



The Impact of Government Policies on Citizen Participation in the Reconstruction of the Deteriorated Fabrics in District 17 of Tehran Municipality*

Vahid Bigdeli Rad^{a**}

^a Assistant Professor of Urban and Regional Planning, Faculty of Architecture and Urban Planning, Qazvin Branch, Islamic Azad University, Qazvin, Iran.

Received 08 May 2018; Revised 05 December 2018; Accepted 22 December 2018; Available Online 19 June 2019

ABSTRACT: Today, deteriorated urban fabrics face a number of issues and problems which ultimately discourages living in these areas. Today, governments are concerned about reconstruction of these areas with the help of citizen participation. In this regard, governments are seeking to increase the incentive to reconstruct the deteriorated fabrics through initiating some policies. Some of these policies will increase citizen participation while some will be ineffective. Therefore, the effectiveness of each policy in increasing citizens participation needs to be evaluated. The present study evaluates the impact of these policies on the participation of the residents of district 17 of Tehran, which is one of the most deteriorated fabrics. Structural equation modeling with Smart PIS software was used for the analysis of the derived data. The results indicate that policies such as facilitating the merging of neighboring lands, defining incentives and discounting policies, granting banking facilities, providing conditions for mass developer participation, purchasing deteriorated properties at fair and reasonable prices by municipalities, exchanging deteriorated properties with newly created state-owned real estate and establishing neighborhood participation centers have a significant impact on increasing citizen participation in reconstruction of deteriorated urban fabrics with coefficients of influence of 1.225, 0.694, 0.547, 0.430, 0.224, 0.209 and 0.115, respectively. Residents' opinion polls on regeneration plans of deteriorated fabrics, on the other hand, do not have much effect in this regard. Therefore, it is recommended that governors and legislators strengthen the abovementioned effective policies and facilitate their provision; because resolving the problems of deteriorated fabrics in urban neighborhoods is impossible without the participation of residents.

Keywords: Government Policies, Citizen Participation, Reconstruction of Worn-out Texture, District 17 of Tehran Municipality.

INTRODUCTION

The deteriorated and inefficient urban fabrics include a large part of many cities in Iran. On the one hand, these fabrics face physical, functional, traffic and environmental problems; on the other hand, there is a high potential in using these lands for housing and providing open and service spaces (Nakhi, Ahmari, & Rezaei, 2016). The continued destruction of buildings structure along with degradation of environmental conditions has led to moving of powerful groups from

these neighborhoods which are now occupied by low-income groups (Naseri & Bolandian, 2014). Therefore, urban management has to synchronize these fabrics due to the rapid structural and functional modern changes in the cities and resolve their non-compliance with the new requirements. Deteriorated fabrics, thus, require more favorable government support policies. Given that the only solution to this problem is the efficient reconstruction of the deteriorated urban fabrics, this can

* The present paper is based on a research project entitled "The role of government policies on citizen participation in the reconstruction of the deteriorated fabrics in District 17 of Tehran Municipality" and all its financial resources were provided by the Vice-Chancellor of Research and Technology of Islamic Azad University of Qazvin Branch.

** Corresponding Author E-mail: Vahid.Bigdeli@qiau.ac.ir



be considered as a valuable opportunity which, if applied correctly, will lead to sustainable urban development (Gorjina & Amini, 2016). Meanwhile, increasing citizen participation is one of the most important issues in the reconstruction of urban fabrics. Therefore, at the time of preparing strategic and corrective plans, all government facilities and measures should be made public in order to encourage public participation in the regeneration of deteriorated fabrics (Daroudi & Arabian, 2015).

The current trend of deteriorated fabrics indicates that if preventive measures are not applied, we will see the growth of these areas and their complexity in the long term. Since urban regeneration requires the adoption of multifaceted policies in the field of civil services by their residents, conducting this task cannot merely be achieved by the state apparatus or by promoting it on a large scale. It effectively requires a joint and coordinated commitment of government agencies and municipalities in relevant areas at national, provincial and local levels with the support and participation of people, non-governmental and private actors. Accordingly, the most important issue in the planning of this part of deteriorated fabrics is to pay attention to the citizens and their participation in the planning process. Thus, it is essential to evaluate the process of public participation in the plans, and to investigate the policies of the governors and authorities in order to increase this trend (Ministry of Roads and Urban Development, 2017).

Deteriorated Fabrics

The deteriorated urban fabrics are one of the authorized areas of the cities that, due to deterioration, have a low spatial, environmental and economic value, and require coordinated planning and intervention for organization (Pourzargar, 2016). Most of the building blocks in deteriorated urban fabrics lack a technically calculated structural system to withstand natural disasters such as earthquakes. In terms of visual beauty, the deteriorated fabrics also have numerous abnormalities and do not satisfy the spirit of the beauty seeker in the citizens tailored to modern tastes, which make them abandoned. The lack of appropriate and sufficient access to these fabrics and the low width of crossroads, as well as the high volume of low-durability and fine-grained buildings, are other negative effects of deteriorated urban fabrics (Momeni, Bikmohammadi, & Mehdizadeh, 2010). Deteriorated urban fabrics also suffer from a lack of network access to urban services and often have a pathway of less than six meters in width, which are not appropriate at all for today's urban transportation. In addition,

deteriorated fabrics usually lack infrastructure networks. They may also have inadequacies in the infrastructure networks and service spaces and the formation of incompatible uses in the vicinity of residential fabrics (Imani et al, 2016).

Thus, native inhabitants of deteriorated fabrics are forced to migrate to other neighborhoods, and they are often replaced by low-income groups or rural migrants. Therefore, the reconstruction of these fabrics is inevitable and the process is usually defined by demolition, cleansing, dismantling and rebuilding operations (Shamaei & Pourahmad, 2005).

Government Policies to Attract Citizen Participation in the Reconstruction of Deteriorated Fabrics

The term "participation" in the lexical sense means engagement and gathering for specific purposes. Participation is a collective, conscious and voluntary behavior, in order to gain individual or collective interests. Characteristics that are considered in cooperative behavior are based on a mental and psychological tendency that occurs when the conditions, tools and institutional contexts are ready (Piškur et al., 2014). Therefore, attracting public participation requires institutional and managerial support in the cities. By examining various library resources and reviewing the administrative rules, the policies that the government has taken to increase the citizen participation in the reconstruction of deteriorated fabrics were identified as follows:

- a. Surveys and interviews with residents of deteriorated fabrics so as to take in to account their views on future plans that will lead to the provision of a platform for more participation in the implementation of the same plans.
- b. Creating neighborhood participation centers for communication between residents of the neighborhood and urban development institutions in order to increase the involvement of people in decision-making and improve their living conditions in a manner in which the spokesman or board of directors of each group summarizes the views of the members of the group. The most effective and appropriate proposals are given to the planners, and consequently the people will support the implementation of the plans and the participation will eventually increase.
- c. Granting bank facilities.
- d. Providing conditions for the participation of mass makers.
- e. Providing municipal incentives and discounting



policies such as municipality's discount to get legal licenses, increase density, and reduce engineering service costs.

f. Purchasing deteriorated property at a fair price by municipalities.

g. Exchange of deteriorated properties with state-owned real estate.

h. Facilitating integration of fine-grained worn parts with neighboring ones.

At the end of this section, it can be concluded that solving the deteriorated fabrics problems in urban neighborhoods is not possible without the participation of residents, and governments should propose policies to encourage residents to participate in the reconstruction process. Therefore, it is important to examine the role and position of effective policies in attracting citizens participation in the reconstruction of deteriorated fabrics, as mentioned above. The present study attempts to evaluate the impact of each of these policies on citizen participation, from the perspective of residents of one of the areas involved in the deteriorated fabrics problem (District 17 of Tehran).

STUDY AREA

District 17 is located in south of Tehran and is a low-quality urban area that is more unsafe and has a lower standard of living. Fig. 1. shows the situation of district 17 in current map of Tehran Metropolis.

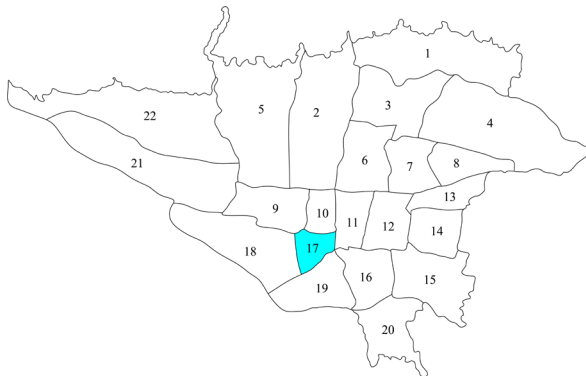


Fig. 1. The Location of District 17 in Map of Tehran (2018)

The evolution and formation of Tehran municipality of district 17 were affected by the development and decisions made for Tehran city in different periods. The urban development and expansion were termed as "self-growing" in urbanism literature. It means that its basic structure and space organization have evolved without any affirmative action, but just in response to changes

and deformation of effective environment and extended as non-standard. In pursuit of reaction development, district 17 has changed its occupancy from agriculture, gardening, and animal husbandry to residential and industrial areas in the last 60-70 years. The rapid process of formation in the past has led to formation of dense and fine grain texture with mainly long and narrow passages, and deteriorating housing units. The formation process can be divided into three periods: The first period involved non-standard construction with rapid growth based on limited possibilities and immigrants' beliefs. The second period involved the narrow passages, and the insufficient access to public services as well as urban facilities and equipment. Finally, the third period, that continues to the present, is when suitable access and buildings of better quality were constructed (<http://region17.tehran.ir>).

District 17 of Tehran municipality has the worst position in terms of construction quality and deterioration among the different districts of Tehran. According to official statistics, 33 percent of Tehran deteriorated fabrics are in district 17 (<http://region17.tehran.ir>). Therefore, this district needs more attention of experts and urban managers than other districts of Tehran. The present study takes a positive step in the reconstruction process of these districts by identifying the desired policies of the residents and providing this information to the city managers.

RESEARCH METHOD AND RESULTS

There are diverse statistical software programs to analyze research data such as the SPSS, Systat, Minitab, BMDP and Statistical Analysis System (SAS); however, they do not cover the purpose of this research. In addition, some of them are better when problems are compared to each other. Considering the purpose and principles of this research, the Smart PLS software was used for this research.

The Partial Least Squares (PLS) uses a principal-component-based estimation approach technique for this research (Chin, Johnson & Schwarz, 2008). According to Esposito Duarte et al. (2010), Smart PLS software has several advantages for this research: a. The indeterminacy problems does not exist when using Smart PLS but exists in other software programs like Rash model, Amos, EQS and LISEREL, b. The Smart PLS software does not assume the normality of the data because it is a non-parametric technique, and c. The Smart PLS software does not require a large sample size in comparison to other casual modeling techniques.

Other researchers believe that the Smart PLS analysis



is a very useful tool to index constructions (Arnett, Laverie, & Meiers, 2003; Wong, 2013; Ringle, Wends, & Becker, 2015). It was utilized in this research to analyze factor loading validity, composite reliability, Cronbach's Alpha, Average Variance Extracted (AVE), convergent validity, discriminant validity and bootstrapping technique by Smart PLS Software.

Structural equations, as statistical samples, test the relationships between independent and dependent variables simultaneously, with the help of obvious variables (questionnaires) (Hair et al., 2016). In the model used in this study, citizens participation in reconstruction of deteriorated fabrics was defined as the dependent variable while government policies for attracting citizens participation were defined as independent variables; therefore, eight government policies were set as independent variables, and citizen participation in reconstruction of deteriorated fabrics was defined as the dependent variable. To assess the role and effect of each of the independent variables, three questions were prepared for each variable that had to be responded by the citizens. The results were then analyzed using Smart PLS software.

Selection of Respondents for Questionnaire Survey

One of the most fundamental issues in PLS-SEM is the minimum sample size estimation. A widely used minimum sample size estimation method in PLS-SEM is the '10-times rule' method, which builds on the assumption that the sample size should be greater than 10 times the maximum number of inner or outer model links pointing at any latent variable in the model (Hair et al., 2011). On the other hand, Loehlin (2004) and Fabrigar et

al. (2010) have indicated that 15 samples are required for every variable or indicator in structural equation models. Hence, 390 samples were selected to rectify possible errors.

According to statistical terms, a sample is defined as a selected set of respondents out of a specified population. As recommended by Thompson (1990), when a sample is developed to be the representative of its population, it should involve a part of its population. In this regard, Brown (1998) has highlighted that random sampling (cluster sampling) must fulfill all entities of the population and it must cover equal independent chances to be selected.

Accuracy and Appropriateness of the Research Model

Although the Cronbach's Alpha illustrates the reliability of research constructs (policies), it does not represent the appropriateness of the research indicators (questions) to each specified research constructs. Therefore, to understand the appropriateness and accuracy of developed survey questionnaire, validity and reliability tests were conducted (Chin, 1998; Gefen & Straub, 2005). The research model was developed through the Partial Least Squares (PLS) approach as the first step. Then, the research indicators were identified to their relevant research constructs. Chin (1998) and Gefen and Straub (2005) highlighted the value of 0.70 as standard value for outer loading approach. Therefore, those outer loadings with values of 0.70 or higher were considered as acceptable values and were valid for research indicators. Table 1 and Fig. 2. Present the outer loading values of research indicators related to each specific research construct.

Table 1. Outer Loadings of Research Indicators (Questions)

F.N	Research Construct	Question Number	Outer Loadings
1	Participation of citizens in the reconstruction of deteriorated fabrics	Q1	0.855
		Q2	0.909
		Q3	0.844
2	Respondents' opinion polls on recreation plans of deteriorated fabrics	Q4	0.713
		Q5	0.747
		Q6	0.863
3	Establishing neighborhood participation centers	Q7	0.939
		Q8	0.854
		Q9	0.808



4	Granting of bank facilities	Q10	0.872
		Q11	0.748
		Q12	0.790
5	Providing conditions for mass developer participation	Q13	0.935
		Q14	0.935
		Q15	0.871
6	Incentive and discounting policies	Q16	0.768
		Q17	0.841
		Q18	0.842
7	Purchase of deteriorated property at a fair price by municipalities	Q19	0.853
		Q20	0.861
		Q21	0.791
8	Exchange of deteriorated properties with state-owned real estate	Q22	0.816
		Q23	0.798
		Q24	0.829
9	Facilitating integration with neighbors	Q25	0.867
		Q26	0.743
		Q27	0.921

*Note: 1. Participation of citizens in reconstruction of deteriorated fabrics, 2. Respondents' opinion polls on recreation plans of deteriorated fabrics, 3. Establishing neighborhood participation centers, 4. Granting bank facilities, 5. Providing conditions for mass developer participation, 6. Incentives and discounting policies, 7. Purchase of deteriorated property at a fair price by municipalities, 8. Exchange of deteriorated properties with state-owned real estate, 9. Facilitating integration with neighbors.

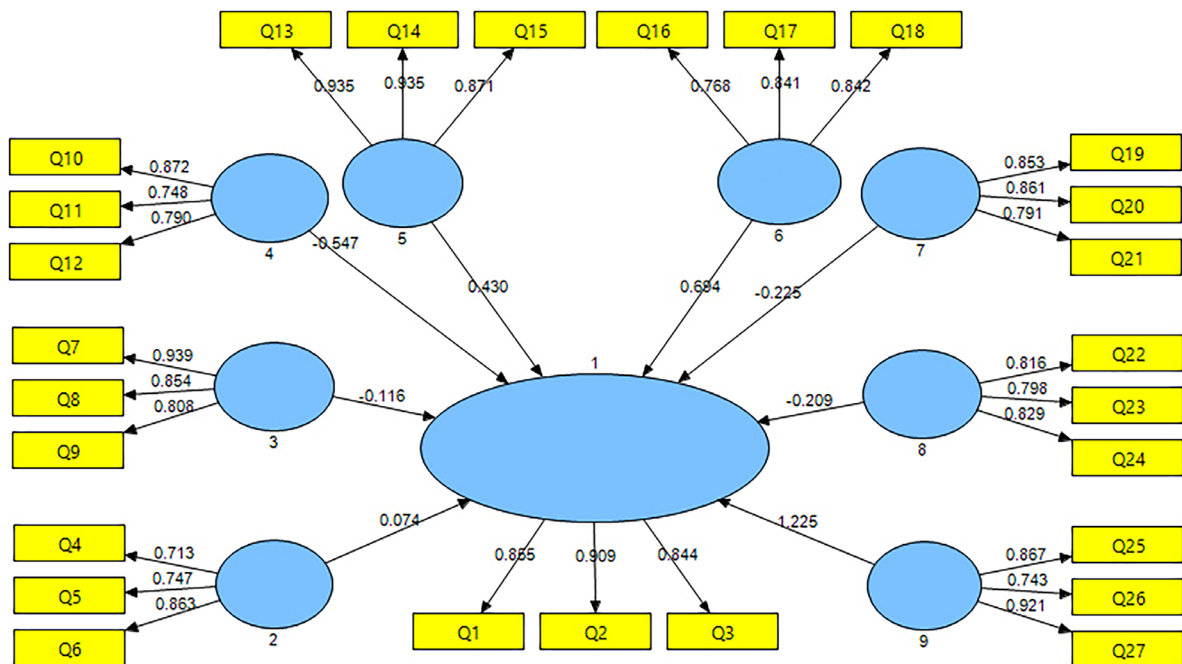


Fig. 2. Research Model Measurement



As seen in Table 1 and Fig. 2. all the research indicators met the standard criteria. Moreover, five indicators possess values higher than 0.90, fourteen indicators possess values higher than 0.80 and eight indicators possess values higher than 0.70.

Next, the composite reliability and Cronbach's Alpha were used to examine the reliability of research model. Composite reliability is the most accurate internal consistency measurement method because it avoids the equal weighting assumption of the items. In this research, composite reliability was conducted according to Green and Salkind's (2010) points of view to examine the

consistency of measured constructs presented by the measurement items.

In addition, to examine the reliability of identified constructs' measures, the Cronbach's Alpha was obtained in this research. Green and Salkind (2010) have described that the purpose of reliability approach is to examine the consistency of the measured constructs of the research model. Therefore, the reliability was calculated to examine the constructs of each group of items (Cronbach, 1951). Table 2 illustrates the results of composite reliability and Cronbach's Alpha.

Table 2. Composite Reliabilities and Cronbach's Alpha of Constructs in Model

N	Construct	Composite Reliability	Cronbach's Alpha
F1	Participation of citizens in the reconstruction of deteriorated fabrics	0.903	0.840
F2	Respondents' opinion polls on recreation plans of deteriorated fabrics	0.819	0.671
F3	Establishing neighborhood participation centers	0.901	0.835
F4	Granting of bank facilities	0.846	0.736
F5	Providing conditions for mass developer participation	0.938	0.901
F6	Incentive and discounting policies	0.858	0.751
F7	Purchase of deteriorated property at a fair price by municipalities	0.873	0.792
F8	Exchange of deteriorated properties with state-owned real estate	0.855	0.749
F9	Facilitating integration with neighbors	0.883	0.802

According to Chin (1998), the acceptable value for composite reliability and Cronbach's Alpha must be equal or above 0.80 and 0.60, respectively. The result from Table 2 illustrates that all the research variables met the standard criteria of composite reliability (0.8 and above) and Cronbach's Alpha (0.6 and above), which means that the research model is reliable.

The final step of examining the validity of research model refers to using convergent validity and discriminant validity. Discriminant validity and convergent validity as a common approach in examining the construct validity has been introduced by Ringle (2015). These approaches are very important to examine the accuracy of the constructs to measure the characteristic of the research before examining any relationship. Convergent validity relies on estimation of theory and the existence of the correlation among the scales relating to the items. Moreover, discriminant validity considers the degree that two or more measurements are conducted to examine the

different theoretical constructs that are not related.

To examine the convergent validity and assess the discriminant validity which is defined as shared average variance between the measures and constructs, developing the Average Variance Extended (AVE) approach was necessary (Hulland, 1999). The equal and above AVE values of 0.50 were identified by Chin (1998); Henseler & Fassott, (2010) and Ringle et al. (2015) as acceptable values to approve the convergent validation.

In addition, to examine the discriminant validity, the Average Variance Extracted (AVE) values of the research model and the square roots of those values had to be calculated. According to Fornell and Larcker (1981); Ringle, Wends and Becker (2015), if the square roots of the AVE for each construct was more than inter-construct correlations, the discriminant validity would be approved. Table 3 presents the AVE values and square roots values of AVE.



Table 3. Average Variance Extracted (AVE) and AVE's Square Root

N	Construct	AVE	AVE's Square Root
F1	Participation of citizens in the reconstruction of deteriorated fabrics	0.757	0.870
F2	Respondents' opinion polls on recreation plans of deteriorated fabrics	0.603	0.776
F3	Establishing neighborhood participation centers	0.754	0.868
F4	Granting of bank facilities	0.648	0.805
F5	Providing conditions for mass developer participation	0.836	0.914
F6	Incentive and discounting policies	0.668	0.817
F7	Purchase of deteriorated property at a fair price by municipalities	0.698	0.835
F8	Exchange of deteriorated properties with state-owned real estate	0.664	0.815
F9	Facilitating integration with neighbors	0.717	0.847

Fornell and Larcker (1981); Chin (1998); and Henseler and Fassott (2010) have identified acceptable values for AVE as those with equal or more than 0.50. As seen in Table 3, all calculated AVE values are acceptable to approve the convergent validation.

In addition, the square roots values of AVE presented are used to undergo the discriminant validity. Table 4 indicates the calculated values for the discriminant validity.

Table 4. Discriminant Validity for Model

	1*	2*	3*	4*	5*	6*	7*	8*	9*
1*	0.870								
2*	0.810	0.776							
3*	-0.527	-0.699	0.868						
4*	0.784	0.754	-0.610	0.805					
5*	0.603	0.630	-0.599	0.786	0.914				
6*	-0.639	-0.767	0.827	-0.779	-0.798	0.817			
7*	-0.454	-0.553	0.331	-0.500	-0.360	0.587	0.835		
8*	-0.638	-0.629	0.802	-0.776	-0.683	0.806	0.558	0.815	
9*	0.865	0.688	-0.626	0.684	0.711	-0.776	-0.457	-0.719	0.847

*Note: 1. Participation of citizens in the reconstruction of deteriorated fabrics, 2. Respondents' opinion polls on recreation plans of deteriorated fabrics, 3. Establishing neighborhood participation centers, 4. Granting of bank facilities, 5. Providing conditions for mass developer participation, 6. Incentives and discounting policies, 7. Purchase of deteriorated property at a fair price by municipalities, 8. Exchange of deteriorated properties with state-owned real estate, 9. Facilitating integration with neighbors.

As shown in the Table above, all the square roots of the AVE, which are highlighted in red were more than the correlations between the constructs. It means that the research model passed the discriminant validity analysis and the research model is validated.

Research Model Assessment

To achieve the aim of this research, the research model was examined through the Smart PLS. To do so, the research model of the associations between different latent constructs was examined during completion of



the measurement model analysis. To specify the path's significance, the bootstrapping technique was conducted using the Smart PLS software. The result pointed the

significance of paths that means the research model is empirically confirmed. Fig. 3. illustrates the research model after conducting the bootstrapping technique.

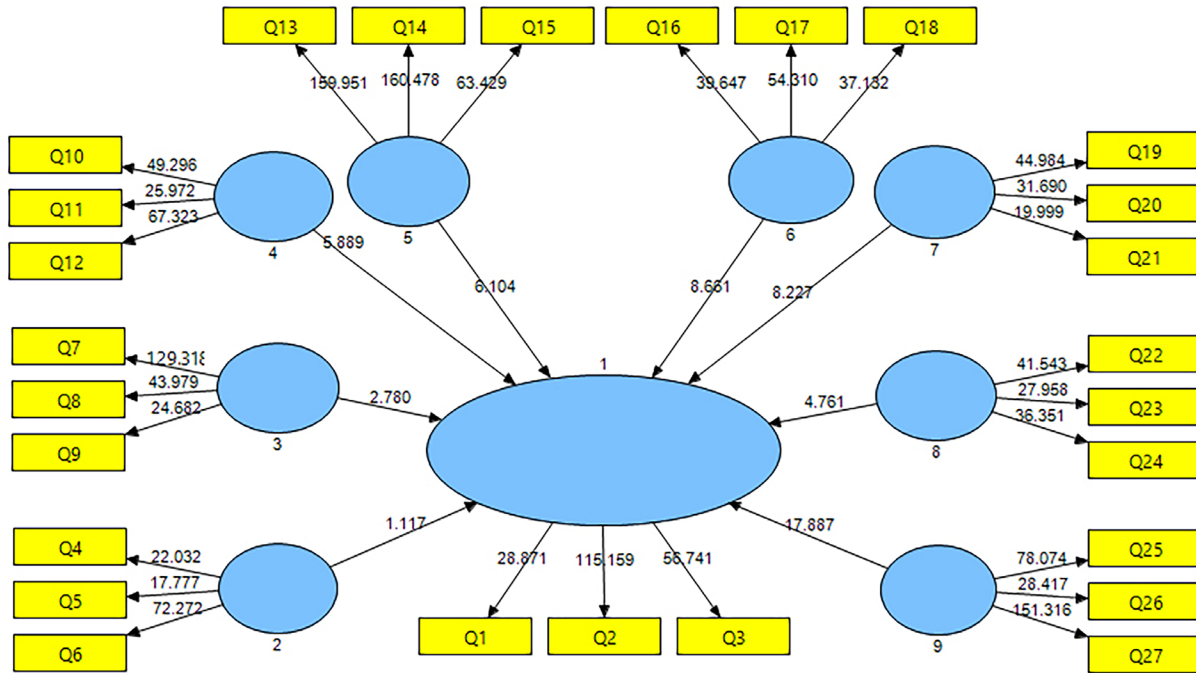


Fig. 3. Research Model after Bootstrapping Technique

*Note: 1. Participation of citizens in the reconstruction of deteriorated fabrics , 2. Respondents' opinion polls on recreation plans of deteriorated fabrics, 3. Establishing neighborhood participation centers, 4. Granting of bank facilities, 5. Providing conditions for mass developer participation, 6. Incentives and discounting policies, 7. Purchase of deteriorated property at a fair price by municipalities, 8. Exchange of deteriorated properties with state-owned real estate, 9. Facilitating integration with neighbors.

According to Henseler and Fassott (2010) and Andreev et al. (2009), the path coefficients derived from the research model are identified as standardized beta coefficients of ordinary least square regressions. They also highlighted that the path coefficients can obtain the partial validation of theatrical relationships assumed among variables. In this regard, Tenenhaus et al. (2005) highlighted the technique to determine the statistical inference and the confidence intervals of the path coefficients as identification of bootstrapping technique. This research utilized the PLS approach to examine the associations among research constructs and validate the research model in empowering the research on modeling the latent construct condition that subscribed to the Limayem et al. (2004) point of view. The outcomes of this section enabled this research to examine the suitability

of the research measures associated with each identified research constructs and the accuracy relationship that were identified in the previous sections.

Bootstrapping Technique

To examine the significant values for research constructs, this research used the bootstrapping technique and the T-Statistic ($|O/STERR|$) of bootstrapping technique associated with diverse outer and model's inner paths. Furthermore, the T-Statistic above the value of 1.96 were considered as acceptable T-Statistic (Petter et al., 2007). In addition, the P-Value approach (the probability value) was conducted to assure the authenticity of identified research constructs. The P-Value of 0.05 which means that there is a 0.05 (or 5 percent chance) that the two sets come from the same group was conducted in



this research. (Henseler & Fassott, 2010). A P-Value of 0.05 is considered as non-significant; because 5 percent of all scientific findings are false. Therefore, the P-Values

below 0.05 were considered as acceptable P-Values (Austin & Tu, 2004). Table 5 presents all the model paths and their significance.

Table 5. The Role of Government Policies in Attracting Citizen Participation in the Reconstruction of Urban Worn-out Texture

N	Connection Mode		Original Sample (Path Coefficient)	T-Statistics (O/STERR)	P-Value	The Test Result	
1	Respondents' opinion polls on recreation plans of deteriorated fabrics	=>	Participation of citizens in the reconstruction of worn-out texture	0.074	1.032	0.303	Reject
2	Establishing neighborhood participation centers	=>	Participation of citizens in the reconstruction of worn-out texture	0.115	2.615	0.009	Pass
3	Granting of bank facilities	=>	Participation of citizens in the reconstruction of worn-out texture	0.547	5.924	2.066E-10	Pass
4	Providing conditions for mass developer participation	=>	Participation of citizens in the reconstruction of worn-out texture	0.430	6.101	8.573E-11	Pass
5	Incentives and discounting policies	=>	Participation of citizens in the reconstruction of worn-out texture	0.694	8.526	1.511E-16	Pass
6	Purchase of deteriorated property at a fair price by municipalities	=>	Participation of citizens in the reconstruction of worn-out texture	0.224	7.974	3.621E-15	Pass
7	Exchange of deteriorated properties with state-owned real estate	=>	Participation of citizens in the reconstruction of worn-out texture	0.209	4.922	2.232E-08	Pass
8	Facilitating integration with neighbors	=>	Participation of citizens in the reconstruction of worn-out texture	1.225	17.710	1.379E-40	Pass
T-Statistics (O/STERR) > 1.96				P-Value < 0.05			

Based on the results of the above table, residents' opinion polls on recreation plans of deteriorated fabrics for increasing citizen participation in district 17 of Tehran in the reconstruction of deteriorated fabrics is not significant. Meanwhile, there is a significant relationship between the seven other policies attracting citizen participation in the reconstruction of deteriorated fabrics.

In the next step, the R square approach was used to examine how well the physical activity was predicted by the constructs (policies) associated with participation in the reconstruction of deteriorated fabrics. As a result, the R square value for participation in the reconstruction of

deteriorated fabrics was associated with its constructs, and on calculation, gave the value of 0.845 out of 1.

DISCUSSION OF FINDINGS

This section discusses the research findings in the previous part of this research. As stated, from the perspective of the citizens, residents' opinion polls about re-creation plans of deteriorated fabrics, identified in red on Table 5, do not have a significant relationship with attracting participation in the reconstruction of deteriorated fabrics. Nevertheless, seven out of



eight government policies have an impact on citizen participation in the reconstruction of deteriorated fabrics. However, the role and impact of each policy on the participation of citizens is not the same. Thus, in Table

6, the policies are presented according to their role in attracting participation, along with their calculated path coefficients.

Table 6. The Order of Impact of Government Policies on Citizens' Participation in the Reconstruction of Urban Worn out Textures

Rank	Government Policies to Attract Citizen Participation in the Reconstruction of Worn-out Texture	Original Sample (Path Coefficient)
1	Facilitating integration with neighbors	1.225
2	Incentives and discounting policies	0.694
3	Granting of bank facilities	0.547
4	Providing conditions for mass developer participation	0.430
5	Purchase of deteriorated property at a fair price by municipalities	0.224
6	Exchange of deteriorated properties with state-owned real estate	0.209
7	Establishing neighborhood participation centers	0.115
8	Respondents' opinion polls on recreation plans of deteriorated fabrics	0.074

As shown in Table 6, the importance and path coefficients of all research constructs were examined. Consequently, facilitating the process of integration with neighbors, incentives and discounting policies, granting bank facilities, providing conditions for mass developer participation, purchase of deteriorated property at a fair price by municipalities, exchange of deteriorated properties with state-owned real estate, and establishing neighborhood participation centers were highlighted as effective policies by all research respondents.

An important point should be taken into account at the end of this section. Although previous studies focused on the participation of citizens in reconstruction of deteriorated urban fabrics, most of them analyzed the effective factors separately and not holistically. However, this study collected all of the effective factors and analyzed them thoroughly. In this respect, there are no similar studies dealing with these policies and their impacts concurrently. As a result of such a research innovation, this study filled the gap to help the increase of citizen participation in reconstruction of deteriorated urban fabrics.

CONCLUSION

Regarding the numerous current problems of deteriorated fabrics, the reconstruction of deteriorated urban fabrics have become one of the most important concerns of urban managers. These structural existing problems, if not resolved, can have consequences in the scale of a disaster. Thus, governments are always

seeking to maximize the participation of citizens in the reconstruction of deteriorated fabrics. Since the regeneration of deteriorated urban fabrics requires the adoption of appropriate policies and delivering of encouragement services to the inhabitants of these districts, the policies undertaken by governments in this area are very important.

The present study, thus, examined the role of each of these policies in attracting citizen participation in the reconstruction of deteriorated urban fabrics, given the district 17 of Tehran as one of the most deteriorated areas of the city. The results indicate that facilitating the process of integration with neighbors, presenting incentives and discounting policies, granting banking facilities, providing conditions for mass developer participation, purchasing deteriorated properties at fair and reasonable prices by municipalities, exchanging deteriorated properties with newly created state-owned real estate and establishing neighborhood participation centers have the highest impacts on increasing citizen participation in reconstruction of the deteriorated fabrics with coefficients of influence of 1.225, 0.694, 0.547, 0.430, 0.224, 0.209 and 0.115, respectively. Residents' opinion polls on regeneration plans of deteriorated fabrics are, however, ineffective in this regard.

Finally, it is recommended that governors and legislators in this area strengthen the abovementioned effective policies and facilitate their access by the citizens. This is due to the fact that solving the problems of deteriorated fabrics in urban neighborhoods is not possible without the participation of residents.



REFERENCES

- Andreev, P., Heart, T., Maoz, H., & Pliskin, N. (2009). *Validating Formative Partial Least Squares (PLS) Models: Methodological Review and Empirical Illustration*, 193-209.
- Arnett, D.B., Laverie, D.A., & Meiers, A. (2003). Developing Parsimonious Retailer Equity Indexes Using Partial Least Squares Analysis: A Method and Applications. *Journal of Retailing*, 79(3), 161-170.
- Austin, P.C., & Tu, J.V. (2004). Bootstrap Methods for Developing Predictive Models. *The American Statistician*, 58(2), 131-137.
- Brown, J.A., & Manly, B.J.F. (1998). Restricted Adaptive Cluster Sampling. *Environmental and Ecological Statistics*, 5(1), 49-63.
- Chin, W.W. (1998). The Partial Least Squares Approach to Structural Equation Modeling. *Modern Methods for Business Research*, 295(2), 295-336.
- Chin, W.W., Johnson, N., & Schwarz, A. (2008). A Fast form Approach to Measuring Technology Acceptance and other Constructs. *MIS Quarterly*, 687-703.
- Cochran, W.G. (2007). *Sampling Techniques*. John Wiley & Sons, 1-428.
- Cronbach, L.J. (1951). Coefficient Alpha and the Internal Structure of Tests. *Psychometrika*, 16(3), 297-334.
- Daroudi, M.R., & Arabian, R. (2015). The Feasibility Study of the Approach of Social Participation in the Renewal of the Worn out Textures. *Journal of Multidisciplinary Engineering Science and Technology*, 2(4), 683-690.
- Duarte, P.A.O., Raposo, M.L.B., Vinzi, V.E., Chin, W.W., Henseler, J., & Wang, H. (2010). *Handbook of Partial Least Squares: Concepts, Methods and Applications*, 1-850.
- Fabrigar, L.R., Porter, R.D., & Norris, M.E. (2010). Some Things You Should Know about Structural Equation Modeling but Never Thought to Ask. *Journal of Consumer Psychology*, 20(2), 221-225.
- Fornell, C., & Larcker, D.F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 39-50.
- Gefen, D., & Straub, D. (2005). A Practical Guide to Factorial Validity Using PLS-Graph: Tutorial and Annotated Example. *Communications of the Association for Information Systems*, 16(1), 89-109.
- Gorjinia, A., & Amini, E. (2016). Strategies for Rehabilitation and Renovation of Old Urban, with a Sustainable Development Approach Case Study: Nineteen Region of Tehran. *Bulletin De La Société Royale Des Sciences De Liège*, 85, 1717-1729.
- Green, S.B., & Salkind, N.J. (2010). *Using SPSS for Windows and Macintosh: Analyzing and Understanding Data*. Prentice Hall Press, 1-448.
- Hair, J.F., Hult, G.T.M., Ringle, C., & Sarstedt, M. (2016). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*. Sage Publications, 1-328.
- Hair, J.F., Ringle, C.M., & Sarstedt, M. (2011). PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152.
- Henseler, J., & Fassott, G. (2010). Testing Moderating Effects in PLS Path Models: An Illustration of Available Procedures. In *Handbook of Partial Least Squares*. Springer Berlin Heidelberg, 713-735.
- Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: a review of four recent studies. *Strategic management journal*, 20(2), 195-204.
- Imani, B., Kanooni, R., Biniaz, M., & ALI, M.A. (2016). Urban Decay Vulnerability Mitigation Strategies Against Earthquake Case Study: Imamzadeh Hasan Neighborhood in Tehran. *BAGH-I-NAZAR*, 13(39), 75-90.
- Knight, A., & Ruddock, L. (Eds.). (2009). *Advanced Research Methods in the Built Environment*. John Wiley & Sons, 1-233.
- Limayem, M., Khalifa, M., & Chin, W.W. (2004). CASE Tools Usage and Impact on System Development Performance. *Journal of Organizational Computing and Electronic Commerce*, 14(3), 153-174.
- Loehlin, J.C. (2004). *Latent Variable Models: An Introduction to Factor, Path, and Structural Equation Analysis*. Psychology Press, 1-330.
- Momeni, M., Bikmohammadi, H., & Mehdizadeh, Z. (2010). Analysis of the Disigns of Reconstruction and Renovation of Deteriorated Textures (Case Study Isfahan Jooybare Neighborhood), *Urban and Regional Studies and Researches*, 2(7), 31-52.
- Nakhi, A.A., Ahmari, N., & Rezaei, S. (2016). Renovation and Rehabilitation Strategies for Worn-out Texture of Ab-Anbar-No District in Sari Using SWOT Technique. *Open Journal of Geology*, 6(04), 270-283.
- Naseri, S., & Bolandian, M.M. (2014). Review of Strategic Management Plans to Improve and Upgrade the Urban Tissue and Provide a Superior Model in Interventional Procedures. *Urban Management*, 13(35), 143-166.
- Petter, S., Straub, D., & Rai, A. (2007). Specifying



Formative Constructs in Information Systems Research. *Mis Quarterly*, 623-656.

Piškur, B., Daniëls, R., Jongmans, M.J., Ketelaar, M., Smeets, R.J., Norton, M., & Beurskens, A.J. (2014). Participation and Social Participation: Are they Distinct Concepts?. *Clinical Rehabilitation*, 28(3), 211-220.

Pourzargar, M. (2016). Regeneration and Restoration of Old Texture with a Perspective to Protect the Identity of Housing, Case Study–Joybareh Locality in Isfahan. *BAGH-I-NAZAR*, 12(37), 41-52.

Region 17, Tehran Municipality. (2018). Retrieved 2018, from <http://region17.tehran.ir/>.

Ringle, C.M., Wende, S., & Becker, J.M. (2015). SmartPLS 3. Boenningstedt: SmartPLS GmbH, <http://www.smartpls.com>.

Shamaei, A., & Pourahmad, A. (2005). *Rehabilitation and Urban Renewal from the Perspective of Geography*. Tehran, University of Tehran, 1-414.

Strategic National Document for the Restoration, Improvement, and Reconstruction and Empowerment of Worn-out and Inefficient Urban Textures. (2017). *Ministry of Roads and Urban Development*, <http://udrc.ir/component/k2/item/3810>, 11-28.

Tenenhaus, M., Vinzi, V.E., Chatelin, Y.M., & Lauro, C. (2005). PLS Path Modeling. *Computational Statistics & Data Analysis*, 48(1), 159-205.

Thompson, S.K. (1990). Adaptive Cluster Sampling. *Journal of the American Statistical Association*, 85(412), 1050-1059.

Wong, K.K.K. (2013). Partial Least Squares Structural Equation Modeling (PLS-SEM) Techniques Using Smartpls. *Marketing Bulletin*, 24(1), 1-32.