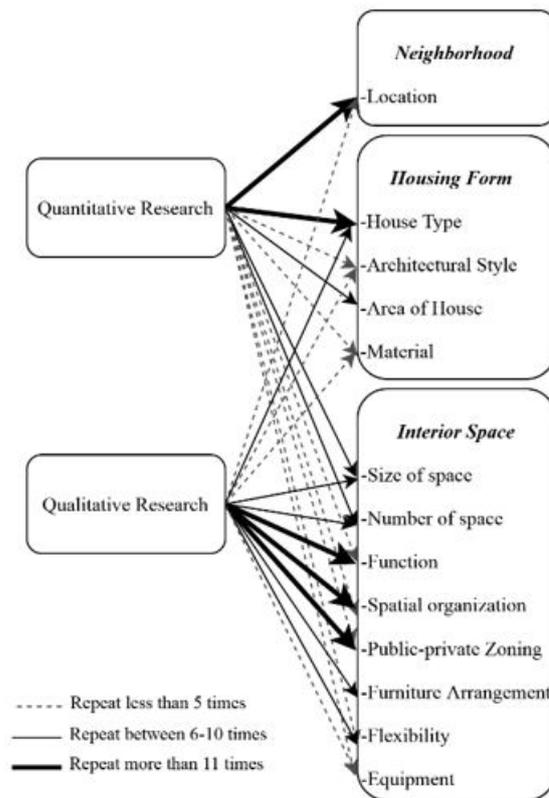


Fig. 7: The relationship between methodology selection and housing elements in the investigation of lifestyle.

## Systematic Analysis of Research Content Process of Studies in Different Fields of Housing

In this paper, studies on lifestyle and housing are divided into four categories: architectural design, residential preferences, energy, and the meaning of housing. However, this division does not mean a whole separation of these fields from each other because, in many studies, there is an overlap between these topics.

The first approach that has received the most articles is the design approach. The research can be categorized into two macro and micro areas:

The macro design field includes residential design policy-making and planning (Amado et al., 2017; Grundström & Molina, 2016; Heijs et al., 2009; Karsten, 2007; Kriese & Scholz, 2012; Salama et al., 2017; Scheiner & Kasper, 2003; Stimson & Minnery, 1998).

The micro design domain includes research that seeks to provide design solutions both in the housing body and in its spatial configuration (Ahmed, 2011; Carrasco et al., 2018; Dincyurek & Turker, 2007; GhaffarianHoseini et al., 2014; Kwon & Kim, 2017; Maddahi et al., 2019; Minami, 2016; Ozaki, 2002; Raeisi, 2018; Sararit et al., 2018; Weggemans, 1987; West & Emmitt, 2004; Yun, 2019).

The second approach is residential preferences, which are used in marketing and quality housing, especially in housing planning. These articles evaluate and select the housing by residents at the physical and neighborhood-level according to their lifestyle (ÆrO, 2006; Andersen, 2011; Beamish et al., 2001; Frenkel et al., 2013; Gram-Hanssen & Bech-Danielsen, 2004; Hooimeijer & Schutjens, 1991; Jansen, 2012; Karsten, 2007; Lindberg et al., 1988; Ouwehand Doff, W., 2011; Salama, 2006). Most of these investigations have used the lifestyle categories in the marketing fields such as VALS1 and AIO<sup>2</sup> methods.

The third approach is the energy discussion and environmental issues (Becchio et al., 2016; De Lauretis et al., 2017; Thomas Le Gallic, Assoumou, & Maizi, 2017; Mavroggianni et al., 2014; Thøgersen, 2017). This approach, which has grown dramatically in recent years, knows residents' lifestyle as a factor in energy-consuming. This approach seeks how lifestyle influences energy consumption in domestic space. Although the number of works done in this area is lower than the other

areas, according to its growth in recent years, it is expected that more housing research will be conducted in the area in the future.

The final group of studies on housing lifestyle seeks to find the meaning of home from the resident's perspective and the social change effects on it (Lawrence, 1982b; Malkawi & al-Qudah, 2003; Meesters, 2006; Willén, 2019). Also, the studies that analyze the home structure and components with the analytical perspective of vernacular buildings are categorized in this group too (Abdollahzadeh & Arzhmand, 2013; Afshari & Pordeihimi, 2015; Afshari et al., 2016; Ebrahimi et al., 2017; Ebrahimi et al., 2017; Farley et al., 2019; Günçe et al., 2008; Habibi, 2017; Hacıhasanoglu & Hacıhasanoglu, 2006; Hosseini et al., 2018; Jeong & Ban, 2014; Kamalipour & Zaroudi, 2014; Karabag & Fellahi, 2017; Maddahi & Memarian, 2019; Mohamadhoseini et al., 2019; Nasir et al., 2019; Yazdanfar et al., 2014; Yazdanfar & Naserdoust, 2019; Yazdanfar & Zarrabi, 2016).

Iranian studies have been solely in the micro-housing design and semantics areas in terms of subject categories, which have an investigation gap in comparison to global studies in macro planning, energy, and residential preference fields (Table 3).

### Study Context and Housing Type

The lifestyle concept in global studies has been mainly evaluated in contemporary urban homes (Fig. 8). These studies have surveyed the typical homes in cities, and only two studies have examined lifestyle in low-income homes and social housing. However, fewer contemporary houses have been studied in Iran, which can be of interest in future research. Also, given the economic housing market and the transaction's growth on the metropolitan outskirts of Iran, lifestyle studying suburban housing can be important.

### Lifestyle Components and Comparison Between Iran and Other Countries

The factors which correlated housing and lifestyle were extracted as codes. In the present study, 32 reference codes were identified in Maxqda software, which extracted 209 codes considering their frequency. There were 54 codes for Iranian and 155 codes for international studies. These codes were then categorized into seven indices. Indicators and factors are shown in Table 4.

Table 3: The number of lifestyle and housing studies based on the subject

|                 | Design                                    | Preference | Energy | Meaning |
|-----------------|---|------------|--------|---------|
| Iran            | Total=2<br>Architecture=2<br>Planning=0   | 0          | 0      | 11      |
| Other Countries | Total=19<br>Architecture=11<br>Planning=8 | 11         | 5      | 12      |

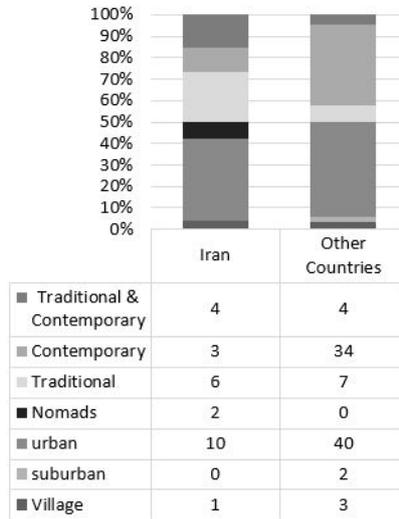


Fig. 8: Frequency of lifestyle studies by context and housing typology

Table 4: Factors associated with housing lifestyle studies, classified according to the 7 dimensions

|                | Behavioral Factor                             | Social Factor   | Economical Factor  | Demographic Factor   | Ideological Factor                      | Psychological Factor                             | Cultural Factor                         |
|----------------|---|---|--|--|---|--|---|
| <b>Factors</b> | Activity<br>Habits<br>Leisure<br>Work at home | Social class<br>Status<br>Family-Communication<br>Social-Communication<br>Individualism<br>Social Structure | Income<br>Welfare<br>Ownership<br>Consumption-<br>Production<br>Technology | Household<br>structure<br>Gender<br>Age<br>Work<br>Education | Value<br>Religion<br>Attitude<br>Belief | Need<br>Identity<br>Taste<br>Belonging<br>Motive | Customs<br>Norm<br>Cultural<br>Activity |

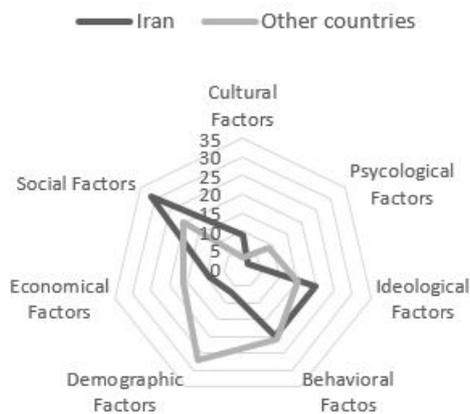


Fig. 9: Comparison of the Frequency of Lifestyle Indicators in Iran and the World

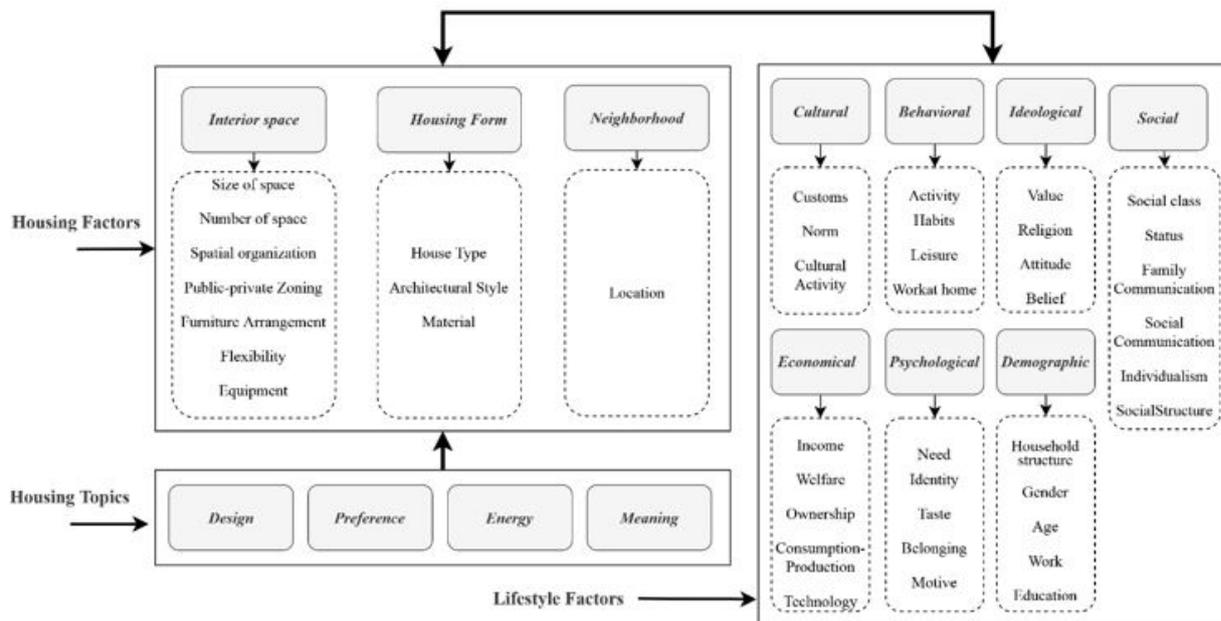


Fig. 10: Theoretical model of housing and its relation to lifestyle

According to Figure 9, it can be said that in international studies, surveying the lifestyle factors in housing is almost equilibrium in different contexts. In the lifestyle indicators categorization, the most important factors are related to demographic factors in these studies, while in Iranian research, this is one of the least important indicators. The reason can be found in the definition of lifestyle. Many researchers do not consider demographic factors as lifestyle indexes, although they consider them an influential factor in people's lifestyles.

One of the most significant differences between Iran and other countries in the lifestyle field and housing is the social structure in these studies, which plays a significant role in Iranian research. This is not correspondent with International studies.

In general, looking at cultural and psychological factors that have more individual aspects are less surveyed. There is a research gap in Iranian studies, including inconsistent with the use of these components and indicators in comparison to international studies. For example, economic factors in lifestyle are also issues that can be considered in Iran.

The theoretical framework of study reviews in lifestyle and housing has been illustrated in summary in figure 10. According to the selected references in this article, the various housing topics such as designing, planning, preferences, and saving energy are under the influence of a group of factors including the behavioral, social, economic, demographic, ideological, psychological, and cultural factors. These lifestyle factors are concerning housing components either in neighborhood scale, housing form, and interior space.

## CONCLUSION

Because lifestyle has a complex structure, it includes various fields and factors for evaluation. This variety is observed in related studies of housing, either. To represent a more accurate understanding of the lifestyle concept in housing, a systematic review is chosen for this study. After studying 45 English and 13 Persian articles published in scientific journals, this investigation was done in structural aspects including time trend, geographical distribution, and methodology and content aspects including subjective categorization, housing typology, and identifying lifestyle factors in housing studies. All the analyses performed in this study are in the outer and inner layers. The inner layer contains the mention items and the outer layer contains comparisons of studies in Iran with world studies.

the following results can be noted from the structural aspect:

Investigation trends in both international and Iranian studies are ascending in this field.

In terms of research methodology, the findings show limited research methods in Iran, which are mainly qualitative with descriptive method. This limitation may be due to the study field, housing typology, and the lack of theoretical foundations in this field. Because the Iranian research has concentrated on traditional and vernacular housing, they have used descriptive method and inductive approach. On the other hand, international quantitative studies have been mostly about building energy consumption or evaluating residential preferences, while no study was observed about these topics in Iran. Theoretical Foundations were observed only in marketing research, no

other topics in lifestyle. Therefore, most articles are qualitative. The results of the content aspects are as follows:

No homogeneity was observed in investigations about housing typology. Most of the international studies have focused on contemporary urban housing and there is less attention to the housing of special income groups or socio-cultural groups. In contrast, Iranian studies have focused on traditional housing. Some topics, such as social housing, affordable housing, and other social groups like immigrants, can be paid attention to in future studies.

The studies have been categorized into 4 groups of Design (macro & micro), Preferences, Energy, and Meaning in content aspects. This categorization can be the basis of housing lifestyle investigations. Article numbers of any topic can be considered as their relative importance. So lifestyle concept has been more important in design and residence preferences in housing research. Also, increasing studies in the energy field in recent years show the importance of this field in the future. According to the gap of subjective studies in Iran, it is suggested to tend the researchers to housing planning, residential preferences, and energy subject aspects by considering lifestyle concept.

In addition to the classification discussed, there are some important factors and indexes of lifestyle. In this study, the indexes have been categorized into behavioral, social, economic, demographic, ideological, psychological, and cultural criteria. The results illustrate the social and behavioral indexes are the two most important factors of evaluation in national and international studies. Since there is no disagreement that lifestyle includes activity and behavior, the importance of the behavioral index is justifiable. It can be said that the main attributes of lifestyle are individual, leisure, and homework activities. The social index is one of the most important factors in determining a person's lifestyle. It is the opposite of the approaches which emphasize individualistic lifestyle and deny the structural effects. The importance value of some indexes, such as demography and ideology are different in national and international studies. The demographic factor has high importance on the international level, but it has a weak presence in Iranian studies. It makes a question that: is this factor a feature of lifestyle? Or can it be considered a supplement to the lifestyle?

The low importance of ideology in international research, including variables like the value and attitude of a person, can be detected in the theory gap of lifestyle. Some researchers believe that there is a casual relationship between value and behavioral indicators, but they are not necessarily a part of the lifestyle. In return, Adler's theory followers believe that the ideology system has been created at the beginning of life, which shapes the human life template. Moreover, religion as the other aspect of the ideology system has not been seen in international studies related to lifestyle, whereas the indicator has high importance in Iranian studies.

The cultural and psychological indicators have had the lowest importance in Iranian and international studies in the housing field. So it can be said that the objective indicators of lifestyle have been more applied in research, but there is a study gap in subjective fields of lifestyle while the lifestyle deals with people's emotions, tastes, and norms as much as behavior. So considering the subjective indicators enriches the investigations. However, it is hard to apply them.

## ENDNOTES

1. AIO questionnaire refers to the amount/size of activities, interests, and beliefs. Activities are including of obvious actions (work, entertainment, social events, holidays, clubs, community, shopping, sports, etc.), Interesting in particular objects, events or subjects (family, home, job, community, entertainment, fashion, food, media, achievements, etc.) with special and constant attention to it and Finally, descriptive beliefs opinions (self, social issues, politics, business, economics, education, products, the future, culture, etc.).

2. The 8-dimensional and 44-item VALS questionnaire was invented by Arnold Mitchell, which examines individual differences in two basic aspects of intrinsic motivation (principled, pragmatic, and pragmatic) and resources available/accessible to consumers (minimal resources - abundant resources) and categorizes the consumer in (out of) 8 specified groups. Agree or disagree individuals will be a part of innovators, experimenters, creators, proponents, militants, thinkers, believers, and survivor's groups.

## REFERENCES

- Abdollahzadeh, M., & Arzhmand, M. (2013). In Search of Iranian Home Properties (Case of Study: Shiraz houses). *Journal of Studies on Iranian Islamic City*, 3(10), 109-122.
- ÆrO, T. (2006). Residential Choice from a Lifestyle Perspective. *Housing, Theory and Society*, 23(2), 109-130. DOI: 10.1080/14036090600773139.
- Afshari, M., & Pordeihimi, S. (2016). Lifestyle Scales in Dwelling. *Housing and Rural Environment*, 35(154), 3-16.
- Afshari, M., Pourdeyhimi, S., & Saleh Sedgh poor, B. (2016). The Environmental Adaptation of Human Lifestyle. *JHRE*, 34(152), 3-16.
- Ahmed, I. (2011). Lifestyle and Affordability Choices in Traditional Housing of Old Dhaka. *Open House International*, 36(3), 74-84.
- Amado, M. P., Ramalhete, I., Amado, A. R., & Freitas, J. C. (2017). Inclusive housing program: The case of Oé-Cusse region in East Timor. *Frontiers of Architectural Research*, 6(1), 74-88.
- Andersen, H. S. (2011). Motives for Tenure Choice during the Life Cycle: The Importance of Non-Economic Factors and Other Housing Preferences. *Housing, Theory and Society*, 28(2), 183-207. DOI:10.1080/14036096.2010.522029.
- Ansbacher, H. L. (1967). Lifestyle: a historical and systematic review. *Journal of Individual Psychology*, 23(2), 191-212.
- Beamish, J. O., Carucci Goss, R., & Emmel, J. (2001). Lifestyle influences on housing preferences. *Housing and Society*, 28(1-2),

1–28.

- Becchio, C., Bello, C., Corgnati, S. P., & Ingaramo, L. (2016). Influence of Occupant Behaviour Lifestyle on an Italian Social Housing. *Energy Procedia*, 101, 1034–1041. DOI:10.1016/j.egypro.2016.11.131.
- Bosserman, P. (1983). *Problems of culture and cultural values in the contemporary world*. In Unesco (Ed.), *Cultural values and new lifestyles* (pp. 22–35). Paris: Unesco.
- Carrasco, S., Ochiai, C., & Okazaki, K. (2018). Resident-built housing modifications as a factor of adaptability to the built environment in disaster-induced resettlement site in Cagayan de Oro, Philippines. *In Science and Technology in Disaster Risk Reduction in Asia* (pp. 453–474). Academic Press. DOI:10.1016/B978-0-12-812711-7.00026-2.
- Coreil, J., Levin, J. S., & Jaco, E. G. (1985). Lifestyle — An emergent concept in the sociomedical sciences. *Culture, Medicine and Psychiatry*, 9(4), 423–437. DOI:10.1007/BF00049232.
- De Lauretis, S., Ghersi, F., & Cayla, J.-M. (2017). Energy consumption and activity patterns: An analysis extended to total time and energy use for French households. *Applied Energy*, 206, 634–648. DOI:10.1016/j.apenergy.2017.08.180.
- Dincyurek, O., & Turker, O. O. (2007). Learning from the traditional built environment of Cyprus: Re-interpretation of the contextual values. *Building and Environment*, 42(9), 3384–3392. DOI:10.1016/j.buildenv.2006.08.007.
- Ebrahimi, G., Soltanzadeh, H., & Keramati, G. (2017). The Reflection of the West Culture in the LifeStyle and the Architecture of the Houses in the Late Qajar Dynasty in Hamadan. *Scientific Journal of Bagh- E Nazar*, 14(47), 29–38.
- Ebrahimi, G., Soltanzadeh, H., & Mirshahzadeh, S. (2017). Impact of lifestyle modernization on the architecture of Pahlavi First period houses, Hamedan city. *Urban and Rural Management*, 16(47), 505–522.
- Farley, W. A., Fox, A. N., & Hrynick, M. G. (2019). A Quantitative Dwelling-Scale Approach to the Social Implications of Maize Horticulture in New England. *American Antiquity*, 84(2), 274–291. DOI:10.1017/aaq.2018.93.
- Frenkel, A., Bendit, E., & Kaplan, S. (2013). Residential location choice of knowledge-workers: The role of amenities, workplace, and lifestyle. *Cities*, 35, 33–41. DOI:10.1016/j.cities.2013.06.005.
- GhaffarianHoseini, A., Berardi, U., Dahlan, N. D., & GhaffarianHoseini, A. (2014). What can we learn from Malay vernacular houses? *Sustainable Cities and Society*, 13, 157–170. DOI:10.1016/j.scs.2014.04.008.
- Gram-Hanssen, K., & Bech-Danielsen, C. (2004). House, home, and identity from a consumption perspective. *Housing, Theory and Society*, 21(1), 17–26. DOI:10.1080/14036090410025816.
- Gröger, M., Schmid, V., & Bruckner, T. (2011). Lifestyles and Their Impact on Energy-Related Investment Decisions. *Low Carbon Economy*, 2(2), 107–114. DOI:10.4236/lce.2011.22014.
- Grundström, K., & Molina, I. (2016). From Folkhem to lifestyle housing in Sweden: segregation and urban form, 1930s–2010s. *International Journal of Housing Policy*, 16(3), 316–336.
- Günçe, K., Ertürk, Z., & Ertürk, S. (2008). Questioning the “prototype dwellings” in the framework of Cyprus traditional architecture. *Building and Environment*, 43(5), 823–833. DOI: 10.1016/j.buildenv.2007.01.032.
- Habibi, R. (2017). The institutionalization of modern middle-class neighborhoods in 1940s Tehran – Case of Chaharsad Dastgah. *Cities*, 60, 37–49. DOI:10.1016/j.cities.2016.07.006.
- Hacihanoglu, I., & Hacihanoglu, O. (2006). Cultural processes and physical change in Sisli—Istanbul. *Habitat International*, 30(4), 902–915. DOI:10.1016/j.habitatint.2005.04.005.
- Heijs, W., Carton, M., Smeets, J., & van Gemert, A. (2009). The labyrinth of life-styles. *Journal of Housing and the Built Environment*, 24(3), 347–356. DOI:10.1007/s10901-009-9147-z.
- Hooimeijer, P., & Schutjens, V. (1991). Changing lifestyles and housing consumption: a longitudinal approach. *Netherlands Journal of Housing and the Built Environment*, 6(2), 143–158. DOI:10.1007/BF02496574.
- Hosseini, A., Foroutan, M., & Salehi, S. (2018). Evolution of Socio-spatial Meaning in Iranian Houses: Comparative Study of Arak’s Traditional Houses and Contemporary Single-family Houses. *Armanshahr Architecture & Urban Development*, 11(23), 27–39.
- Hustad, T. P., & Pessemier, E. (2011). *The development and application of psychographic lifestyle and associated activity and attitude measures*. Decatur: Marketing Classics Press.
- Jansen, S. J. T. (2011). *Lifestyle Method*. In S. J. T. Jansen, H. C. C. H. Coolen, & R. W. Goetgeluk (Eds.), *The Measurement and Analysis of Housing Preference and Choice* (pp. 177–202). Dordrecht: Springer Netherlands.
- Jansen, S. J. T. (2012). What is the worth of values in guiding residential preferences and choices? *Journal of Housing and the Built Environment*, 27(3), 273–300. DOI:10.1007/s10901-012-9270-0.
- Jeong, S. K., & Ban, Y. U. (2014). The spatial configurations in South Korean apartments built between 1972 and 2000. *Habitat International*, 42, 90–102. DOI:10.1016/j.habitatint.2013.11.002.
- Kamalipour, H., & Zaroudi, M. (2014). Sociocultural Context and Vernacular Housing Morphology. *Current Urban Studies*, 2(3), 220–232. DOI:10.4236/cus.2014.23022.
- Karabag, N. E., & Fellahi, N. (2017). Learning from Casbah of Algiers for more Sustainable Environment. *Energy Procedia*, 133, 95–108. DOI:10.1016/j.egypro.2017.09.376.
- Karsten, L. (2007). Housing as a way of life: Towards an understanding of middle-class families’ preference for an urban residential location. *Housing Studies*, 22(1), 83–98.
- Kriese, U., & Scholz, R. W. (2012). Lifestyle Ideas of House Builders and Housing Investors. *Housing, Theory and Society*, 29(3), 288–320. DOI:10.1080/14036096.2011.629679.
- Kwon, H., & Kim, S. (2017). Variation in the Characteristics of Everyday Life and Meaning of Urban Housing Due to the Transition of Social Structure: Focusing on Articles Published in Lifestyle Magazines. *Sustainability*, 9(8), 1298.
- Lawrence, R. J. (1982a). A psychological—spatial approach for architectural design and research. *Journal of Environmental Psychology*, 2(1), 37–51.

- Lawrence, R. J. (1982b). Domestic space and society: A cross-cultural study. *Comparative Studies in Society and History*, 24(1), 104–130.
- Lawrence, R. J. (1987). What makes a house a home? *Environment and Behavior*, 19(2), 154–168.
- Le Gallic, T., Assoumou, E., & Maïzi, N. (2017). Future demand for energy services through a quantitative approach of lifestyles. *Energy*, 141, 2613–2627. DOI:10.1016/j.energy.2017.07.065.
- Le Gallic, T., Assoumou, E., & Maïzi, N. (2018). Investigating long-term lifestyle changes: A methodological proposal based on a statistical model. *Sustainable Development*, 26(2), 159–171. DOI:10.1002/sd.1727.
- Lindberg, E., Gärling, T., & Montgomery, H. (1988). People's beliefs and values as determinants of housing preferences and simulated choices. *Scandinavian Housing and Planning Research*, 5(3), 181–197. DOI:10.1080/02815738808730162.
- Maddahi, S. M., & Memarian, G. H. (2019). Reading the Link of Spatial Organization of House and Lifestyle in Vernacular Architecture (Case Study: Boshrooyeh). *Housing and Rural Environment*, 37(164), 69–84.
- Maddahi, S. M., Esfandiani Moghaddam, E., Abbasi, L., & Bemani Naeini, M. (2019). Analytical Comparison of Residential Semi-open Areas on the Formation of Lifestyle and Behavioral System of Residents in Traditional Houses and Present Housing, Case Study: Mashhad City. *Armanshahr Architecture & Urban Development*, 11(25), 149–161.
- Malkawi, F. K., & al-Qudah, I. (2003). The house as an expression of social worlds: Irbid's elite and their architecture. *Journal of Housing and the Built Environment*, 18(1), 25–48.
- Mavrogiani, A., Davies, M., Taylor, J., Chalabi, Z., Biddulph, P., Oikonomou, E., ... Jones, B. (2014). The impact of occupancy patterns, occupant-controlled ventilation, and shading on indoor overheating risk in domestic environments. *Building and Environment*, 78, 183–198. DOI:10.1016/j.buildenv.2014.04.008.
- Meesters, J. (2006). *Finding the meaning of dwelling in everyday activities*. In J. M.-C. Meesters (Ed.), *Housing in an expanding Europe: theory, policy, participation, and implementation*. Ljubljana, Slovenia: ENHR.
- Michelson, W., & Reed, P. (1970). *The Theoretical Status and Operational Usage of Life Style in Environmental Research*. Toronto: University of Toronto. Center for Urban and Community Studies.
- Minami, K. (2016). The Efforts to Develop Longer Life Housing with Adaptability in Japan. *Energy Procedia*, 96, 662–673. DOI:10.1016/j.egypro.2016.09.124.
- Mohamadhoseini, P., Javan Forouzande, A., Jahani Dolatabad, I., & Heidari, A. A. (2019). An Analysis of the Role of Social class's Lifestyle in the Pattern of Housing; Case Study: The late Qajar and Early Pahlavi Houses in Ardabil. *Scientific Journal of Bagh- E Nazar*, 16(76), 31–44. DOI:10.22034/bagh.2019.138376.3667.
- Nasir, E. B., Timur, s., Ebnem, & Gürel, M. Ö. (2019). Living Rooms Occupied: Narratives on the Recontextualization of the “Museum-Salon” Practice in Modern Turkish Domesticity. *Home Cultures*, 16(1), 63–92. DOI:10.1080/17406315.2019.1699739.
- Ouwehand Doff, W., A. (2011). What is the use of lifestyle research in housing? A case study from the Netherlands. In *23rd Conference of the European Network for Housing Research ENHR*. Toulouse: ENHR.
- Ozaki, R. (2002). Housing as a reflection of culture: Privatised living and privacy in England and Japan. *Housing Studies*, 17(2), 209–227.
- Pozas, B. M., & Espada, M. J. (2016). Getting Results in a Historical Dwelling Stock in a Thermal Simulation with EnergyPlus. *Procedia Engineering*, 161, 300–306. DOI:10.1016/j.proeng.2016.08.560.
- Raeisi, M. M. (2018). Analysis of Locating Subspaces in Contemporary Iranian Housing Based on Islamic Lifestyle. *Iranian Association of Architecture & Urbanism*, 8(13), 123–133. DOI:10.30475/isau.2018.62052.
- Rapoport, A. (1969). *House form and culture*. Prentice-Hall foundations of cultural geography series. Englewood Cliffs (N.J.): Prentice-Hall.
- Salama, A. M. (2006). A Lifestyle Theories Approach for Affordable Housing Research in Saudi Arabia. *EJER: Emirates Journal for Engineering Research*, 11(1), 67–76.
- Salama, A. M., Wiedmann, F., & Ibrahim, H. G. (2017). Lifestyle trends and housing typologies in emerging multicultural cities. *Journal of Architecture and Urbanism*, 41(4), 316–327.
- Sararit, T., Tamiyo, K., & Maly, E. (2018). Resident's satisfaction to relocated Houses after 2004 Indian Ocean Tsunami, Thailand. *Procedia Engineering*, 212, 637–642. DOI:10.1016/j.proeng.2018.01.082.
- Scheiner, J., & Kasper, B. (2003). Lifestyles, choice of housing location and daily mobility: the lifestyle approach in the context of spatial mobility and planning. *International Social Science Journal*, 55(176), 319–332.
- Stimson, R. J., & Minnery, J. (1998). Why people move to the 'sun-belt': A case study of long-distance migration to the Gold Coast, Australia. *Urban Studies*, 35(2), 193–214.
- Tallman, I., & Morgner, R. (1970). Life-style differences among urban and suburban blue-collar families. *Social Forces*, 48(3), 334–348.
- Thøgersen, J. (2017). Housing-related lifestyle and energy-saving: A multi-level approach. *Energy Policy*, 102, 73–87. DOI:10.1016/j.enpol.2016.12.015.
- Veal, A. J. (1993). The concept of lifestyle. *Leisure Studies*, 12(4), 233–252.
- Weggemans, T. (1987). Modern communal lifestyle and housing form. The Netherlands *Journal of Housing and Environmental Research*, 2(3), 247–261. DOI:10.1007/BF02497875.
- Weiss, M. J. (2000). *The clustered world: How we live, what we buy, and what it all means about who we are*. Little, Brown Boston.
- West, B. N., & Emmitt, S. (2004). Functional design? An analysis of new speculative house plans in the UK. *Design Studies*, 25(3), 275–299. DOI:10.1016/j.destud.2003.10.002.
- Willén, M. (2019). The Making of Home and History The Revival of the Fin de Siecle Architecture. *Home Cultures*, 16(1), 23–40. DOI:10.1080/17406315.2019.1699736.
- Yazdanfar, A., Hosseini, B., & Zaroudi, M. (2014). Culture and House Form (Case Study: Traditional Hoses in Tonekabon and Ramsar). *Housing and Rural Environment*, 32(144), 17–32.

Yazdanfar, A., & Naserdoust, Z. (2019). Changes of Lifestyle and Physical Patterns of Houses and their Reciprocal Influences (Case Study: Maragheh City). *Journal of Iranian Architecture and Urbanism*, 10(17), 37–60.

Yazdanfar, A., & Zarrabi, M. (2016). The Impact of Lifestyle on the Domestic Spatial Organization Case Study: Urmia City. *Iranian*

*Association of Architecture & Urbanism*, 6(10), 45-61. DOI:10.30475/isau.2016.62007.

Yun, J. (2019). Vernacular Participatory Designs: The Do-It-Yourself (DIY) Housing Scene in South Korea. *Space and Culture*, 00(0), 1-15. DOI:10.1177/1206331219830332.

