

Explaining components affecting immigrant participation in the housing design process (case study: Immigrants in Golshahr neighborhood, Mashhad)

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Abstract

The housing design process often prioritizes material objectives while neglecting the unique needs of users. To address this problem, housing design process must align more closely with cultural strategies, particularly regarding immigrant participation in design decisions. This ensures that housing is adopted to meet the requirements of immigrants from diverse cultural backgrounds, thereby increasing their satisfaction with their living environments. This article examines the participation of Afghan immigrants in the housing design process in Golshahr neighborhood of Mashhad. The main objective is to identify the key components affecting their partnership with architects, while the secondary objective is to suggest solutions to enhance the quality of immigrant participation. Initially, partnership components were identified through library research, followed by qualitative assessments using semi-structured interviews with Afghan immigrants in Golshahr. Data analysis was conducted using a descriptive-analytical method with MAXQDA. The results revealed three crucial aspects of immigrant participation: initiating participation, active participation during the design process, and articulating needs by immigrants. Among these, economic efficiency and local trustee from immigrants' community were the most significant components. To achieve active participation, it is essential to focus on the place of participation, clarify goals, and define participation levels. Additionally, the most crucial aspect of expressing needs is fostering a two-way information exchange between immigrants and architects. Consequently, the study presents nineteen practical principles to enhance immigrant participation in housing design process.

Keywords: Effective participation; Immigrants; Participatory design process; Housing design; Golshahr neighborhood.

1. Introduction

Participation in housing design is crucial for shaping human settlements. It allows residents to express their needs in the places they inhabit (Chen, 2023). Housing reflects a society's values, culture, and social beliefs (Namian et al., 2021). Therefore, designing for immigrants with diverse backgrounds necessitates specific principles that align with their goals, attitudes, requirements, and behaviors, transforming these into design archetypes (Concilio et al., 2022). Since housing design is a process centered on the residents (Farshchi & Turki Baghbadrani, 2018), immigrant participation with architects is vital to meet their unique goals and needs (Sabie et al., 2020). Active participation and the identification of immigrant needs are therefore essential to achieving their desired housing outcomes.

Achieving suitable housing for immigrants requires consideration of their cultural contexts, necessitating design criteria adopted to their backgrounds (Rahimi & Karimi, 2021). Smith (2002) notes that immigrants often prefer living near others from their home communities (Rafieian et al., 2018). This separation can lead to the formation of distinct neighborhoods on city outskirts that

reflect their cultural identities and lifestyles through architecture design (Domaradzka, 2018). In Mashhad, neighborhoods like Golshahr exhibit ethnic concentration among Afghan immigrants, whose diverse decision-making processes influence their housing (Hagen-Zanker & Mallett, 2020). Furthermore, Afghans lack of legal property ownership in Iran complicates their roles as clients, requiring a multidimensional approach involving architects, clients, and future residents (immigrants).

According to the above, the participation of designers, clients, and immigrants in the design process is closely tied to the desirability of housing, as it is reached through understanding immigrant cultures. Neglecting this aspect contributes to declining housing quality and may eventually results in immigrants abandoning their homes. Immigrants in Golshahr come from diverse racial and cultural backgrounds and possess a unique understanding of their own needs and requirements. They have specific demands related to their cultural and racial identities and seek solutions within their environment. These differing demands compared to the host society create challenges for architects designing homes for immigrants, prompting designers to participate with immigrants to address these

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challenges. Given the limited researches in this field, this study seeks to identify the key components influencing the participation of immigrants, particularly Afghan immigrants, thus filling this research gap. Figure 1 illustrates the relationship between participation and desirability of housing.

This study has a main purpose and a sub-objective. The main purpose of this study is to reach the affecting components onto immigrants participation within the architects through housing design process. Considering the impact of partnership on immigrant housing design

process, the present study seeks to answer these questions: What are the components that affect immigrant partnership within the architects in the housing design process? And which solutions and principles can be implemented to enhance the quality of this partnership? To answer these questions, the study uses field research method combined within descriptive-analytical method.

Firstly the immigrants' partnership components has been collected, then those compiled components has been evaluated and analysed and finally the proposed solutions and principles are presented.

Table 1

Components affecting the participation of designers and users from the perspectives of various researchers

Researcher	Components
(Bason et al., 2013)	Participation procedures, Participatory planning, Grouping of migrants, Communication with migrants.
Alal-Hasabi and Yousef Zamani, 2010)	Giving awareness of participation, Considering ethnic characteristics (culture and values), Implementation stages of participation.
(Salgado et al, 2015)	How to hold engagement sessions, Choosing a engagement venue, The designer's responsibility in communicating between design perspectives.
(Frampton, 2016)	Acceptance of conflicts by the architect, Not imposing the architect's views on the immigrant.
(Tatlic, 2019)	Participants freedom of expression comments, Not imposing the architect's views on the immigrant.
(Zhang et al, 2023)	Type of immigrant (domestic/foreign, first generation, etc.), Type and location of community, Form of participation (formal, informal).
(United Nations Economic Commission for Europe, 2021)	Awareness raising and encouraging participation, Training the migrants, Simplification of the problem, Stakeholder groups participation.
(Torunczyk-Ruiz & Martinovic, 2020)	Degrees of commitment and attachment to the place, Duration of residence.
(Liaqat et al, 2021)	Attention to intergenerational culture, Groups participation.
(Concilio et al, 2022)	Creating equal opportunities.
(Carroll & Nortoft, 2022)	Determining the levels of participation, Using flexible participation.
(American Institute of Architects, 2022)	Allocate sufficient time, Allocate sufficient resources, Statement of the objectives of partnership, The level of stakeholder involvement.
Zapata-Barrero et al (2013)	Types of participation, Tools and goals of participation, Creating motivational conditions.
(Farshchi and Turki Baghbadrani, 2018)	The degrees of designer-user communication, Participatory levels and methods.

2. Research Background

The topic of participatory design was first raised in the 1980s in the United States in protest against the excessive power of designers and their disregard for the real needs of users in architecture projects, and it claimed that people who are affected by a decision should have an opportunity to influence it (Lee et al, 2018). Gradually, participatory design became popular in other countries, and in the 1990s we witnessed the peak of its importance in the field of architecture. At this time, numerous researchers examined the widespread effects and techniques of this approach, and thus high expectations arose for participatory design (Foroughi et al., 2018). Among these researchers were Kuhn & Muller (1993), who classified 66 different methods and techniques for it (Esmaeilzadeh and Soleimani, 2023). Today, profound user participation in design process has become a conventional method.

Therefore, hundreds of participatory design methods have been introduced, evaluated and formalized in the literature in this field (Hyysalo et al, 2016). Table 1 shows the components that influence the participation of designers and users, as determined by researchers.



Fig. 1. The relationship between architect, client, and immigrant partnership and housing desirability through a mutual circle of cultural understanding.

According to the literature review, most of non-Iranian researchers have identified various components that influence the participation between immigrants and architects although Iranian researchers have not

addressed this issue or, if they have, the role of architecture has been very weak. In this regard, studies such as “Role of the Participatory Management in Good Urban Governance” (Sharifzadeh Aghdam et al., 2019), “Increasing Social Participation in Historical Contexts” (Dahbashi-pour and Soheili, 2021), “The Role of Social Capital in Promoting Popular Participation” (Gorjipour and Shakoor, 2019), and finally “The Architectural Design Process In The Direction Of Interaction Between The Designer And The User” (Alalhesabi & Usefzmani, 2010) have been conducted, none of which have specifically evaluated the immigrant community. On the other hand, the presents of Afghan immigrants in Iranian society (Zandi Navgran et al, 2022) has caused the design process to be recklessly and carried out individually by the architect.

So the “Designer-Centered Approach” has led to a decrease in desirability of residences through their housing. Despite this problem, existing research has focused only on participatory methods and related techniques and has not paid attention to the components affecting the participation of immigrants, especially foreigners who do not have the legal right to own property according to Iranian law. Therefore, in this research, the focus is on a multi-dimensional participatory approach; an approach in which the architect, the client, and immigrants participate in the housing design process. According to the above, paying attention to the participation of immigrants and architects in the architecture design process can be considered as one of the factors affecting the desirability of housing, which there is a lack of researches in this field, especially in Iran. For this reason, it seems that the analysis of the components affecting the promotion of immigrants' participation with architects in this research is significant for today's architectural community.

3. Theoretical Framework

3.1 Design process in residential architecture

The abundance of literature and written theories about the “design process” is a relatively fresh phenomenon that has gained momentum since the late 1950s. The verb “design” refers more to a physical process (Beyti et al, 2023); which employs a set of actions, tools, and characters in the form of a coherent and integrated whole and strives to achieve an ultimate goal. This complex relationship of components is simultaneously motions in the mental and physical worlds of the designer (Amini et al, 2019). Therefore, the design process can be considered an attempt to invent solutions before their implementation (Lang, 2012). Among them, the most important need of man in the field of architecture design is “housing”. Man has long built his house based on principles that are the result of his lifestyle and culture, and this process continues in the present era (Mahdavi and Sameh, 2022). Accordingly, housing design requires the collaboration of the designer and the user, so that not only the designer, but also the user cannot handle the actual realization of the issue alone (Alalhesabi & Usefzmani, 2010).

According to the above, the basis of participation in housing design is based on changing the level of intervention of the designer and the user during the design process (Soleimani-Almouti et al., 2020). In this regard, Simonsen & Robertson (2013) believe that; participatory design is defined as a process related to examining, understanding, cognition, creating, developing and supporting mutual learning between designers and users in the housing design process (Esmaeilzadeh and Soleimani, 2023). This participation in the design process empowers the community by providing housing that reflects the values and customs of the individuals and when planned strategically, it also increases the value of the neighborhood (Vakil & Colistra, 2020).

In design process, three main factors, namely “legislator”, “user” and “architect”, play a role; the legislator sets the framework, the user expresses his needs and the architect shapes the final design by adapting the user's demands and the law (Beyti et al, 2023). However, in the context of marginal housing, this triple structure often faces challenges. Specifically, in the case study this research, architects design and build houses largely without considering the residents, who are migrants, and individually by considering the existing laws. This leads to the elimination of the active role of migrants in the design process. Accordingly, in this study, our intention is to return the design process to its original state, where each of these three factors (legislator, user and architect) plays a distinct and separate role. In this regard, by focusing on active participation between the architect and the immigrants, we seek to create housing that perfectly meets their real needs. Figure 2 shows the ideal housing design process.

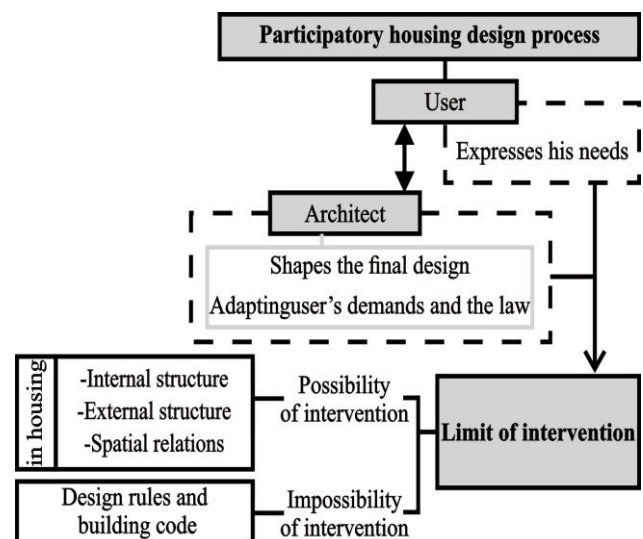


Fig. 2. The ideal housing design process

3.2 Explaining the participation of architects and immigrants, as users, in the architecture design process

In the literature of Halskov & Hansen (2015), two-way and interactive participation and exchange lead to empathetic design and enable the designer to achieve tangible experiences and needs of users. In this regard; Lanzara (1983) has pointed out that the participation of a group of users and the involvement of diverse knowledge of the participants which lead to the reshaping of the purpose of participation (Lee et al, 2018). Participation with immigrants is no exception to this, therefore; the architect needs to exchange information with immigrants to achieve the purpose of participation (Zhang et al, 2023). In this type of participation, the architect transforms the content of information into spatial satisfaction and provides individuals with free decisions that are the product of genuine participation (Beyti et al, 2023). According to Arnstein (1969), whenever a change occurs in the genuine participation the utilization rate of the participants placed into new circumstances so that the efficiency of participatory program is determined (Raispour et al, 2023).

Creighton (2005); in opposition to the existence of a predetermined program for participation, has considered the chain of participation in informing people, listening to and involving them and ultimately developing agreements between the architect and the user (Raispour et al, 2023); in this case, immigrants will not be simply listeners of the architect's plans and programs, but after becoming aware, they will also participate in controlling the actions and decisions of the design. The authenticity of the design that relies on the interaction between immigrants and architects; is not accidental or superficial, such design is inherently genuine. In the words of Habermas (1984); These communication methods, which are a prerequisite for constructive communication, are the basis of effective and successful participatory planning (Akarcay, 2020). In this regard; Abrams (1964) considers immigrants living in informal settlements on the outskirts of the city as part of the citizens who have created a platform for themselves in participatory planning (Houshang et al., 2023).

Forester (1992) developed participatory planning with communicative rationality. According to him, participatory planning increases its dominance over society by strengthening rationality that leads to cooperation and compromise of participants (Akarcay, 2020). On the other hand, the role of the development of rationality and cognitive bias of immigrants under their ethnic exclusivity to display their identity in design should not be neglected (Naseri and Kianpour, 2015). In other words, the construction of a space with identity is created through participation (Ahmadi et al, 2024). In this regard, Preity and Cornwall (1996) has referred to the impact of the typology of participation and believes that participation is more related to the goals of participation than to the rationality and ethnic bias of immigrants. So that individuals can participate in seven ways: Light, Passive, Consultation, Materialistic, Practical, Interactive

and Collective (Mohammadzadeh et al, 2021); and play a key role in the design process (Ziari et al, 2015).

The participatory typology from Lawson's perspective (2005) leads to different perspectives on the relationship between designer and user, including self-centered (designer-centered), pragmatic (user-centered) and modernist (standard-centered) architects (Bender-Salazar, 2023). In such a case, immigrants demonstrate different levels of social integration based on different types of participation. Two individual immigrant and designer with different backgrounds share different norms and rules that create their subjective affiliations. Therefore, the factor of subjective affiliation and responsibilities of immigrants reveals two important aspects of their integration (Xie et al, 2022) that are effective in the type of participation. This means firstly, creating an appropriate platform leads to the integration of immigrants into society, and then the ideology of participation, participatory institutions, awareness and motivation; it shapes the conditions of the participation process. From Gaotri's perspective, these conditions lead to the development of people's participation in society (Garcia-Zamor, 2020). To put it differently, private sector involvement is a significant factor in the people participation process necessary for establishing an appropriate platform (Mahooti & Tabibian, 2019).

Another characteristic of participation – influenced by the user-designer relationship – is “community orientation”. The shift in orientation towards collective architecture as a way to attract user participation in preserving and maintaining the environment and creating a stronger bond between people and the environment can be traced through the tendency towards community, which has led to participatory approaches in three areas: rational (following rational goals), human-centered (following users' desires), and social action (collaboration of collective groups) (Nari Ghomi, 2016). Different thinkers have envisioned different levels of these approaches for the occurrence of participation, which is reflected in architectural design. In this context, Pena and Parshal (2001) have referred to user orientation, Giedion (2010) and Martinez (2003) to designer-centeredness, Groat (2005) and Brey (2006) to audience training, and Alexander (1984) and Durkheim (1897) to group social participation as the level of participation of people and designers. Specifically, in the immigrant community of Golshahr neighborhood, due to the presence of different ethnicities, the designer-centered approach and reliance on the private and public sectors were not key aspects, but rather user participation was the main strategy for realizing the promotion of identity and a sense of place belonging to housing (Mashhad Municipality, 2019). Figure 3 states theoretical framework of the components of participation between immigrants and designers based on the opinions of experts and researchers.

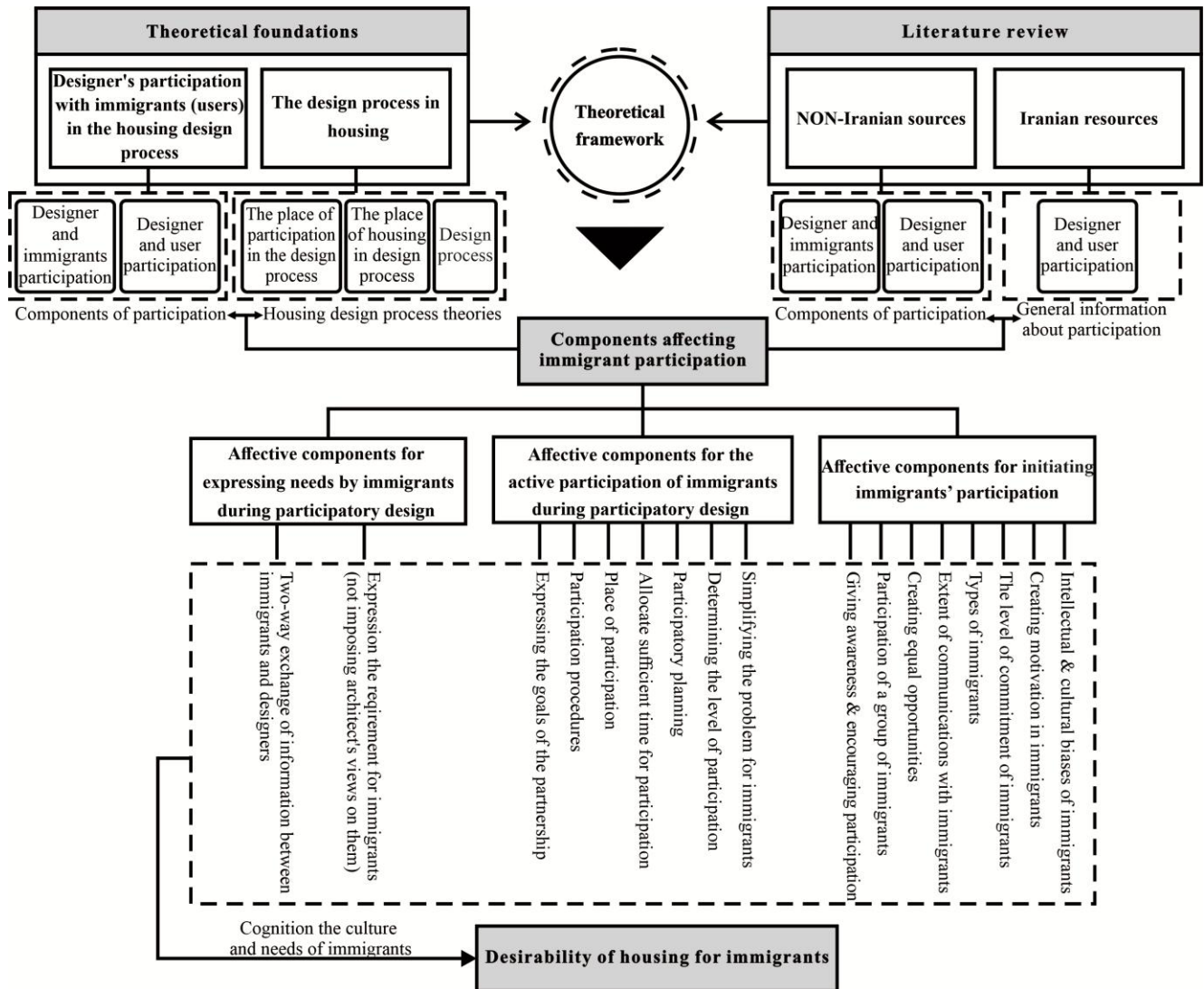


Fig. 3. Theoretical framework of components affecting the immigrant participation in the housing design process

According to the opinions of scholars and researchers, it can be concluded that immigrants participate during the initiating the participation, based on eight factors: Giving awareness, holding group meetings, creating equal opportunities to different immigrants, extent of communication with immigrants, considering the type of immigrants, measuring the levels of commitment of immigrants, motivating immigrants, and considering their intellectual and cultural biases. If participation initiating, migrants in order to their continued presence in the design process until the end of the participation are influenced by 7 components: goals, procedures (formal, informal), amount of time allocation, participatory planning, levels of participation, and simplifying the problem for immigrants. As a result, participation is affected by the mutual communication between immigrants and architects. In such a case, the two-way exchange of information between immigrants and architects, as well as

their freedom of expression, will lead to trust between the parties and the expression of immigrants' needs by themselves.

4. Research Methodology

The practical research methodology is applied in this article due to objectives. Documentary and qualitative methods were used to collect and analyze data. In the first step, conducting library and documentary studies led to the achievement of different viewpoints of scholars. Then, through concluding the viewpoints of experts and researchers, the theoretical framework was set in relation to the components affecting the promotion of immigrants' participation with architects in architecture design process. In the second step, using interviews to achieve the research objective, the obtained components, which were the basis of the interview questions through field study, were analyzed using descriptive-analytical method. The research process is presented in Figure 4.

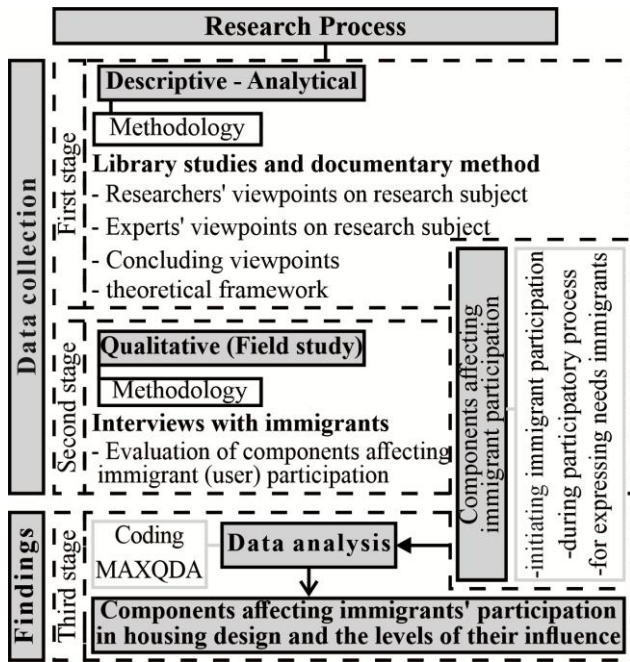


Fig. 4. Research methodology used in different stages of the research

As shown in Figure 4, the second step of the research involves field studies. In this stage, to collect and evaluate the components affecting migrant participation, a targeted interview was conducted for the migrant community of Golshahr town. The statistical population consisted of first-generation Afghan migrants aged 15 and above 15, who were born in Afghanistan and migrated after living there for a while. The interview was conducted using a semi-structured method, which was ultimately conducted using open, axial, and selective coding and continued until theoretical saturation was reached. Finally, due to the continuous repetition of data and the lack of access to new data, saturation was reached and ended with 12 migrants. In order to prove the validity of the interviews, rich data recording was used, and to prove their reliability, multiple coding was used. In the final step, MAXQDA qualitative data analysis method was used to verify and summarize the interview data. With the help of MAXQDA, the components were classified into different categories and similar concepts were divided into separated categories. The extracted categories were examined and reviewed in several stages to ensure their accuracy. Then, the frequency of the components in each category was analyzed using MAXQDA and through the descriptive-analytical method. Finally, in accordance with the prioritization obtained and the components extracted from each aspect, solutions were deduced to answer the research question.

5. Case Study (Golshahr Neighbourhood)

In this research, Golshahr Neighborhood located in Mashhad city has been examined as the case study. This Neighborhood is located under the municipal divisions of region 2, district 5. It settled in the north-east of Mashhad city and covers about 7% of district 5 and includes an area

of 86.6 hectares, of which 28 hectares estimated as worn texture (Mashhad Municipality, 2019). This region was covered with several gardens like rural areas, then gradually it has been changed into urban area which has plot division within residential fuction. Several immigrants from different origins, from other provinces or even other countries, reside in this region, which the majority of them are Afghans. This amount of migration caused significant changes in the demographic, social, cultural and physical context of Golshah (Fazel, 2018). Location of the case study is shown in Figure 5.

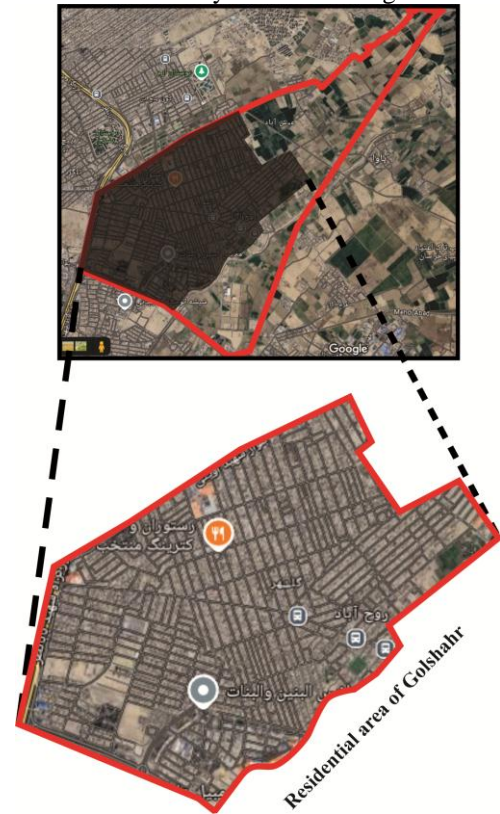


Fig. 5. Location of Golshahr neighborhood in Mashhad

According to the 2016 population and housing census, the population of this neighborhood is 24,346 people, the majority of them are immigrants. The proportion of Afghans immigrants, who make up the statistical population of this study, is more than 70 percent of the neighborhood's residents. The population density in this neighborhood is 281 people per hectare, which is almost three times the population density in Mashhad. The reason for choosing this neighborhood is the high population density of immigrants, which has led the development document of this district considers the two essential principles of "partnership" and "comprehensive assessment of the situation". In other words, the development of houses of this neighborhood is not possible without the partnership between users and architects. To achieve this important objective, the "Golshahr Neighborhood Development Office" has conducted initial identification and collected existing data (Mashhad Municipality, 2019).

6. Data Analysis, Findings and Discussion

The process of conducting interviews on the extracted components (Figure 3) and analyzing them in MAXQDA

to achieve the main objective of the research led to prioritizing and determining the frequency of each of the

Table 2

Frequency of immigrant participation components in different participatory dimensions

Code System	1	2	3	4	5	6	7	8	9	10	11	12	SUM
Components affecting immigrant participation													0
Affective components for initiating immigrant													0
Architect resume			1										1
Types of immigrants	1			1	1		1	1					5
The presence of a trustee from immigran			2	3	2	3	2	1			1		14
Creating equal opportunities											1		1
Extent of communication with immigrants			1			1	1	1		1	1	1	7
Intellectual & cultural biases of immigran	1	1		1			1	2		1		1	8
Paying attention to economic efficiency	3	3	2	1	2	2	1	1	1		1	1	18
Participation of a group of immigrants	1				1				1				3
creating motivation in im	1			1		1			2		1		6
Giving awareness & encouraging partic.		1		1	1	1			1		1		6
Affective components for the active participati													0
Simplifying the problem for immigrants	1				1	1	1						4
Determining the levels of participation		1	1		1			1			1		5
Participatory planning									1	1		1	3
Allocate sufficient time for participation	1	1								1		1	4
Participation procedures						1				1	1	1	4
Place of participation		1	1	1		1	1	1	1				7
Expressing the goals of the partnership		1			1				1	1		1	5
Affective components for expressing needs b													0
Two-way exchange of information betwe	1	1	1	1	1	1		1	1	1	1	1	11
Freedom of expression for immigrants					1	1	1		1	1	1	1	7
Σ SUM	10	10	9	10	12	12	10	9	10	8	10	9	119

According to the table above, from the affective components for initiating participation aspect, “the commitment of the immigrant community”, were ineffective and were eliminated also components such as: “the architect’s resume”, “the presence of a trustee from the immigrant community”, and “attention to economic efficiency” were added based on the data extracted from interviews. Among them, “attention to economic efficiency” and “the presence of a trustee from the immigrant community” had the highest importance with frequencies of 18 and 14, and the other components were of less importance. From the affective components on the active participation of immigrants during the design aspect, “the place of participation” had the highest importance with a frequency of 7, then “goals and levels of participation” with the same frequency of 5, and the other components had less of importance. Finally, “the two-way exchange of information between immigrants and the architect” with a frequency of 11, and then “the components affecting the participation of immigrants in the housing design process, which are examined below. These components have been identified and examined in three dimensions: effective components for initiating immigrant participation, effective components for the active presence of immigrants, and finally effective components in expressing immigrants’ needs during participatory design in Table 2.

freedom of expression of immigrants” with a frequency of 7, were declared as affective components in expressing 7, were declared as affective components in expressing the needs of immigrants. Each of these dimensions is explained separately below.

6.1 Affective components for initiating immigrant participation

The emphasis and priority given by immigrants to affective components for initiating participation is analyzed in Figure 6. The “economic efficiency” component, with a frequency of 26.1%, indicates that ideal participation with immigrants is achieved when economic benefits are guaranteed for them. Immigrants participated in participatory housing design process as active members with cultural knowledge, but this participation only occurs if it brings tangible economic benefits to them. In this process, the role of architects is defined as facilitators alongside immigrants, rather than as designers and decision-makers separated from them, to ensure that the participation is beneficial to both parties. In other words, design knowledge would be effective when the architect’s academic knowledge as a professional resource alongside cultural knowledge of immigrants complemented each other. So, “the presence of a trustee from the immigrant community” (frequency

20.3) is crucial in order to build trust and attract their participation. Finally, the collaboration between the architect and the trustee makes it possible to ensure that the design process carefully considers the “intellectual and cultural biases of immigrants” (frequency 11.6) and that their needs are well considered.

The fourth factor emphasized by migrants is “the extent of communication to immigrants” with a frequency of 10.1. This communication should be established in such a way that migrants understand why they should participate in participatory processes and also ensure that their participation will lead to positive results. This concept is based on the principle that the greater the level of

communication and consultation with migrants about their various housing needs, the more problems will be examined from more aspects and the answers provided will be approved and welcomed by a greater number of migrants. In this regard, “informing migrants” (frequency 8.7) plays a very important role. Providing accurate and transparent information about participatory processes and their effects can help migrants to achieve a better understanding of the importance and necessity of cooperation and participation. This awareness not only reduces fear and uncertainty among migrants, but also gives them the feeling that their voices are heard and that their opinions will be influential in decision-making.

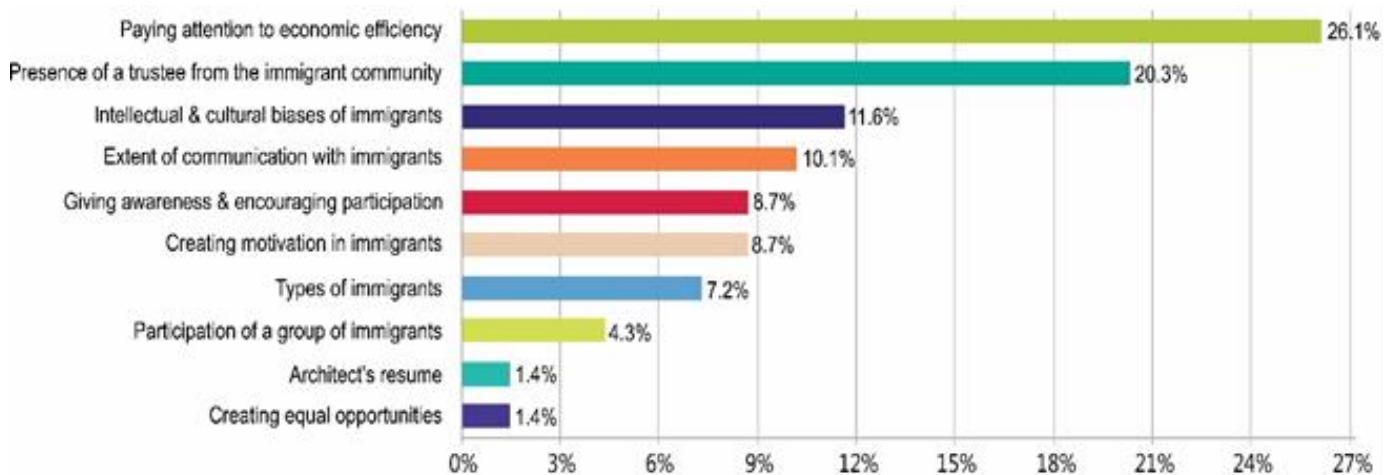


Fig 6. The frequency of components affecting the initiating of immigrant participation, according to their level of emphasis and priority

One of the effects of awareness is “creating motivation to participate” (frequency 8.7). This motivation can lead migrants to participate and strengthen their sense of belonging and responsibility.

In addition to motivating immigrants, “paying attention to their types” with a frequency of 7.2 can also facilitate the initiating of participation. In particular, Afghan immigrants in different generations face different challenges and it is of great importance to recognize their cultural, social, and economic differences. Therefore, to recognize these differences, an “participation of a group of immigrant” (frequency 4.3) can provide more motivation. This group can include Afghan immigrants of different generations who help to understand and interact with each other and provide a space for them to participate together to solve problems. It is important to remember that different experiences and viewpoints can enrich group thinking. The ninth component in the subset of components affecting immigrants is “architect resume” with a frequency of 1.4, which includes not only technical

expertise and skills, but also the includes architect’s deep and diverse experiences in interacting with immigrants. A key point in interacting with immigrants is to “give them equal opportunities” (frequency 1.4). it means, architects should act in such a way that all of the immigrants, can participate in the design and planning process and benefit from the same facilities and resources. This approach increases the possibility of design adequate housing in multicultural societies by considering the diverse needs and desires of all groups.

6.2 affective components for the active participation of immigrants during participatory design

After creating appropriate conditions for immigrants to enter the participatory process, providing the necessary infrastructures to carry out the steps of housing design with their active participation is a priority (Figure 7). The absence of these infrastructures can lead to a decrease in the influence of immigrants in the design process and the

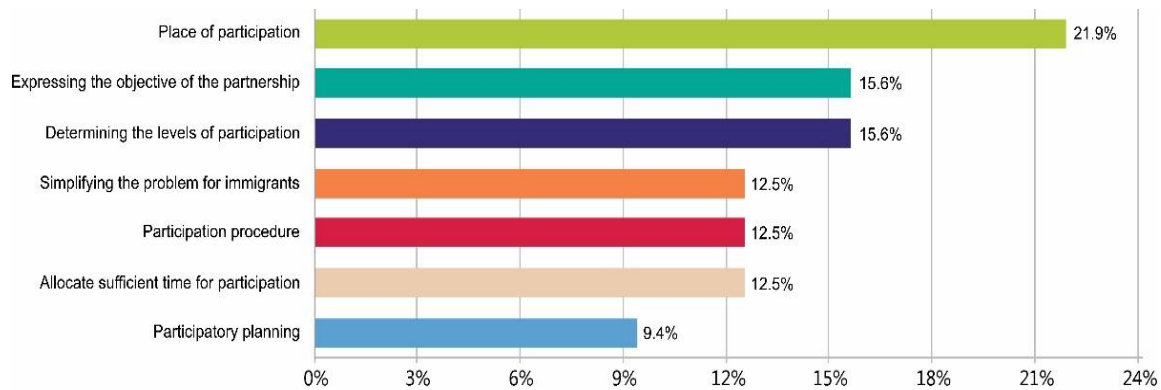


Fig 7. The frequency of components affecting the active presence of immigrants, according to their levels of emphasis and priority

The most important component that can contribute to the active participation of immigrants is the selection of the “appropriate place for participation” with a frequency of 21.9. This is because the characteristics of the space in which immigrants participate with architects and other people involved in the project have a significant impact on the quality of participation and their interest in interacting with other people. Providing conditions that bring a sense of comfort and security to immigrants and also provide better access for them are among the important factors for their active participation. Also, to improve the efficiency of the process, it is essential that the architect clearly determines his “goals for cooperation with immigrants” (frequency 15.6) and, based on these goals, determines the level of their participation. The “participatory levels” (frequency 15.6), in which immigrants are considered the main factor and move in a specific and purposeful direction under the support of the architect, will greatly help extract the desired results from this cooperation. The more humane and closer to the real experiences of immigrants the architect sets, the closer he or she will be to achieving his or her objectives of working with them.

Another effective factor in the active participation of immigrants is “simplification of the architectural problem” with a frequency of 12.5. If immigrants can be possibility of not collaborating effectively with the the participatory process. In this case, the design process is eliminated from the path of participation and is followed only based on the architect's decisions. Data analysis shows that the active participation of immigrants depends

on the existence of the necessary grounds for their constructive participation. Also, the classification of codes shows that seven main factors are effective in facilitating the active participation of immigrants (Figure 7).

fully familiar with the various aspects of the architecture subject and these aspects are presented to them in an understandable way, the opportunity to participate in architect, and increase the withdrawal of immigrants from participatory processes is significantly provided. Otherwise, ambiguity in this subject can lead to their inability to provide the physical needs of housing and even a reluctance to continue participating in these processes. Therefore, providing information in simple and understandable language to immigrants can play an important role in promoting their participation. For this reason, creating appropriate platforms for immigrants to be trained and more closely familiar with architecture subjects is of particular importance. In addition, “participation procedures” (frequency 12.5) also plays a vital role in ensuring this. Participation procedures means those processes and rules that guide immigrants in participatory activities and ensure that immigrants feel comfortable and safe in this process. These procedures can include preparing meetings, using understandable words, setting appropriate times, and even “allocating sufficient time” (frequency 12.5) for immigrants. Therefore, the time allocated to them should be managed in a way that allows people to understand the topic and familiarize themselves with the discussions calmly and without time pressure, as the tension caused by lack of time can prevent active participation.

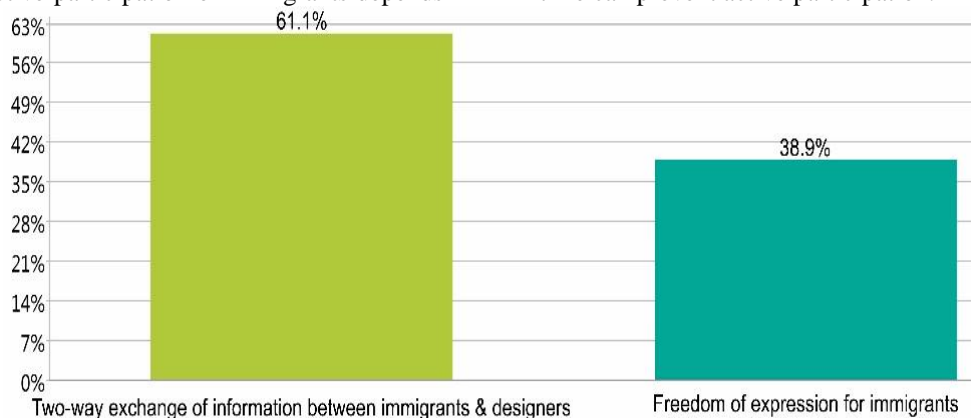


Fig 8. The frequency of components affecting on expressing immigrants' needs, according to their levels of emphasis and priority

The last component that can facilitate the effective and continuous presence of immigrants in participation is “participatory planning” with a frequency of 9.4. Since this type of planning helps to create appropriate opportunities for both parties, immigrants and architects, and allows for the exchange of different opinions, experiences and needs. In this way, a sense of belonging and participation in design can be strengthened and immigrants can be given the opportunity to play an active and effective role in decision-making processes. The more efficient and closer to the real needs of the immigrant community the architect’s participatory planning is, the closer he will be to his objectives of participation with immigrants.

The analysis shows that “two-way exchange of information between immigrants and architects” with a frequency of 61.1. has the greatest contribution to expressing immigrants’ needs as a rich source of cultural experiences and viewpoints. This exchange of information helps architects to better understanding immigrants’ challenges, cultures, and expectations, and as a result, the architect designs a project that responds to their real needs. In order to advance this exchange, the architect can sometimes act as a facilitator and, by giving “freedom of expression to immigrants” (frequency 38.9), create a space in which immigrants can express their opinions and ideas without imposing the architects’ opinions, and the architect only manages these opinions and then solves the problem. This approach can lead to the discovery of innovative solutions and responding to their specific needs.

6.3 Affective components for migrants to express their needs

The thire aspect of the components effective for migrants participation focuses on providing appropriate contexts for migrants to express their needs during the participation process and includes two components. The first component considers two-way exchange of information as an effective factor for migrants to express their needs, and the second component emphasizes migrants’ freedom of expression (Figure 8).

6.4 Results

Figure 9 shows the relationships between the components that led to the research findings’ inference. As stated, the components affecting immigrant participation during the housing design process are based on three aspects: “components affecting the initiating participation,” “components affecting the active presence of immigrants,” and “components affecting the expression of immigrants’ needs.” Each of these aspects contains several components, each with a different frequency compared to others. The frequency of each component, therefore, indicates its priority for the Afghans’ immigrant participation in Golshahr Neighborhood. Figure 10 displays the frequency of components without considering dividing the three aspects.

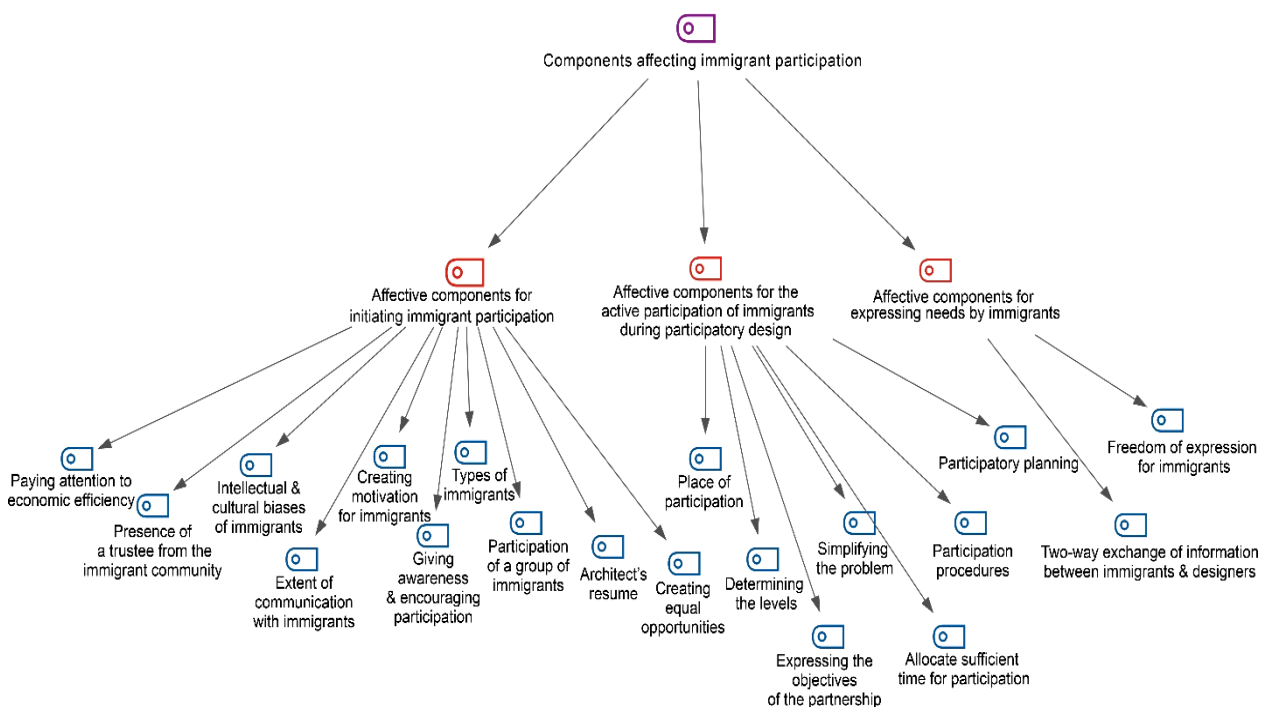


Fig. 9. The relationships between the components affecting immigrants participation which are expressed based on three aspects

Generally; it can be stated that the partnership between the architect and the immigrants will begin when economic benefits is guaranteed for the immigrants and the architect does not act individually as an economic beneficiary. In this regard; the architect should act as a facilitator who assures the immigrants that the cooperation between the parties will be beneficial to both groups. In this partnership, the first step can be the introduction of the architect by a trustee among the immigrants. This introduction should be done in a way that considers intellectual and cultural biases and provides the necessary context for effective communication with the immigrants. This process not only helps to raise awareness; but also creates the necessary motivation to start the partnership. It should be noted that this beginning depends on the type of immigrants. Since Afghans immigrants in different generations are faced with different viewpoints and experiences. In order to promote this interaction, it is necessary for immigrants in different groups to be invited to participatory activities. This approach requires providing equal opportunities for all groups to express their opinions and experiences, thereby creating a balanced and synergistic environment. Once the participation has begun, some of the factors that affect the efficiency of participation include the active and effective presence of immigrants. To achieve this type of

participation, it is essential to create a suitable place that provides a sense of peace and security for immigrants. The more psychologically secure immigrants are, the more willing they are to provide their opinions and participate in decision-making. So architects should clearly explain the objectives and levels of participation to immigrants and consistently raise subjects in a simple and understandable manner for a sufficient period of time. In this case, immigrants will not only be more willing to participate in participatory processes, but they will also be able to effectively collaborate with the architect and play an active role in participatory planning. In the continuation of the discussions discussed, it is essential that architects who design houses for immigrants strengthen their ability to exchange information two-way with them. This strengthening can lead to a deeper understanding of immigrants' needs. In order to advance this exchange, architects can sometimes ,by providing an appropriate space, give immigrants the freedom to express their opinions and ideas without any imposition from the architects, so that the architects can achieve the best housing design by problem-solving their opinions.

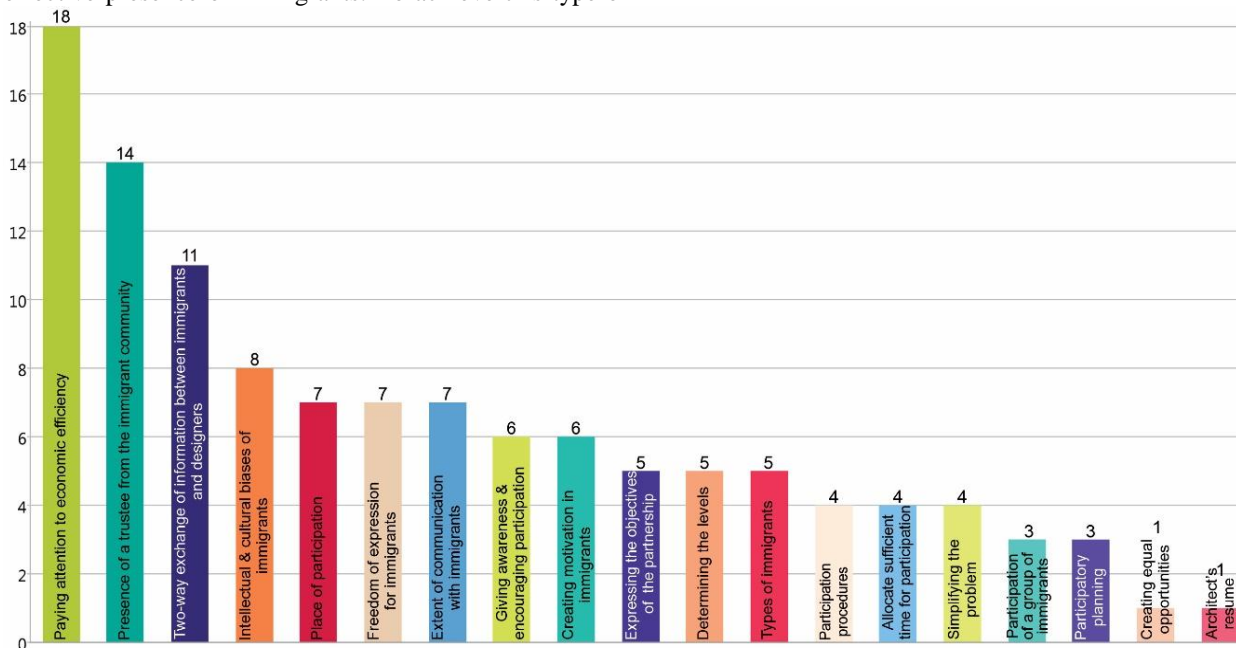


Fig 10. The frequency of components affecting immigrant participation which are expressed without dividing the three aspects

7. Conclusion

Focusing on designer-centric approaches to housing design process and ignoring migrants and their active participation with their own ethnic and cultural knowledge could have many negative consequences for the desirability of their housing. As this research has shown, involving and incorporating migrants' viewpoints and needs in the design process can be a key strategy for increasing their housing desirability and help create a

space that is culturally appropriate and meets their needs. Given the lack of specific strategies to promote the participation of migrants, especially Afghans living in Golshahr who are unable to own property due to legal restrictions in Iran, the findings of this study emphasize the importance of incorporating this group's viewpoints and needs into the design process.

It also has shown that the adaptation of Golshahr housing to the needs of Afghan migrants depends on their participation and the levels of effectiveness of

participation. According to the analyses of this study, several components affect the participation of Afghan migrants in the housing design process, one of the most important of which is the level of economic benefits for migrants. The more prominent the role of migrants in cooperation with the client and the architect, the more effective the participation will be, and this depends on the level of economic benefit of migrants from participation.

On the other hand, as has shown in figure 6, in participatory methods; trust-building is crucial, which is done by introducing the architect by a local trustee, paying attention to cultural biases, the level of contact with migrants, etc. Using these components can be a way to establish participation. However, efficient participation requires the effective and active presence of migrants during the design process, which often begins with providing a suitable location, and by stating the objectives of interaction and determining the level of participation of migrants, it can lead to improving the quality of the

participatory design process. Therefore, paying attention to the components of active presence, alongside with strengthening the two-way relationship between the architect and immigrants, can create a suitable platform for expressing the needs of immigrants and achieving greater effectiveness in participation. The research findings show that the problem raised is the concern of a large part of designers and immigrants. Therefore, in order to achieve the effective components on immigrant participation, the results were introduced in three aspects: "Affective components for initiating immigrants participation", "Affective components for the active participation of immigrants during participatory design" and "Affective components for expressing needs by immigrants". The solutions in each of the three aspect led to the achievement of nineteen proposed principles effective on immigrant participation, which are shown in Table 3.

Table 3

Aspects, solutions, and proposed principles for the participation of immigrants living in Golshahr based on importance and priority

Participatory Aspects		Participatory Solutions	Proposed Participatory Principles
Affective components for initiating immigrants' participation		Providing economic benefits for immigrants	Paying attention to the levels of profit making for immigrants
		Using the presence of a local trustee from the Afghan refugee community to build trust	Focusing on gaining trust between the immigrants
		Prioritizing the intellectual and cultural biases of immigrants as architect's collaborators	Giving priority on intellectual-cultural viewpoints of immigrants
		Adjusting the level of communication with immigrants based on their level of interest in cooperation	Focusing on the numbers and efficiency of sessions with immigrants
		Creating motivation for immigrants to participate	Motivating immigrants
		Informing migrants about their effective role in participation	immigrants as a collaborator for the architect
		Changing the process of installation a partnership based on immigrant generation	Focusing on the effect of the immigrant's type
		Involving immigrants in a group to obtain more comprehensive opinions	The more immigrants, the wider viewpoints
		Employing architects with more professional precedent and capabilities in working with immigrants	Training architects for participatory design with immigrants
		Immigrants should be given equal opportunity to express their opinions and demands	Equalization between immigrants
Affective components for the active participation of immigrants during participatory design		Creating a place of partnership based on ensuring peace and security of migration	Paying attention to a desirable place for immigrants
		Providing information to immigrants about the levels of participation	Participation as an identification of its levels
		Expressing the objectives of participation to immigrants	Determining a certain path for immigrants

		Using simple language and verbal expressions to communicate with immigrants	Simplifying the problem
		Providing sufficient time for immigrants to participate based on their level of cooperation	Allocating sufficient time for immigrants' focus on the participation
		Providing a participation process based on the comfort and preferences of migrants	Paying attention to participation processes and its principles in different steps
		Strengthening the architect's ability to create an effective program for participation	Verifying architect's program in accordance with his or her abilities
Affective components for expressing needs by immigrants during participatory design		Exchanging ideas between immigrants and architects to adapt their desires to housing design	Adoptation housing design within immigrants viewpoints
		Letting immigrants to feel free to express their desires and opinions	Focusing on the immigrants freedom of expression

As can be seen in the above, diagram 3, the components are stated in the order of priority in each aspect by Afghan migrants in Golshahr. The results show that for the initiating the participation, "economic efficiency" and "the presence of a local trustee from the migrant community", were more important than the other components, and with the initiating of participation, "the location of participation", "participation objectives", and "participation levels" must be specifically identified for the active participation of migrants. These components, alongside with the "two-way exchange of information between the architect and migrants", lead to the cognition of needs and design in accordance with the needs. Therefore, it is suggested that the architect, as a facilitator, receive complete training in participation with migrants. In this research, the effect of factors such as gender, age, ethnicity, etc. on the participation of migrants has not been considered. It seems that examining the effect of each of these factors on the participation of migrants can be a basis for future research.

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