Identification Catalytic Projects of Development Based on Social Capital in Surrounding Areas of Imam Reza Holy Shrine (Case Study :Noghan Neighborhood in Mashhad)

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Abstract

The historical texture of the city reflects the identity of the city and has hidden values within it that need to be identified and used to restore the context. These values can be named as social capital to preserve the old textures. Urban catalyst project is suggested as one of the late approaches in the process of urban regeneration. This use elements and values in the Current Situation to define stimulants for changes in the Context. Urban catalyst involves number of projects that lead to the development and its effect on further progression. The main purpose of this research is to build a robust and participatory society based on the relationship between social capital and urban catalyst project. In fact this goal focuses on social and public aspects besides physical and economic ones. For examining relationships between social capital and development catalyst project, Noghan Religious District in Mashhad, one of the oldest settlements adjacent to the Razavi shrine, has been evaluated. As a result, Combined research method has been used. The relationship between these two variables have been surveyed through field research and questionnaire distribution in society which includes people and experts and the structural equation method(SEM) used to examine the relationship between variables. According to the findings, the potential of society in the form of social capital can provide ground for the development catalyst project in the texture. Therefore, development catalyst project has a significant correlation with social capital to improve the context.

Keywords: Historical texture; Urban catalyst projects; Social capital; Correlation; SEM

1. Introduction

Historic urban centers play a major role in enhancing place identity. and form the primary center of the city, which gradually become dysfunctional neighborhoods due to architectural developments and changes in cultural and economic values. (Bohannon L. , 2004) Historic cores of cities are not only the embodiment of cultural heritage but are also considered as an important source and opportunity for dynamicity in the urban economy, enhancing the social and cultural development of cities.

Therefore, dealing with this type of dysfunctional context requires a comprehensive and integrated approach that tends to continuously improve the economic, social, physical, and environmental conditions. The need to understand the contextual influence in context and also requires the participation of all stakeholders in the research process to achieve a better environment. (Raberts & Skyes, 2000) The urban regeneration program is a participatory process in which the desires of all stakeholders must be considered and balanced. The role of urban planners is to provide opportunities for participation, people and the government. Cultural and social features must also be exerted in urban regeneration to create a favorable neighborhood. (Blakeley & Evans, 2009; Montgomery, 2003) One of the recent approaches in urban regeneration is urban development catalyst projects. These approaches are context-oriented process that improves the social and economic features in the context by adding new elements or strengthening existing elements in the context.

One of the regeneration dilemmas in developing countries is the conflict of government programs with local programs which is the conflict of government priorities with the priorities and demands of the people. Therefore, two-way method is need to solve this obstacle and provide the ground for participatory programs in the context from both perspectives which include people and the government. In the first stage, it needs to draw attention to the government as a catalyst to provide regeneration to address issues such as budgeting and policymaking. And drawing attention to people's requirements as a stimulus to consider the intangible and mental aspects of making success and return the value of life to the place. As a result, it requires a two-way program from top to bottom and from bottom-to-top .

The purpose of this study is to investigate the effect of values and capital embedded in dysfunctional neighborhoods to stimulate central organization. in the central and historical context. Hidden capitals are used as a potential for urban stimulates to reform the context. Then, in this study, an attempt has been made to identify values and stimulants to achieve participatory programs from both public and expert perspectives.

2. Literature

One of the new policies in urban development in general and in the re-creation of undefined urban contexts, in

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particular, is the use of urban development catalysts to accelerate and facilitate the process of transformation in contexts by using the participation and social power of residents and local capacities. In fact, urban catalysts are new urban redevelopment strategies that often involve several projects that lead to launch and guidance of the following development. Urban catalyst projects are formed through the city and change the content of the city. The purpose of urban catalysts are to draw attention to the local capacities of the context which accelerates the process of influencing the urban fabric and can induce the involvement of local communities. These urban catalysts are not separated, but they are elements that leads to the launch and guidance of future long-term development. (Attoe & Logan, 1989**;** Bohannon L. , 2004)

The main goal of development catalyst projects are the rehabilitation of neglected urban spaces by promoting effective participation and use local contexts as inspirational elements in development programs that gradually lead to the achievement of urban integration. It creates habitable and diverse cities that start economic growth in the future of the city. (Ellin, 2006, pp. 9-10)

The difference between the development catalysts strategy and other methods is in the comprehensive view and importance of contextualism. In fact, the development catalyst strategy is a combination of two strategies, top-down and bottom-up, and has features that distinguish it from other methods of renovation. This method uses new elements to strengthen and enlarge values to the existing texture and preserves the existing values in the context, and also prevents radical changes and cause gentrification in its context. In the end, it leads to guidance in future developments .(Kongsombat, 2013**;** Sideroff, 2003**;** bahonan 2004)

Therefore, development catalysts projects attempt to find urban catalysts from inside the context that provides participatory planning, and also these catalysts can use internal elements in the context to provide preserve and add value in the context people also play a significant role in urban catalyst projects. In fact, people who are living in central neighborhoods attach to where they live. Jacob (1993) believes that there is trust and security in the old neighborhoods that despite the physical problems and shortcomings, the old residents are still present in the context. The relationships between individuals lead to the creation of common norms and values can be called social capital. The relations between individuals form social networks, norms of reciprocity and trustworthiness are called social capital. They allow the participants to act together more effectively to reach collective goals. (Putnam, 2000, p. 19)

2.1 The interaction between social capital and urban development catalyst

The urban development catalyst project rehabilitates the context with the aim of contextualization and participation and requires public-private partnership development. Therefore, there is a need to identify urban catalysts in the context, in the first step, it is necessary to know the existing context, which identifies the strengths and weaknesses in the environment. Strengths can be recognized as capital hidden in the context, among which social capital is the most important hidden capital in the old and central neighborhoods (figure1).

Social capital provides opportunities for participation and social action, leading to bottom-up planning. Participation and collaboration build people's capacities in communities, which has caused people exposed to a wide range of skills and thus improves community capacity and empowerment. (Kilpatrick, field & falk, 2003, p. 425) Micro-scale development catalyst projects emphasis mutual participation and this element is used as a step towards improving the problematic context (figure2).
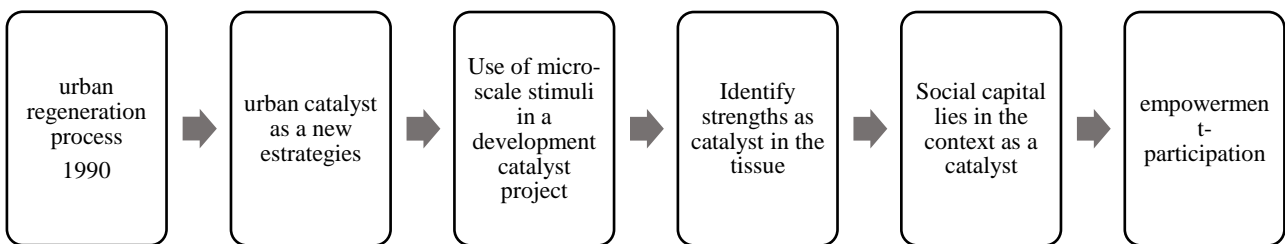

Fig. 1. The correlation between development catalyst projects and social capital
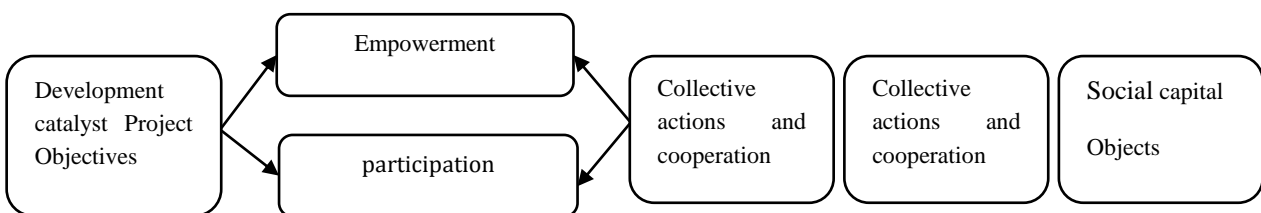

Fig. 2. The connecting point between social capital and the development catalyst project.

One of the ways to strengthen effective participation in the community is to identify social capital in the environment. In fact, the purpose of this approach is to empower the local community to pave the road for effective participation in the environment. Social capital is a social communication network which is formed by trust, reciprocity, and partnership. Social capital allows residents to resolve collective problems more efficiently, and these participatory method make implementation feasible. (Chavis & Wandersman, 1990) In addition to the social dimension, social capital also reduces transaction costs, and in general, the extension of social capital in the environment leads to the proliferation of capital and progress in participatory projects and finally achieving developing of society. (Thompson, Social capital, innovation and economic growth, 2018, p. 47)

It is necessary to identify the processes through which social capital is acquired or constructed when social capital is considered to be an analytic tool for the development of society. Therefore, for community development, strengthening social resources and processes that lead to the development of communications, relationships and networks require the consideration of existing social capital. Furthermore, the use of development catalyst projects to provide participatory contexts and strengthen social capital can lead to better efficiency and feasibility, and this manifests reciprocal effects of components that can be influenced by strengthening one element to another. In this research, by considering the two components of development catalyst projects and social capital, the dimensions and policies of these two components have been identified.

2.2 Urban development catalyst projects and social capital in Iran

Urban regeneration policy in Iran was a top-down intervention by the authorities, and the role of participation was limited. because of failed policies in 2007, there has been a shift in the method of participatory which is consists of attention to people. (Dienel, Shirazi, Schorder, & Schmithals, 2017) Challenges of urban planning in Iran were the lack of flexibility and participation in programs and problems in the implementation of programs. (Farhoodi, Gharakhlou, & Ghadami, 2009)

Therefore, one of the goals of urban regeneration since the 2000s is to empower cities and emphasize social function. to analyze disordered textures in cities, especially central contexts and informal settlements, which is about 2700 neighborhood units in 543 cities and about 141000 hectares that need to be identified. (Jamshidzadeh, 2019, p. 4)

One of the recent policies in urban regeneration is the use of development stimulus activities which aims at accelerating and facilitating development process in these textures, utilizing social cooperation and using local capacities. (Bohannon L. , 2004, p. 10)

Some appropriate Iranian domestic studies have been done, related to urban regeneration using stimulus activities, inside the country that are as follow. (Hashemi, Shieh, & Zabihi, 2019) in this studies demonstrate that there are so many sub-criteria that are implanted in urban catalyst projects but social and economical criteria are the most important factors in the success of catalyst projects in Iran. Sajadzadeh & Zolfigol (2015) considered the role of urban planning in regeneration of traditional neighborhoods with the approach of development catalyst in the area of Golpa locality in Hamedan. The results demonstrate that social concept has a greater priority in proportion to the other concepts in Golpa locality and considering social problems and issues are the main approach of development stimulus in this neighborhood. Izadi (2010b) demonstrated that in the modern preservation approach, being holistic in concerning values and also considering historical environment as an economic -social wealth play as the pivotal principles in enhancing the texture. Zang Abadi & Moardfar(2012) in their essay with the title of "Urban Regeneration Approach in Old Textures" use SWOT mode. The result demonstrated that employing internal-external matrix cart caused concentrated guidelines to protect the present condition, and also had adequate attempt to improve strength points and optimum use of them, reduce weak points to change them into strength points and a good use of opportunities and transformation of threads to opportunities.

According to experience gained outside and inside Iran, restoration that has used people's participation and promoted fields for participation has been successful. It is true not only in the physical restoration but also is effective in term of functional, cultural factors, and even the kind of life (Rezazade Ardebili & Saberi Naseri, 2016)

Therefore, Understanding the capacities of historical context development and sustainability in historical context with regard to its capacity and participation of people with authorities is great importance to ensure stability in the context and make proper implementation of the project . (Rezazade Ardebili & Saberi Naseri, 2016)

3. Research Methodology

This research adopts case study to provide an in-depth examination of the role of social capital in providing stimulant for urban catalyst project of historic urban quarters in the city of Mashad (Noghan Neighborhood), Iran. The key actors in this research is local authorities who are involved in Noghan regeneration process and local communities member in Noghan neighborhood . In fact, these people are the ones who have a direct impact on the research process and are also influential. Therefore, it is necessary to consider both groups to achieve integration in the urban planning process.

The data utilized in this study were obtained from both first and second-hand resources. The data from second-hand resources were mainly derived from several previous documents including dissertations, articles and existing books. Therefore, the research variables in the two categories of social capital and urban catalyst project were obtained by studying various documents.

First-hand data were obtained by researcher-made questionnaire and face-to-face interview. This questionnaire is intended for two target groups. In the first part, the questionnaire is designed with the aim of the

local communities of the noqghan neighborhood, and in the second part, it is also designed for the community of authorities. In fact, each item of the questionnaire has been obtained according to the main purpose of the research, which is examining the impact of social capital on urban catalyst projects. In this study, after obtaining the research structures from the existing theoretical foundations, these structures have been studied from the point of view of academic and executive experts.

4. Research Variables and Indicators

The development of indicators and criteria for measuring the impact of social capital on the dimensions of urban catalyst development requires a comprehensive study to identify and classify the appropriate criteria. The research criteria are picked by examining types of influential variables in the research. two physical and non-physical dimensions are based on the two-dimensional

classification of Ethan and Logan (1989), And the following criteria have been selected according to the theoretical foundations of the research and diffrernt sample studies (table1). The purpose of identifying these criteria is to investigate the effect of the catalyst variable in different dimensions in the neighborhood. Each of these criteria has an impact on performance. In fact, several catalyst factors affect the activity of stimulus for internal capacities or social capital. Therefore identifying social capital in any context makes it possible to accelerate the process of improvement, so the effectiveness of social capital components can improve the context (Table2).

The first step is to identify the effectiveness of components in the research. Secondly , the relationships and effectiveness of these variables are examined by various methods. finally, the correlation between components are determined(fig3).
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Table 1
the physical and non-physical criteria of urban catalyst

parameters	Dimensions	Measures	Source
physical		1- The amount of maintenance of historical and worthy buildings	(Fitch, 1990) (Qin S. , 2014) (Healey, 1992)
	Housing aspect	2- The amount of renovation and reconstruction in buildings 3. Position and ownership in housing 4-Compatibility of new construction with old	
	Spatial aspect	8-Access to adequate services And infrastructure in the neighborhood 9- Access to sidewalks 10- Access to public spaces in the context	(Mullin & Kotval, 2003) (Sternberg, 2002)
Non-physical	Activities aspect	11- Employment rate in the neighborhood 12- The amount of commercial activities 13- Variety of activities in the street	(Mullin & Kotval, 2003) (Bohannon C. L., 2004) (Ling, 2013)
	Management aspect	15. The level of awareness of residents 16- Tendency to participate in the context 17. Reliability	(Sternberg, 2002)

Table 2
the most influential criteria of social capital

Domain of social capital	Influential variables	Source:
Communications and interactions	-The desire to communicate with neighbors and communication in times of trouble -Communication with their environment	(Lu & Peng, 2019) (Saukani & Ismail, 2018)
Participation	-Stakeholder participation in the project -People take part in social and community activities: local event	(Soulard, Joelle ;et all, 2018) (Han, 2019)
Collective norms and values (religious beliefs)	-Access to mosques and access to other religious centers -Participate in religious activities	(Rezazadeh, Hashem Zehi, & Eslami Rad, 2016)
Social network	-Conscious activity of citizens in the neighborhood	
	-Entrepreneurship in the context and efforts of residents in the neighborhood -The level of conflict in the neighborhood	(Thompson, 2018)
Trust	-Trust in neighbors and non-natives living in context(pilgrims) -Trust in government institutions	(Lu & Peng, 2019)

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│   urban development catalyst project     │
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│ Examining the variables of social capital│
│ influencing the development catalyst     │
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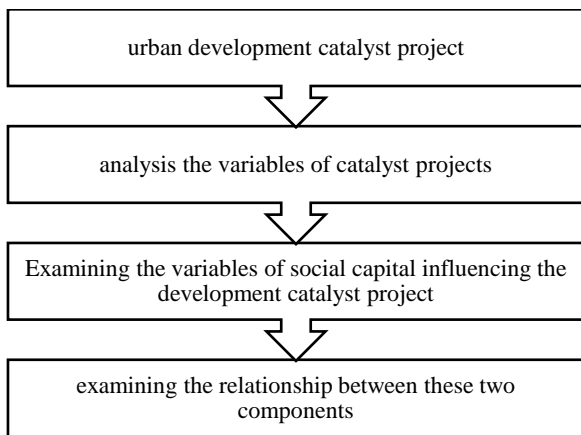
Fig. 3. Data analysis steps

The purpose of this study is to consider social capital to create stimuli in the context of improving the environment. . For this purpose, the effective variables of each component (development catalyst project and social capital) have been obtained to examine their effects and relationship with each other But the difference between this method and other methods is in the combined prospect of local officials and residents. In fact, designing two questionnaires from two different groups of people and authorities, it seeks to find common ground and determines planning priorities. Thus, both aspects of questionnaires are measured from two target groups, then these two results are compared and the connection points in the process are reached to reduce one-sided planning and achieve reciprocal planning. The questionnaire for the residents of Noghan neighborhood with a population of 2931 , based on the statistics of the center of Iran in 2019, measured by Morgan formula 156, which is randomly distributed. questionnaire for authorities is about 60 based on the smartpls method. The reliability of both questionnaires has a high validity, which is measured by Cronbach's alpha in Spss24.

Table 3
Cronbach's alpha coefficient of social capital component from residential perspective

Variable	Cronbach's alpha coefficients
Urban Development catalyst projects Total(16 items)	0.826
Social capital Total (21)	0.859

Table 4
Cronbach's alpha coefficient of social capital component from expert perspective

Variable	Cronbach's alpha coefficients
Urban Development catalyst projects Total(15 items)	0.889
Social capital Total (4 items)	0.829

5. Case Study: Mashhad

Mashhad, with a population of 3.5 million, is the second-largest city, located on east-north of Iran and has about 30 million visitors annually . Imam Reza's tomb is one of the main reasons for the emergence of Mashhad. This mega-space is a combination of developments over time which is covered about half million square meters (598,657 m2) and has free access 24 hours a day. (Talebian & Muge, 2020)
Mashhad has 2,300 hectares of damaged areas along with problems such as heavy traffic, growing population, unsafe structures as well as historical elements (Rahnama, Kharazmi, & Amini, 2016). The central regions of Mashhad considered damaged areas act as the linchpin of the city's urban economy due to the holy shrine. But Samen region, which is the district surrounding the holy shrine and is the original urban core of Mashad, provides a very poor quality of life and consider an improper area for citizens to live in' (Javadzade, 2013) The redevelopment of this region is one of the important urban projects in Mashhad. (Assadpour & Melles, 2018)
As a result of the urban redevelopment plan, the district has lost most of its old buildings such as local business, historical urban spaces and local residents which have been replaced by modern hotels, shopping malls, new urban spaces and streets (Sarkheyli, Rafieian, & Taghvaee, 2016)Thus conventional demolition and modernization processes are proceeding as before. Social considerations in this redevelopment plan were very weak and the only form of participation was financial partnerships with temporary and permanent exhibitions held to advertise investment opportunities and investment packages. Anecdotally, the level of the residents trust in the municipality has diminished and the redevelopment plan declined. As a result, many residents left the district. In samen district, during the past decade, had been no intention or specific systematic-targeted programs to control, guide or organize the urban spaces. Municipality managers'actions were limited to physical control and provision of services. Our study shows that public participation was low and the need for green spaces is emphasized (Ghasemi, Farhudi, & Ezzatollah, 2015) Samen district consists of four regions and six neighborhoods including Chaharbagh, Bala Khiyaban, Noghan, Payin Khiyaban, Tabarsi and Eidgah, that are considered as worn-out textures and cover a total area of 321 hectares. (Babaei, Rahnama, Khakpour, & Shokouhi, 2018, p. 156)
Noghan neighborhood is one of the three main centers of the core of the Mashhad (fig 3), which has more credibility than two other centers. The current sedan, the remains of the original and ancient textures are located on the northeastern part of Mashhad, in the Samen region, the second central area and one of the most important neighborhoods of Mashhad. Noghan neighborhood, despite its old age and high traffic flow, is in the vicinity of the shrine with a tidy texture. (Baastani & Hanaei, 2019, p. 41)
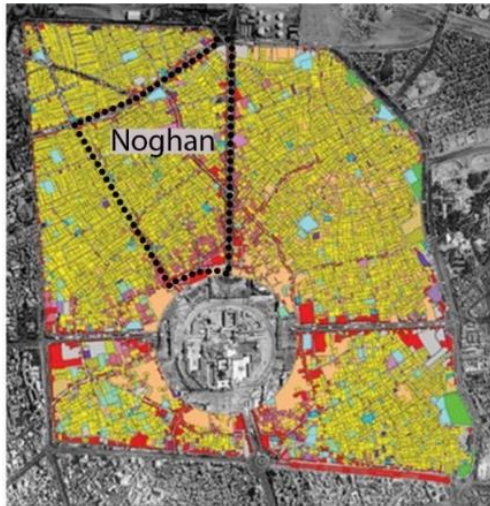
Fig. 4. Four sections of Mashhad, including section 2, Noghan neighborhood

Noghan neighborhood is the old core of Mashhad, which is located on the northwest side of the holy shrine of Imam Reza and is known as a religious neighborhood. Existence of old mosques and religious places has also distinguished this neighborhood from others. Noghan Bazaar is also known as an important and historical center of activity.

Noghan neighborhood has undergone many changes since the expansion of Imam Reza tomb, which was started in the 1940s (table5) based on the plans made in Samen region. In the last project of Tash Consulting in the '90s, this neighborhood combined recreational and residential functions with together to provide a new area for pilgrims and visitants.

In the current situation, high-density commercial-residential projects are being established and the residential areas of the neighborhood are being changed to commercial and business functions. In this neighborhood, suburban uses and commercial-residential projects have replaced local activities due to the plans made around the shrine, and this has caused the phenomenon of gentrification. This has historical and ancient value and needs attention to texture to improve. Therefore, the local residents have priority with the aim of improving the condition of the Noghan texture.

An attempt has been made to address the two social and physical dimensions in the neighborhood which is declining. Based on this, first, in the social dimension, the situation of social capital in this area is studied, and the impact on the components of development catalyst projects is examined.

The aim is to use the existing potential in the neighborhood to improve the physical, social, and environmental quality. The next step is to analyze the relationship between components. Therefore, it needs to recognize potential in neighborhood and then evaluate their correlation to provide improvement. For this purpose, SEM method is applied in the research.

Table 5
Different planning for the neighborhoods around the shrine from 1967 to 2010.

Suggested project	Objects of planning	project accomplishment's year	Review of planning
Residential use, commercial use on the edge of context.	Studying the future issues of the city and the effects of population growth, economic growth, and land use issues	1967	Khazen planning
Cultural and commercial functions.	This plan was referred to as a revitalization plan.	1993	Mehrazan planning
As the dominant area of residence for pilgrim in the central area	To Analysis spatial organization in context	2006	Farnahad planning
recreational Commercial-residential (Pilgrim base)	1- Pilgrimage area: The main activity of this area is a pilgrimage 2- Pilgrimage-accommodation area (level 1): The main activity of this area is to prepare the needs of pilgrims. 3- Residence area (level 2): mostly allocated to residents.	2010	Tash planning

6. Data Analysis

To analyze the research data and statistical inference, various analyses have been used. At first, factor analysis is used to categorize variables in social capital and urban development catalyst projects for both views. In the resident's questionnaire, based on the exploratory factor analysis, there are 4 categories in the urban development catalyst project variable and 5 factors in the social capital variable, which have communal values above 0.5. and in the authority's questionnaire, the structure of social capital is more brief and the development catalyst project is classified into 4 factors. In sequence, T-test analysis was used to identify the status of social capital and development catalyst project in the noghan neighborhood.(table 6,8).

Therefore, the situation of social capital in Noghan neighborhood is moderate, which is less than the average in terms of trust (table 9). The reason for this can be the dissatisfaction of residents with the recent developments in Noghan neighborhood, which is taking place within the framework of top-down

The amount of urban development catalyst project in Noghan neighborhood is less than the average of the community. In fact, urban development catalyst projects have been measured in different dimensions in terms of quality compared to the average of the society, with a favorable situation in both spatial and activity dimensions, which can be paid more attention to this variable in defining development stimulus in neighborhood. One of the reasons for inefficiency in the field of management and housing can be considered as emphasizing investments and profitability in economical aspects instead of paying attention to social aspects(table7).

In the second part, the relationship between variables is examined. In order to investigate the relationship between the two components of social capital and the urban development catalyst project, the structural equation method has been used as the analysis method. The research models were tested using a variance-based, structural equation modeling (partial least squares—PLS-) PLS allows the assessment of the measurement model and testing of the linkages proposed between constructs. (Roldán & Sánchez-Franco, 2012)
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Table 6
T test for urban development catalyst project

	Test value : 3						
					Mean difference	95% confident interval of the difference	
	T	Average	df	sig		lower	upper
Average development catalyst project	2.980	2.861	155	0.000	0.139	2.404	2.0756

Table7
Estimate the different dimensions of the development catalystproject

Dimension	Average	Quality of utility
Hosing	2.7	unfavorable
Space	3.16	favorable
Activity	3.05	favorable
Management	2.58	unfavorable
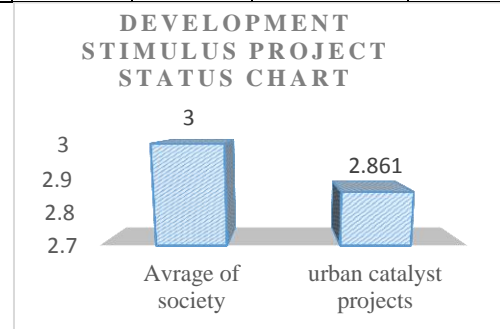
Fig. 5. Average urban catalyst projects compared to society

Table 8
T test for social capital

	Test value : 3						
					Mean difference	95% confident interval of the difference	
	T	Average	df	sig		lower	upper
Avrage catalyst project	3.0608	3.0360	155	0.000	0.036	2.9304	3.0756

Table 9
Estimate the different dimensions of the social capital

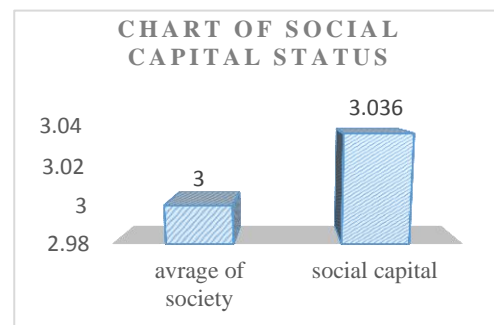| Dimension	Average	Quality of utility
Connections	3.14	favorable
participation	3.16	favorable
religious beliefs	3.34	favorable
trust	2.52	unfavorable
social network	3.05	favorable

Fig. 6. Average urban catalyst projects compared to society

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The choice of PLS in this study is based on the following reasons: (1) this research is focused on the prediction of variables and tackles a theory-building environment; So this method is used to test complex relationships between hidden and observed variables for predictive relevance. The relationship between the questionnaire questions with structures is investigated. Hence, the factors studied are considered together to test the hypotheses. (2) the sample is not too large (n = 156 for local residents and n = 60 for authorities), and "PLS should be the method of choice for all situations in which the number of observations is lower than 250". (Reinartz, Haenlein, & Henseler, 2009, p. 342)

7. Results

This approach examines the structure of internal relations in sets of equations. It has a high ability to predict the model, develop new models, support for combined and reflective measurement models. Analyze hypotheses of the model and test relationships between research variables. To analyze the research data, 156 completed questionnaires were collected from the residents of the Noghan district and 60 completed questionnaires were collected from authorities of Noghan district then analyzed by Smart-PLS software. The main idea of employing two target groups is to find priority in planning. By examining these two perspectives, commonalities can be identified and provide a basis for collaborative planning, as needs are measured from both top-down and bottom-up perspectives.

The PLS Methodology Starts With The Graphical Description Of The Structural Or Internal Model, From A Representation By Means Of Symbols Of The Relationships Existing Between The Latent Variables (Constructs), And The Indicators Of The Measurement Or External Model. The Latent Variables Are Represented By Means Of Circles, Being Able To Distinguish Between Independent (Exogenous Constructs) And Dependent Variables (Endogenous Constructs). Roldán And Sánchez-Franco (2012) Indicate Two Main Stages In Any PLS Analysis: The Assessment Of The Measurement Model And The Evaluation Of The Structural Model And Finally, The Overall Evaluation Criterion For The PLS Path Model Will Be Calculated In Smartpls3 (Fig 8, 10).

8. Measurement Model

Given that the measurement model has been designed as reflective, its assessment has to be based to reliability and validity (Roldán and Sánchez-Franco, 2012). The first step is to evaluate the reliability using g Cronbach's alpha and composite reliability and the Average Variance Extracted. The recommended cutoff value of the first both is 0.7 as extensive evidence of reliability and 0.8 or higher as exemplary evidence of reliability. (Kim, Hong, & Song, 2019, p. 9) so Cronbach's alpha and composite reliability for all variables is above 0.7, which indicates the accuracy of this indicator in the model (table 10,11).

In sequence, to evaluate the Convergent Validities obtained by the observations of the Average Variance Extracted - (AVEs). Using the Fornell and Larcker (Henseler, Ringle, & Sinkovics, 2009) criteria, that is, the values of the AVEs should be greater than 0.50 (AVE > 0.50). As shown in (table10), the convergent validity of all structures is above 0.5, which indicates the convergent validity of the model. In fact, if the social capital variables are more than 4 variables, the average of these structures for the second-order variables is less than 0.5, that leads to incorrect convergence. the communication variable, with 0.6 load in model, in social structure has the least factor load and The management variable as well in the structure of the development catalyst project. Therefore, these two variables are removed to strengthen the model(fig7).

In expert model (table11), the convergent validity of all structures is above 0.5, which indicates the convergent validity of the model. The validity for second-order namely catalyst projest is higher than 0.5 which shows the correction of model but two indicators of infrastructure and financial resources are removed due to coherence, Coherence is a condition that indicates that an independent variable is a linear function of other independent variable and the variable should be less than 5 otherwise they are unacceptable(fig 9).

Table 10
Measurement for residential model

Indicators/Constructs	loadings	Cronbach's Alpha	Combined reliability	AVE
Trust	0.697	0.882	0.927	0.810
religious beliefs	0.730	0.768	0.850	0.588
Network _	0.755	0.737	0.835	0.559
Space	0.835	0.815	0.871	0.576
Activity	0.720	٠0.770	0.853	0.593
Housing	0.640	0.714	0.840	0.638
participation	0.774	0. 844	0.885	0.563
Social capital*	0.607	0.874	0.890	0.547
Development catalyst Project *		0.816	.0.877	0.542

For second-order variables, this criterion is calculated manually, which in this study has two second-order variables of social capital and development catalyst project

Table 11
Measurement for expert model.

Indicators/constructs	loadings	Cronbach's Alpha	Combined reliability	AVE
Housing_	0.830	٠0.879	0.916	0.773
Space	0.871	0.842	0.905	0.760
Activity	0.599	0.890	0.932	0.820
Management	0.60	٠0.883	0.927	0.809
Social capital		0.828	0.885	0.733
Development catalyst Project *	0.699	0.882	0.902	0.541

For second-order variables, this criterion is calculated manually, which in this study has two second-order variables of development catalyst project
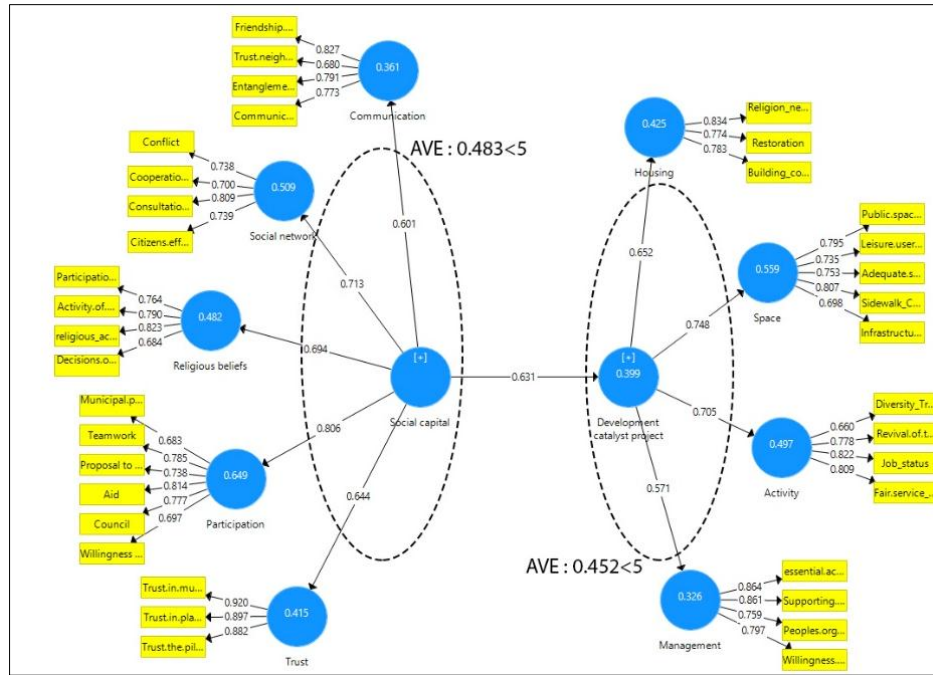
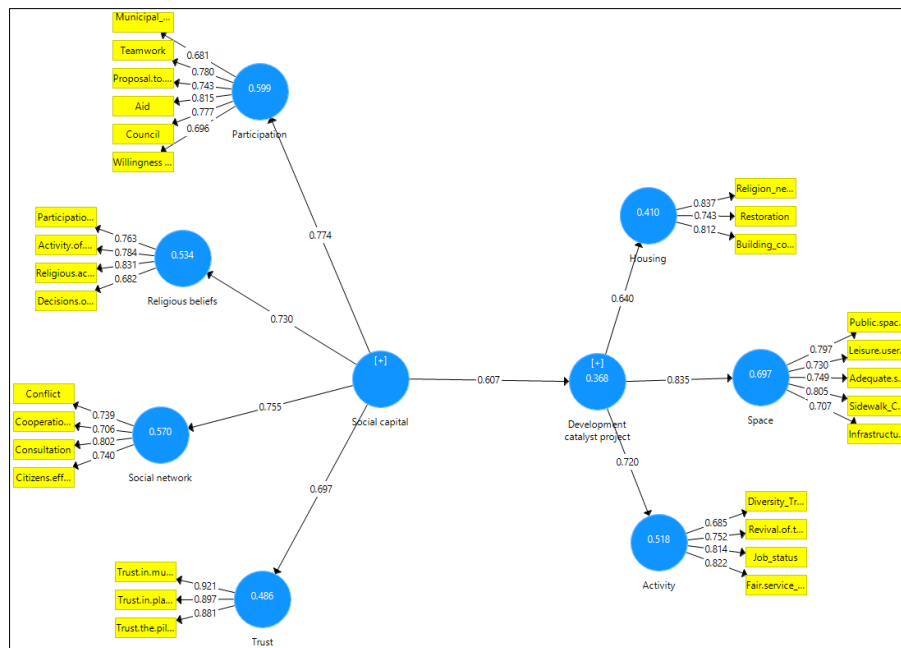Fig. 7. Graphical description of the hypothetical residential model

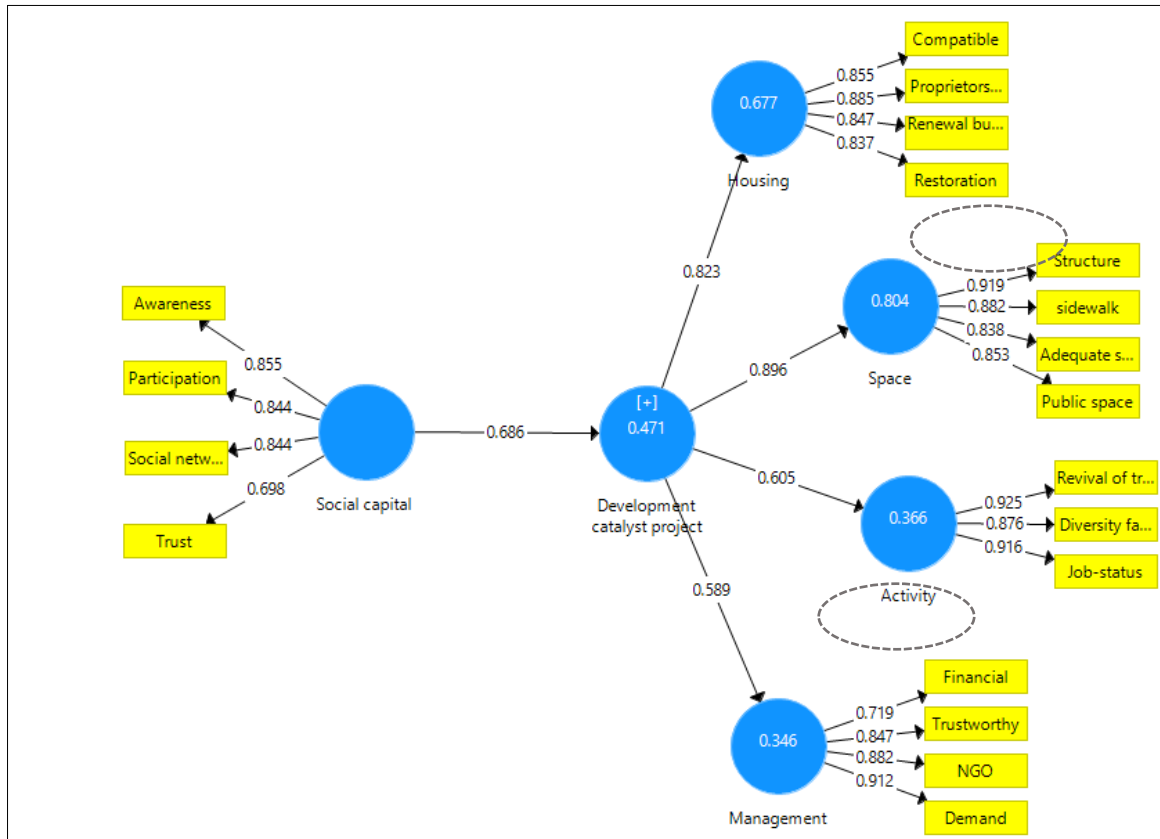Fig. 8. Graphical description of the correct residential model.

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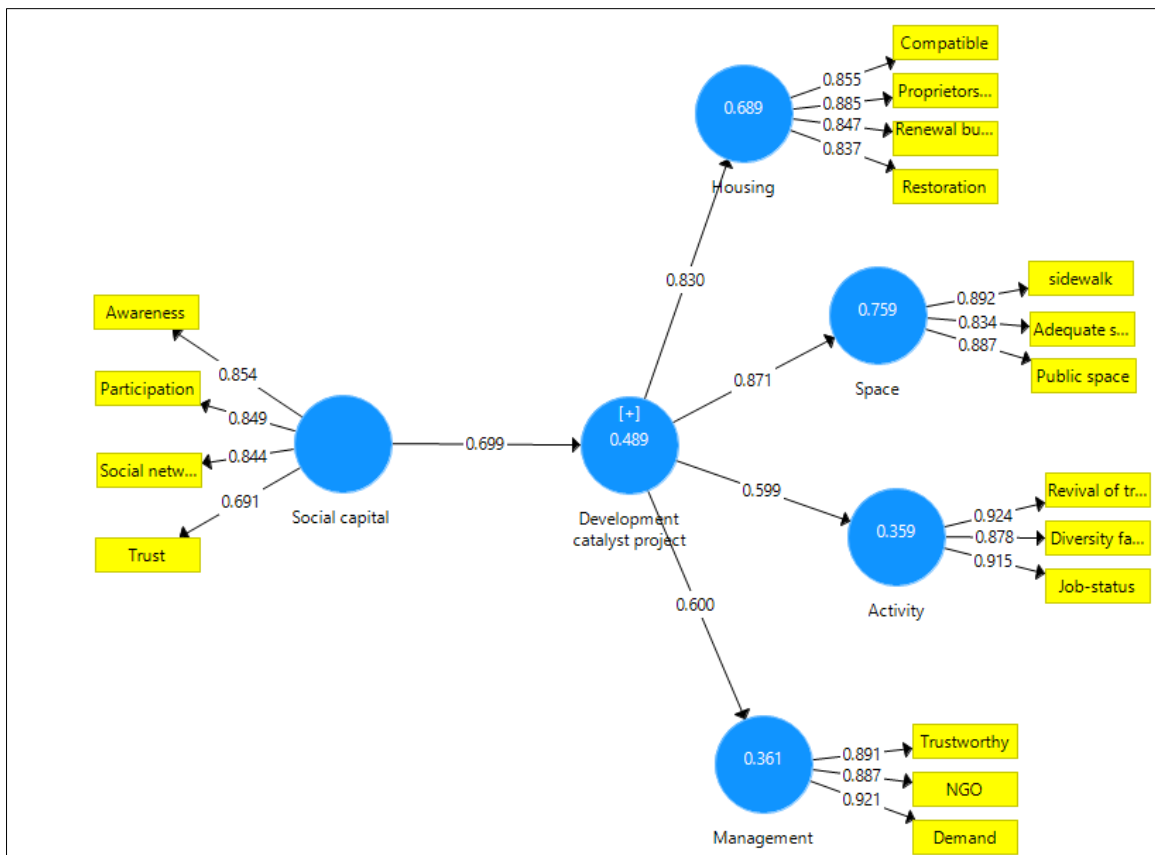Fig. 9. Graphical description of the hypothetical expert model

Fig. 10. Graphical description of the correct expert model

Finally, Table 2 shows that the square root of the AVE of each latent is greater than its correlations with any other latent variable. Thus, the discriminant validity is reached, and it can be concluded that the main constructs measure differen aspects.

Table 12
Discriminant validity for Residential

	Activity	Housing	Participatio	Religious beliefs	Social network	Space_	Trust
Activity	0.770						
Housing__	0.273	0.799					
Participation	0.336	0.440	0.750				
Religious beliefs	0.273	0.228	0.381	0.767			
Social network	0.458	0.221	0.434	0.408	0.748		
Space_	0.348	0.337	0.596	0.235	0.275	0.759	
Trust	0.204	0.271	0.270	0.468	0.463	0.245	0.900

Note: Diagonal elements (bold) are the square root of the variance shared between the constructs and their measures (average variance extracted). Off-diagonal elements are the correlations among constructs

Table 13
Discriminant validity for authorities

	Activity	Housing	Management	Social capital	Space
Activity	0.906				
Housing	0.226	0.856			
Management	0.336	0.287	0.900		
Social capital	0.246	0.669	0.323	0.813	
Space	0.417	0.689	0.344	0.691	0.872

Note: Diagonal elements (bold) are the square root of the variance shared between the constructs and their measures (average variance extracted). Off-diagonal elements are the correlations among constructs.

9. Structural Model

The structural model was evaluated based on the algebraic sign, magnitude and significance of the structural path coefficients, the R2 values, and the Q2 (redundancy) test for predictive relevance (Roldán and Sánchez-Franco, 2012). And then apply General fitting of GOF to Check the authenticity of the overall model. Consistent with Hair et al. (2013), bootstrapping (5000 resamples) was used to generate standard errors, T-statistics, and percentile 95% confidence intervals.

(R2) index is a criterion for determining the effect of an exogenous variable on an endogenous variable. chin (1998) considers R2 values of 0.67, 0.33, and 0.19 as substantial, moderate, and weak, respectively. In our case, all the relationships set out in the structural model fulill this rule. The rate of all the hidden variables in the two models are moderate to strong.

In residential model. The lowest amount of these structures in the social capital model is the trust. The lack of trust of people in the plans and projects in the current situation. Also, in the structure of the development catalyst project, housing has the least impact, which indicates the dissatisfaction of residents with the construction situation in the neighborhood. The structure of the development catalyst project has an average upward rate. In fact, this is related to the average amount of social capital in the Noghan neighborhood and indicates that it is necessary to improve the status of social capital in various dimensions to strengthen the impact of social capital and development catalyst projects In expert model, space and housing are in a very strong range, which shows the great impact of these two variables on the structure of the development catalyst project. As a result, the development catalyst project as the main internal variable is in the medium to the strong range due to the effect of the social capital variable in noghan neighborhood. (table15). As discussed in the model from the public point of view, two steps need to enhance the correlation of the research model. in the first step, we need to strengthen the social capital in different dimensions of the model and then address the development project in the model.

F2 which shows the intensity of influence on variables is investigated, ranging between 0.02 and 0.35. All structures have a great impact on the residential model. The greatest effect is related to the space variable, in both model which shows the importance of spatial dimension. In the structure of social capital, participation has the most influence(figure 11), which indicates the extent of people's willingness to participate in the context of resolving conflicts between people and government institutions. And from the point of experts view, housing has significant variable to improve the context and effect on catalyst projects(fig 12) from the residential point of view, this variable has less intensity, which shows dissatisfaction in housing projects. then, it is necessary to lay the groundwork for housing trust for the target area.
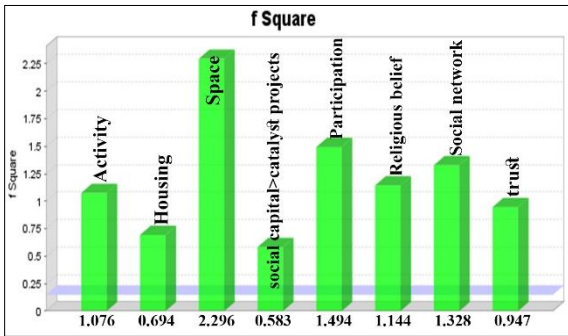
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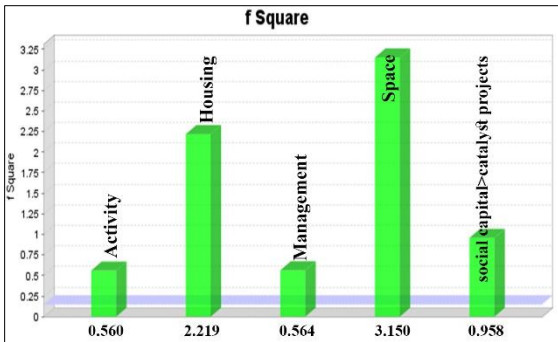Fig. 11. the intensity of variables on residential model

Fig. 12. the intensity of variables on expert model

The predictive relevance of the theoretical/structural model is assessed with the cross-validated redundancy index (Q2) for internal constructs. Q2 values above zero indicate that the observed values are well regenerated and the model has the ability to predict. (Baastani & Hanaei, 2019, p. 47). Chin (1998) considers Q2 values of 0.02,0.15,0.35 as predictive strength. In the residential model (table14), the value of all internal variables are between modest and strong but the development catalyst project (11%) is in the amount of moderate rate to low. This structure has a downgrade average for two reasons, the first reason is due to the low impact of social capital in the Noghan neighborhood, after which the low level of social capital structure has formed an average relationship

in the model. The second reason is that housing and activity variables experience a low amount of load, which indicates the existence problem in these two variables in the target area.

In the expert model (table15), the value of all endogenous variables is between modest and strong, and the main structure is in a strong range. In fact, the structure of the development catalyst project can be analyzed from two aspects in the expert model. The first aspect is related to the impact of the external variable of social capital in the catalyst project component, and the second aspect is about the correlation between the structural variables of the catalyst project. To improve the model, in the first part, It needs to enhance the amount of social capital in neighborhood to affect urban catalyst structure as they are an average level. On the other hand, the amount of management and activity variables in the structure of the development catalyst project is at the lowest amount which requires to increase the level of these variables to strengthened in the environment. . One of the reasons for the insignificance of the managerial dimension in the target area is the lack of a bottom-up regeneration process, which has reduced this dimension.

to confirm proposed hypotheses, after confirmation of reliability and validity, the precision and stability of the obtained estimations must be assessed. For this purpose the Bootstrap technique was used which offers the standard error and the t values of the parameters. Following Roldán and Sánchez-Franco (2012), there was a generation of a Bootstrap proof of 5,000 subsamples and a one-tailed Student t distribution with (n−1) degrees of freedom, where the number of subsamples is to calculate the significance of the path coefficients. From these levels, the significance of the structural routes is obtained. The optimal value of this criterion is above 1.96 at a confidence level of 95%. Which shows the accuracy of the relationship between the structures. This measure is greater than 1.96 for all variables which shows the accuracy of both models.

Table 14
Structural residential model results

Structures	SSO	SSE	Q² (=1-SSE/SSO)	R2	communality	T-value
Activity	624.000	446.326	0.285	0.518	0.593	12.142
Housing__	468.000	353.402	0.245	0.410	0.637	10.293
Participation	936.000	644.980	0.311	0.599	0.563	15.651
Religious beliefs	624.000	445.057	0.287	0.534	0.588	14.443
Social network	624.000	439.428	0.296	0.570	0.559	16.263
Space_	780.000	489.259	0.373	0.697	0.575	25.634
trust	468.000	294.379	0.371	0.486	0.809	14.817
Development catalyst project_	1,872.000	1,667.919	0.109	0.368	-	11.035
Social capital_	2,652.000	2,652.000	-	-	-	

Table 15
Structural residential model result

Structures	SSO	SSE	Q² (=1-SSE/SSO)	R2	Communality	T-value
Activity	150.000	109.784	0.268	0.359	0.821	3.453
Housing	200.000	108.788	0.456	0.689	0.733	16.355
Management	150.000	110.089	0.266	0.361	0.810	5.129
Space	150.000	70.562	0.530	0.759	0.759	23.158
Social capital	200.000	200.000	-	-	-	9.269
Development catalyst project	650.000	540.980	0.168	0.489	-	

GOF index takes into account both measurement and structural models and serves as a benchmark for measuring the overall performance of the model. The range of this index is between zero and one, and Watzles et al. (2009) presented three values of 0.01, 0.25 and 0.36, respectively, as weak, moderate and strong values for GOF. Given that this model indicates whether the tested model is successful in predicting the intradermal variables or not. GOF for residential model is 0.568, which indicates that the model is strong. According to the residential model, the variable of social capital explains about 61% of the changes in the development catalyst project (table 16). In fact, this rate indicates the relationship between the social capital variable and the development catalyst project (bottom-to-top planning). Therefore, the more social capital increases in the area, the more impact it will have on development-driven projects. In the first step, it is necessary to provide opportunities for participation for residents, which is a variable that has a lot of weight in research. It is also necessary to provide a platform for gaining trust to increase social capital in the context because this variable has little effect on the research that affects the effectiveness of the model. In fact, needing the physical aspect in the field of activity has the greatest weight, which is one of the priority needs from the people's perspective.

The GOF criteria for the expert model is about 0.644 which indicates the strength and correctness of the model. This shows that the variable of social capital explains about 70% of the changes in the development catalyst project (table16). This shows that the variable of social capital explains about 70% of the changes in the development catalyst project (top to button planning). In this model, there is a need to increase public awareness about municipal programs, and it also should be physical changes in the environment to provide priorities for the people. As a result, it builds trust and ultimately increases the impact of social capital.

10. Discussion and Conclusion

This research seeks to investigate the potential affecting development stimulus projects to create change in urban spaces and improve the quality of life in the urban environment. Utilizing the existing potential in the neighborhood and identifying the strengths and opportunities can improve the development process. In fact, these development catalyst projects can be completed and context-oriented when they can involve public participation in the design process. Therefore, in this research, an objective and efficient social capital component has been examined to influence the process of development catalyst projects preventsthe occurrence of gentrification. On the other hand, identifying the priority of action is essential to examine contextualism. One of the benefits of this method is prevents the use of repetitive and monotonous strategies in the context and to implement the context-oriented strategy.

In the residential model, the results confirm the accuracy of the model. Due to the extensive changes lately, the participation variable in the social capital structure is the most efficient variable among others while the least structure is residents' communication, which is removed from the model. In the first step, local people should be involved in the urban planning process to achieve interactive participation. The participation variable has an enormous impact on the catalyst project component, so it needs to be promoted in the neighborhood because of the high weight compared to other variables. In the structure of the development catalyst project, the most weight is allocated to the space dimension, which shows the importance of this dimension at the local scale for residents and also shows the impact of social capital dimensions on the spatial dimension. Government institutions need to take steps to strengthen the trust of the people in the areas of housing and management, where there is the least level of trust.

In examining the expert model, awareness and participation in the social capital structure have high priorities. In fact, by improving the areas of participation and awareness, it is possible to develop the situation of social capital in the context, Then it can also be effective in growing development catalyst projects. In the catalyst project, the spatial and housing dimensions have priorities. From the experts' perspective, by enhancing the space and housing dimensions, it is possible to build the grounds for the development catalyst project in the context. In fact, the resident's demand has neglected in the regeneration process in the housing variable. Therefore, the housing variable should be renovated due to residential demands to improve the environment.

Therefore, according to the views of the residential and experts, it is necessary to heed the participation and awareness variable to provide the grounds for residents'

participation in the context. In this way, the local's demand that exists in the spatial dimension can be met and provide ground to improve texture, as well as the genius of building trust between people, which has the lowest impact in the model. The housing and management variables should focus on people to improve their effectiveness (fig13).

As a result, a framework for the research process can be considered based on the prioritization of indicators. In fact, commonalities and contradictions of both models are examined to reduce the planning challenges and to be able to focus on context-oriented planning, and finally provides a framework for successful action(fig 14).

Table 16
the result of hypotheses

| Dependent factor	criterion	value	Interpretation
Catalyst projects<social capital (Residential model)	T-value	10.524	The relationship with 99% confidence is significant.
	Load factor	0.607	The impact of social capital on the development catalyst project is 61%.
Catalyst projects< social capital (Expert model)	T-value	8.955	The relationship with 99% confidence is significant.
	Load factor	0.699	The impact of social capital on the development catalyst project is about 70%.
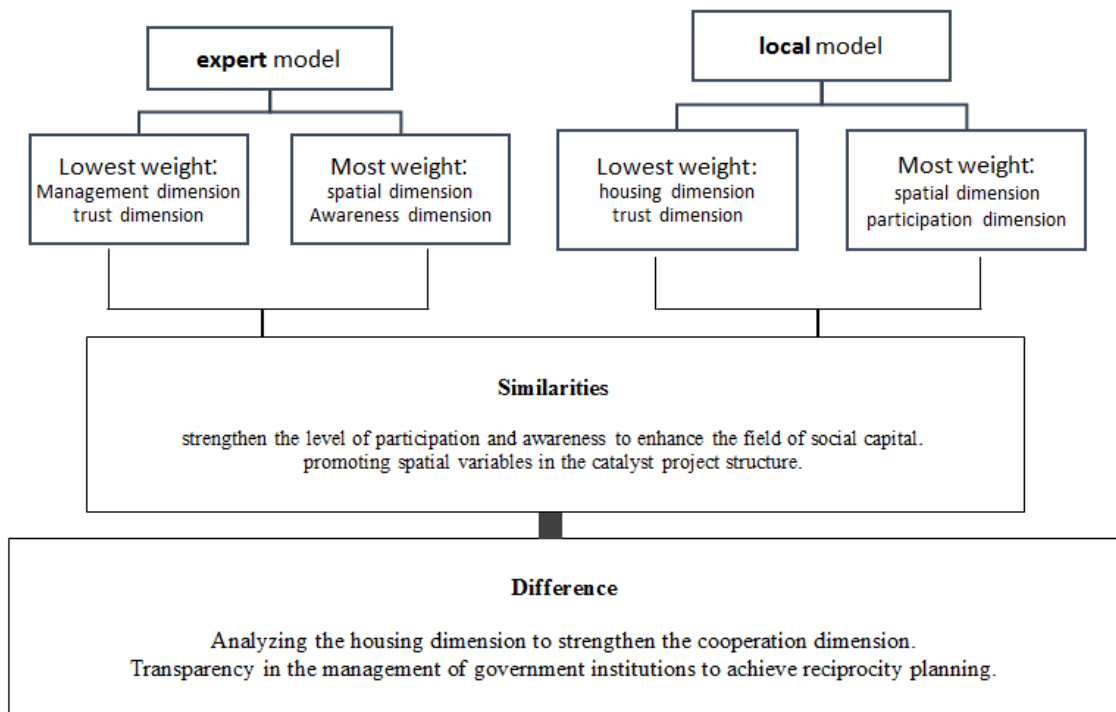
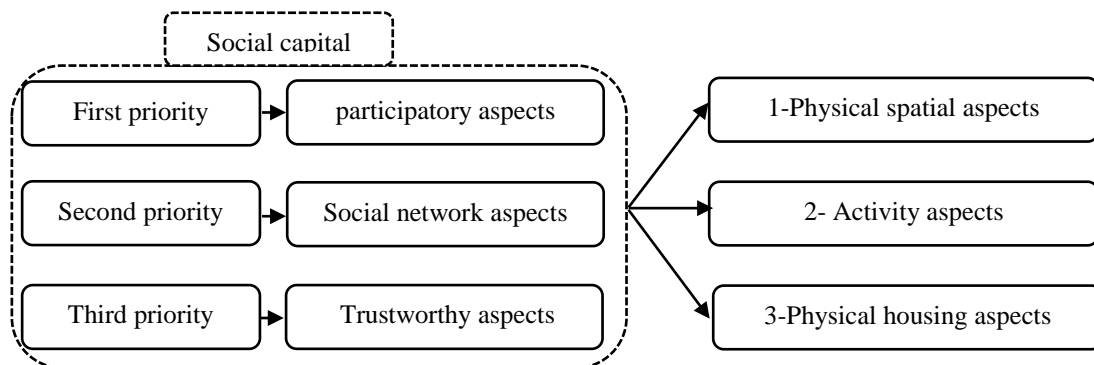Fig. 13. Communication between two models

Fig. 14. Action priorities based on model relevance

Suggestion

As a result of the confirmation of hypotheses, it is

possible to explain development catalyst projects by using

social capital. Therefore, suggestions based on the direct effects of social capital and development catalyst projects in different dimensions of research have been addressed. These suggestions are categorized according to physical and non-physical dimensions.

Physical-spatial suggestions

- providing green connecting axes in the neighborhood to stimulate the improvement of environmental conditions.
- maintain a balance between suburban and local uses in the context as a stimulus to improve the quality of life.
- planning infrastructure networks to equip the neighborhood and be a stimulus for better communication.

Physical-housing suggestions

- eliminating restrictions on the sale, renovation, and improvement of property as a stimulus for public participation.
- compatibility new constructions with environmentally friendly use as a stimulus for regeneration.
Preservation of historic buildings as a stimulus to improve the sense of belonging in the context

Non-physical - social and cultural suggestions

- providing people-centered organizations as a place to coordinate with governmental institutions as a stimulus for popular participation.
- providing a proper relationship between the neighborhood and the holy shrine as a stimulus for religious communication.
- enhancing the neighborhood center for context to stimulate residents' interactions

Non-physical-activity suggestions

- improving the existing commercial and active places in the neighborhood as a stimulus for revitalizing the local economy.
- offering activities by providing services at different hours of the day.

Non-physical-management suggestions

- Holding joint meetings with residents to create new projects and increase the participation
- Flexibility in the rules and regulations of the design and plan, with regard to protecting the interests of the residential.

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