Defining Neighborhood, Analysis of Two Different Approaches: Expert-oriented Approach of Theorists and Perceptual Approach of Residents*

Khashayar Emadi[1] and Ali Ghaffari[2**]

[1] Ph.D. Student of Urban Design, Department of Urban and Regional Planning and Design, Faculty of Architecture and Urban Planning, Shahid Beheshti University, Tehran, Iran.

[2] Professor of Urban Design, Department of Urban and Regional Planning and Design, Faculty of Architecture and Urban Planning, Shahid Beheshti University, Tehran, Iran.

ABSTRACT: The different offered definitions of "Neighborhood Unit" in various approaches and viewpoints by different specialized views, on the one hand; and excessive attention to expert-oriented and reduced viewpoints as well as neglecting residents' perception of the neighborhood on the other hand necessitate providing a complete and exact definition of neighborhood which can cover all approaches and viewpoints. Therefore, this paper applied the content analysis research method – descriptive content analysis- to analyze the numerous important neighborhood definitions meticulously. It scrutinizes two different approaches, specialized views (expert-oriented) and the perceptual approach (resident-oriented) in order to extract the most appropriate and repeated indicators, and finally introduce a comprehensive definition of neighborhood according to these indicators. Result show significant differences exist between neighborhood characteristics according to the definitions given by experts, famous theories and perceptual understanding of residents. For instance the definitions of neighborhood center(s), land uses, boundaries of neighborhood and etc. were used to derive the final appropriate indicators obtained from both approaches. The indicators are: neighborhood boundaries including streets and traffic roads; natural elements and social distinctions such as racial or ethnical distinctions; neighborhood area as it is perceptible for residents (50-500 acres); neighborhood land use (providing daily and weekly needs, appropriate access); economic- social homogeneity (social class, and income level of residents, land value); social interaction (social relations and residents' participation); and semantic and particular symbols of neighborhood (natural and historical characteristics and neighborhood meanings).

Keywords: Neighborhood Definition, Expert Approach, Perceptual Approach, Residents Definitions, Specialists Definitions.

INTRODUCTION

Neighborhood is one of the main concepts of urban design and planning in both theoretical and professional fields, but no comprehensive definition is offered for this concept. One of the reasons for existence of a variety of definitions is the different attitudes and viewpoints, through which neighborhood is considered. It can be said that these definitions face two major problems. Firstly, each definition relies on one or some of the neighborhood dimensions, and no comprehensive inclusive definitions have yet been presented. Secondly, most of the presented definitions offered by different scientific theorists have an extrinsic, planning-based and expert-oriented basis (often quantitative). They disregard the definitions offered by the residents, which are based on their neighborhood perception. Regarding the mentioned issues, the questions arose for the study include the state of obtaining a comprehensive definition from experts, people and a combination of both views that covers the

---

expertly and perceptual approaches. Moreover, this paper seeks to find how this definition can be achieved. In this regard, the main purpose of this study is providing the conceptual frameworks for defining the neighborhood according to the views of the experts and people on the basis of previous definitions and results in order to provide a more comprehensive and novel definition that can cover both approaches. In fact, the first definitions based on the specialized approach are planning-oriented with up/down order views, while the second definitions are perception-oriented based on the people attitudes and perception with down/up order views.

RESEARCH METHODOLOGY

Whereas this research does not apply quantitative research method and statistical models, different methods can be used to survey the definitions of a phenomenon or subject such as neighborhood unit, including chronological survey method, or viewpoint survey method. Since this research is looking for the recognition of the main and most perfect characteristics of the neighborhood definition offered by different viewpoints and theories during the long time in order to obtain the main dimensions of the neighborhood definition, the "Content Analysis" research method and data analysis method - descriptive type of content analysis- is applied in this research. Using the descriptive type of content analysis method, all words and phrases of neighborhood definitions and concepts are surveyed and analyzed to deduce the most repeated and important qualitative and quantitative characteristics of the neighborhood. Eventually, the most perfect and comprehensive definition is presented on the base of the derived characteristics. The data collection is librarian study in this research.

FIRST APPROACH: EXPERT APPROACH; THE DEFINITIONS OF SPECIALISTS

Extracting the Main Characteristics

Based on the analysis of the previous studies, specialized definitions by the theorists in related disciplines which often have a physical- functional and quantitative approaches, can be categorized into three different dimensions regarding their expressed characteristics of the neighborhood:

Table 1. The Characteristics of Neighborhood Definitions by Different Theorists

Dimensions Theorist	The Physical Characteristic of the Neighborhood	The Functional Characteristic of the Neighborhood	The Social and Demographic Characteristic of the Neighborhood
Clarence Perry in1930s (Walters, 2007. p. 145)	- 60-Acre Area - ¼ Mile Radius - Using the Main Street as Neighborhood Boundaries - Emphasis on Neighborhood Center	- Open Public Spaces, Local Parks, Local Institutions and Local Stores - Accessibility to All Public Services and Facilities Residents Need	- Population: 5000-9000 - Applying Urban Design Qualities to Improve Local Identity And Sense of Community
Pan Nelson in1940s (Bailly,1959)		Elementary School, Playground, Kindergarten, Social Spaces, Educational Spaces, Stores	- Population Approximately 5000 - Social Spaces in the Neighborhood
Angel Heart (Bailly,1959)	- 1/2 Mile Radius and ¼ Mile Distance of School	Playground, Day Care Centers, Schools	- Population Approximately 6000
(Hoppenfeld,1967) (for Village planning in Maryland,1967)	200 – 500 Acre Area	School, Retail Stores, Playground and Pool, Day Care, Facilities for Mothers and Young Children	3000 – 5000 Population
Suzanne Keller (1968)	Emphasizing Geographical Boundaries		Combination of Geographical Boundaries with Ethnical and Cultural Characteristics of Residents and Psychological Unity

(Cooke, 1980, p. 12)		The Base Environment for Underlying Primary Actions	Social Organization for Widespread Recognition of People to Create an Individual and Group Effective Mutual Interaction
(Habibi & Masaeli,1999)	Approximately 300- 375 Meters Radius	Mosque, School, Daily and Weekly Facilities and Services, (Commercial, Sport, Leisure)	Population Approximately 3500- 5000
Marans and Rodgers, (1975)	Environed by Main Streets	Elementary School as a Critical Landmark	Similar to a Planned Community
(Alexander et al.,1977)	Locating Land Uses Such as Grocery and Café at the Neighborhood Edge to Make Boundaries Clear		- Agreement on Local Government and Local Decisions, Particularly about Public Services 500-1500
(Gold & Kolb, 1997, p. 928)	Certain Place, Space for Residence		Abundant Daily Interactions, Collaboration to Solve Problems
(Glaster & Hesser, 1982, p. 237)	A District Including Many Allied Blocks, Environed by Perceived Boundaries Such as Topographical Boundaries and Transport Lines		Homogeneous Social and Economic Characteristics of Residents
(Chaskin, 1997)	A District Including Few Blocks	Daily Services and Functions Like Church	A Primary Unit to Create Identity and Local Social Nodes
Duany and Zyberk 1994 (new urbanism theory) (Farr, 2007) (Cowan, 2005)	- ¼ Mile Radius (Approximately 5 Min - Certain Neighborhood Center	Elementary School in Neighborhood Center, Public Transportation	- Balanced Combination of Human Activities, Social Mix
Calthorpe 1993 (TOD pattern) (Farr, 2007) (Grant, 2006) (Caltrhope, 1993)	- Semi- circle Form District, 160-Acre Area -10 Min Walking Radius to Public Transportation Station - 160-Acre Area	Mixed Functions, Mixed Residential Patterns, Considering Streets Hierarchy	- Creating Unity Among Different Ages and Social Groups and Creating Sense of Place
Kearns & Parkinson (2001)		A Space to Move through Out for Social and Economic Activities Such as Visiting Friends and Shopping	Combination of Social Organization and Built Environment Contributes to One's Identity
(for west palm development plan) (Stephenson, 2002	5 Min Walking Distance from City Center	Educational and Cultural Center, Park, Commercial Areas and Offices	1800
Urban village theory (Neal, 2003) (Magnaghi & Kerr, 2005)	Emphasis on the Space as Neighborhood Center	Mixed Uses, Mixed Residential Patterns, Necessary Services and Facilities an Appropriate Walking Distance of Residential Units	Residential Participation in Planning and Management of Neighborhood, - Neighborhood Center as a Civic Space for Social Relations and Public Gathering
(Martin, 2003)			Place where Human Activities, Social Interactions, Political and Social-economic Commitments Occur

(Spreiregen and De Paz, 2006)	- Approximately 3 Miles Radius - Approximately 18000 Acre Area	Drugstore, Automobile Services, Supermarket & Daily Services in Neighborhood Center	7500- 20000
American planning association (2006)	More Than 3 Face- blocks	Park, Public Spaces, Services Center	Appropriate to Evoke Direct Resident Participation Rather than Appropriate for Economic Development
Leed rating system (us green building council, 2006)	Almost 320 Acre	Civic and Public Spaces, Mixed Uses, Public Transportation,	
(Vidyarth, 2010) (for Delhi master plan in 1962)	Including 4 -6 Alleys	School, Daily and Weekly Stores	
(Gibbs, 2011)	Approximately 1/5 Miles Radius	Daily Services Like Drugstore and Bakery	2000
(Park and Rogers, 2014)	125 – 500 Acre Area	Central Activity Points Like School and Parks, Retail Stores and Daily- weekly Services and Facilities	Homogeneous Social and Economic Characteristics of Residents, Similar Economic Values of Houses - Population 500-5000

The Conclusion of Mentioned Characteristics for Obtaining the Indicators of the First Approach

The criterion for selecting the indicators is the frequency of being repeated in the tables. The indicators which are more repeated in the definitions are extracted and categorized in three dimensions, i.e. physical, functional and social dimensions, based on their nature and usage. The quantity and quality of these indicators are usually discussed in definitions.

Table 2. Extracted Indicators for Neighborhood Definition Based on the Expert Approach

Dimensions	Indicators	Explanations
Physical	- Radius (Relative Distance of the Center to the Neighborhood Edges)	
	- Neighborhood Area	
	- Center of the Neighborhood	- Public Open Space
	- Rather Definite Boundaries	
Functional	- Providing Daily and Weekly Land Uses	- Quantity Provision of Land Use Shares -Appropriate Accessibility to Land Uses
	- Mixed Uses	
Social	Population	
	- Social-economic Homogeneity	- Social and Wealthy Classes Homogeneity of The Residents
	- Social Interactions	- Human and Social Interactions - Residents Collaborations and Partnership

Cities make endless efforts to reach a better competitive position among others in the new global economy. These result are obtained regarding more frequency of the characteristics. The average neighborhood radius (distance from the center to its edges) is about 500 meters, equivalent to approximately 5-10 minutes of walking and an area of 50-500 acres (20-200 hectares). The most important frequent functions are respectively as follows: 1- Elementary schools, 2- Commercial and public service centers providing and supplying daily and weekly needs, 3- Green spaces (parks) and leisure and amusement spaces, particularly for children, 4- Local cultural and care

centers, 5- Public transportation, 6- Local institutions. Moreover, mixed uses are recommended in most of the definitions. According to the definitions, the population ranges between 2000 and 15000 in the social domain. (Most often 5000 – 1000). In general, the presented definitions are often based on physical and functional characteristics, and few of them, as mentioned by "Glaster and Hesser" and "Chaskin", have considered social views and relations. The economic and social conditions are suggested homogeneously in most of the definitions. The social interactions have also been considered in most of the required definitions in that regard, but few definitions have referred to small civic public spaces, such as green areas. The outstanding point to notice is the informal and intimate social relations which have been attributed in most of the definitions at micro-neighborhood scales. Also, a limited number of definitions have referred to participation and collaborations among residents in daily affairs, management system of neighborhoods. Local decision-making aspects indicate that most of the definitions have not considered neighborhood managements and participation of the residents in making decisions.

SECOND APPROACH: PERCEPTUAL APPROACH; RESIDENTS' DEFINITIONS

According to the previous section, most of the neighborhood definitions are expert-oriented and based on reduced approaches that may vary from residents' approach. Lupton (2003) mentioned that the neighborhood concept has subjective characteristics which are not experienced in the same way by all people. Identifying the neighborhood boundaries is important in practical fields and urban interventions; because in case of improper identification of the neighborhood and agreed boundaries by the residents, these urban interventions cannot be succeeded, particularly in residents' participations (Minnery et al., 2009, p. 490). On the other hand, this issue is quite important for the different researchers due to different accomplished researches related to the different fields and sciences about the context of neighborhood that investigate the effects of neighborhood characteristics on considered variables, such as the studies related to the neighborhood effects on public health (Perchoux et al., 2016; Flowerdew et al., 2008), and crime occurrences (Timothy & Waller, 2013). Rivlin believes that the criterion for neighborhood identification is the recognition and verifications by people. Residents and users agreement on boundaries, name, and identification of distinct characteristics are the

prerequisite for this recognition (Rivlin, 1987, p. 2). The results of the previous studies can be categorized in three recognition and analysis levels to achieve an appropriate definition for this approach. The Appropriate conclusion of these analyzing levels instructs us to introduce a better neighborhood definition in this approach.

First Level Analysis: Defining the Neighborhood Boundaries

Generally, the results of these studies indicate varieties and differencesbetween the defined neighborhoods according to residents, and also among the defined neighborhood and their boundaries according the residents, and the official neighborhood defined by the urban organizations (Hart & Waller, 2013; Campbell et al., 2009; Coulton et al., 2001; Seghatoleslami & Aminzade, 2009; Minnery et al., 2009; Banerjee & Baer,1984). About the relation between the social-demographical characteristics of residents and their defined neighborhood size, previous studies have proved that age (Roosa et al., 2009; Coulton et al., 2001; Orford & Leigh, 2014), sex and gender (Kitchen & Blades, 2002; Roosa et al., 2009; Minniery et al., 2009; Coulton et al., 2001; Guest & Lee, 1984; Orford & Leigh, 2014), race and ethnic factors (Banerjee Bbaer,1984; Lee & Campbell,1997), having children, and length of the residence (Minnery et al., 2009; Lee & Campbell,1997; Guest & Lee,1984) are the main social, economic and demographical variables which can affect residents' definitions of neighborhood. Also some studies have investigated the relationship between the size of defined and depicted neighborhoods by residents and their location in different situations and regions (Valle´e et al., 2015; Haney & Knowles, 1978; Guest & Lee, 1984).

Second Level of the Analysis: The Reasons of the Residents' Definitions about the Neighborhood and Its Boundaries

Few studies have tried to discover the effective factors and reasons that the residents express about in defining their neighborhood and the required boundaries.

The most important characteristics were defined after a study in 1984 by Banergee and Baer, and a study by Lebel et al., and the results of the mapping technique and interviews of local key actors. They were socioeconomic situation, some physical barriers, and the strong sense of place, socially relevant institutions, and some demographics characteristics. (Lebel et al., 2007) The research by Campbell et al. (2009) discovered four main reasons about the residents' definitions: physical

and institutional characteristics, ethnic-racial and social class-related characteristics, symbolic identities, as well as crimes and security threats by the surrounding regions. In another study in Kelvin Glove district / Brisbane (2009), 134 respondents used the "Abstract Forms", 132 respondents referred to the main pathways, and 10 persons defined in a skeletal (linear) (Minnery et al., 2009). The relative and general results of a research in Agra / Ghana indicated that historical factors and neighborhood forming process in colonization era were effective (Engstrom et al., 2013). And finally in newest research in Gold Coast by Alidoust et al. (2017) demonstrated the importance of three factors: built-form patterns (including physical context characteristics, edges, natural and artificial linear elements), the spatial distribution of resident's social network, and the personal social and physical attributes of older people.

Table 3. The Effective Factors in Defining Neighborhood Boundaries

Researches	Effective Factors in Defining Neighborhood Boundaries				
Banerjee and Baer, 1984	Main Arterial			Strong Natural Edges	
Lebel et al., 2007	Socio-economic Situation,	Some Physical Barriers (Railways, Commercial Axes, Major Streets)	The Strong Sense of Place	Socially Relevant Institutions Such as School and Churches	Some Demographics Characteristics (Physical State of Residence, Dwelling Types, The Ratio of Tenants/ Homeowners)
Campbell et al., 2009	Physical- institutional Characteristic		Racial and Ethnic Characteristics	Symbolic Identities	Crimes and Security Threats of Close Regions
Minnery et al., 2009	Abstract Forms		Main Streets		Skeletal Form
Engstrom et al., 2013	Physical Characteristic		Racial and Ethnical Characteristics	Historical Characteristics of Neighborhood During Its Formation	
Alidoust et al., 2017	Built-form Patterns		Spatial Distribution of Resident's Social Network		Personal Social and Physical Attributes

Third Level of the Analysis: The Nature of the Defined Neighborhood by Residents

After the study by Birch et al. (1979) indicated that the residents perceived and defined four hierarchies of neighborhood and the study by Guest and Lee (1984), (results in Table 4), Chaskin -by summarizing previous theoretical and experimental studies-, concluded that the definition of the neighborhood by its residents can be categorized in four principles: 1- Neighborhood as a place or space unit, in which residence and related activities occur (physical-functional), 2- Neighborhood as a complex of social relations (social), 3- Neighborhood as a unit defined by its relations to one or some activities of organizations (institutional), 4- Neighborhood as a symbol, with a recognized name and identity (symbolic). (Chaskin, 1997, p. 53). In a different studies analyzing the definitions introduced by association leaders of each district of the city, the nature of neighborhood definitions was considered in four categories (Table 4) (Haeberle, 1988). In another research by Banergee and Baer (1984) the results showed that the residents acknowledge their neighborhood as primarily a social environment and then a physical plan (Table 4). According to previous researches, Kallus and Law-Yone analyzed the transformations related to time in the neighborhood concept by theorists (Table 4) (Kallus & Law-Yone, 2000). Lebel, Pampalon and Villeneuve introduced three main perspectives to define neighborhood in a multi-perspective approach. These perspectives include: historical perspective, socioeconomic perspective, and perception perspective (Lebel et al., 2007). And recently, three main concepts of identity, social capital, and the subjective affair were obtained from 32 individuals, by a research in Kan neighborhood in region 5 in Tehran via the phenomenological-descriptive method (Gharshi et al., 2016).

Table 4. The Nature of Neighborhood Definition in Theoretical and Experiential (Field) Researches

Researches	Nature of Defined Neighborhood				
Birch et el. 1979	Territorial (Play Territorial of Children or a District Equal or Larger than District	Symbolic (Neighborhood Name, Main Streets Around the Neighborhood)	Economic- social (Congruity of Residents' Social and Economic Condition)	Functional (Neighborhood and School)	
Chaskin, 1997	Physical and Functional	Social	Semantic - symbolic	Institutional	
Guest & Lee 1984	Geographical or Territorial	Social (Social Relation, Sense of Community)		Institutional	
Lee & Campbell, 1997	Social		Social		
Haeberle, 1988	etc.	Residents' Social Relations	Demographic Characteristics of Residents	Physical	
Vanergee and Baer, 1984	Physical	Social (Important)	Security	Economic-functional	Environment Appearance and Its Atmosphere
Kallus & Law-Yone, 2000	Physical and Functional	Social (Human Oriented)		Semantic (Relation between People and Place)	
Lebel et al., 2007	Historical	Socio- economic		Perception (Subjective)	
Gharshi et al., 2016	Identity Making	Social Capital		Subjective Affair	

Conclusion from the Performed Studies for Obtaining Second Approach Indicators

Analysis of the previous studies in perception and definition of the neighborhood by residents indicates that these indicators (Table 5) have been most noteworthy and can be categorized in three dimensions, namely: physical, social and symbolic aspects.

Table 5. Neighborhood Definition Indicators in Residents' Point of View

Dimensions	Indicators	Explanations and Sub-indicators
Physical	- Building-related Characteristics	- Distinct Physical Identity-making Factors such as using Similar Materials and Distinction of another Regions
	- Neighborhood Boundaries	- Arterials around the Neighborhood - Natural Elements around the Neighborhood
	- Territory	- Including Few Blocks to All Region (Depending on the Conditions and Personal Characteristics of the Residents)
Social	- Resident's Social Interactions	- Social Relations with Neighbors - Recognition of Neighbors
	- Economic and Social Homogeneity	- Similar Value of Neighborhood's Land Price - Similar Social Class (Social Level) and Income Level of Residents
Symbolic	- Symbolic Factors	- Particular Land Uses - Historical Characteristics - Particular Religion and Demographical Characteristics (Racial, Ethnical and …) of Residents - Semantic Values

In fact, building-physical characteristics are the ones that cause the neighborhood to become distinct from other regions or have special importance for their residents; for example, the physical form and particular architecture of the houses in a neighborhood. Neighborhood boundaries have been one of the most important and discussable

items in this kind of studies. Residents often notify and perceive their neighborhood boundaries in two ways, traffic roads and main roads encompassing the neighborhood, and also the natural elements limiting the neighborhood, such as rivers, hills and green strips. Some studies showed that some of the residents define their neighborhoods as a territory, particularly where there are no distinct and salient factors. Social relations of the residents including their abundant mutual interactions or even superficial recognition of the residents can be very effective in the quality of defining the neighborhood and its size and dimensions by the residents. One of the other social characteristics which is considerable in neighborhood definition is similarity in general, social, and economic conditions of the residents and this homogeneity is expressed in social and wealthy classes and also in the neighborhood's land prices. Symbolic and semantic attributes are characteristics which include not only the historical precedents and religion, racial, and demographic characteristics of the residents, but also crime rates and security threats of the surrounding neighborhoods. In fact, the residents sometimes determine their neighborhood boundaries regarding separations from the rather disreputable neighborhoods. Moreover, some special land uses or macro scale land uses (bigger than neighborhood scale) can effect neighborhood definitions. Semantic values are some personal or group semantic concepts that are respectful and of vital importance for residents.

Analysis of the Relation of the Neighborhood Defined by the Residents and the Neighborhood Units (Clarence Perry Idea, "New Urbanism")

The mentioned study by Minnery et al., (2009) showed that the maximum radius of the considered neighborhood in 10 percent of the depicted subjective maps was about 400 meters. Only 20 percent of them had the maximum radius of 800-meter approximately (the standard and maximum radius for the neighborhood units presented in most of the scientific resources). The important point in Banergee and Baer study (1984) was the inattention of residents to some main ideas of neighborhood units such as centrality and number of cores and nodes in the residents' subjective maps, which was indeed in contrast to the high importance of centrality and the neighborhood center in the main idea of the neighboring units. This result was affirmed by Seghatoleslam and Aminzade studies. Another important point was the emphasis of residents on the natural and topographical elements to determine their residential place boundaries, while the neighborhood boundaries were strongly determined by the traffic ways according to the Perry's idea. The last point of inattention was about the schools' quality and adjacency (Banerjee & Baer, 1984). In a study in Brisbane / Australia, it was proved that there is no significant relation between the existing schools in the neighborhood (either elementary or high school) and the defined subjective neighborhoods by the residents (Minnery et al., 2009).

CONCLUSION

Comparing neighborhood definition indicators of two approaches highlights the significance of some noticeable points. Firstly, the residents pay less attention to the local land use in the neighborhood definition compared to the experts. They probably consider them as the prerequisites of a neighborhood, while determining the land use in experts' definitions is a main point of consideration. Secondly, opposing theorists, the residents do not emphasize on the center of the neighborhoods and they mainly consider the boundaries, while it is an accentuated idea in Perry's theorem and the new urbanists' patterns. Thirdly, residents pay more heed to the symbolic factors and phenomena to define the neighborhood. The size of the defined neighborhood is another issue of debate. Eventually, the social and economic homogeneity of the residents are similarly reflected in both definitions. Despite the new urbanism theories, the majority of theorists as well as the residents have also emphasized on social and economic homogeneity.

Finally, by deriving the indicators of neighborhood definition from both approaches, these indicators can be provided for defining the neighborhood (Table 6). In fact, these indicators are acceptable in the first place for both of the approaches, and secondly, they are realistic regarding the neighborhood areas in the modern cities.

Table 6. The Final Indicators of Comprehensive Neighborhood Definition Extracted of Both Approaches

Indicators	Explanations and Sub-indicators
Neighborhood Boundaries	- Streets and Traffic Arterials - Natural Elements - Social Distinctions (Racial. Ethnical and Etc.)
Area	- Perceptible for Residents (Perceptible Territorial)

Neighborhood Land Uses	- Providing Daily and Weekly Needs - Appropriate Access
Economic-social Homogeneity	- Social Class (Social Level) and Income Level of Residents - Land Value
Social Interaction	- Social Relations - Residents' Participation
Semantic and Particular Symbols of Neighborhood	- Natural and Historical Characteristics and Neighborhood Meanings

According to Table 6, three important indicators in experts' approach have not presented. Firstly, population factor is not indicated due to the extensive differences between the population densities in different cities. Therefore, a definite rate of population cannot be determined for the neighborhood. Secondly, the radius is not mentioned. Regarding the realistic view, the neighborhood cannot be considered a circle, for both existing areas. The designable districts and the appropriate radius of the neighborhood cannot be an appropriate indicator for that neighborhood, and it is to say that the neighborhood radius defined by the residents is not similar to neighborhood radius defined by the theorists. The third eliminated indicator is the neighborhood center. Despite being emphasized by the new urbanists and Perry's theorem, it seems to be an inappropriate indicator to define the neighborhood, because many of the residents referred to actual numbers of nodes and centers.

The indicators to present a perfect definition of neighborhood are introduced as six indicators. The first indicator as emphasized by both approaches, especially by the residents' definitions is the neighborhood boundaries. Boundaries can be defined in the following three forms of connection routes, natural terrains, and social distinctions (such as race). The second indicator is the approximate area, which should primarily be perceivable by the residents and should also be appropriate for creating local relations and social recognition of residents. Based on the fulfilled studies and researches this area can cover 50-500 acres (20-200 hectares). The third indicator is local land use. Despite being ignored by the residents, it is presented as a prerequisite indicator because of its importance to supply daily and weekly requirements of the residents. Nonetheless, suitable accessibility to these land uses should be provided by an appropriate spatial distribution. The fourth indicator is the social and economic homogeneity of the residents, expressed in similar social classes and income levels of residents. Perhaps, one of the ways to provide this indicator can be land price control and providing price integrity in the neighborhood. Moreover, the second approach can be

lack of combining the land uses and symbols of different social, racial and religion groups in a neighborhood. The fifth indicator is social interactions that include social relations and residents' participations with each other, the first of which can be provided by creating open public spaces in the neighborhood, such as the neighborhood center, the neighborhood sub-center, and open spaces within the residential blocks. The second item (participation) can be developed by supporting the local management and the local associations. The last indicator in the comprehensive definition of the neighborhood is the particular semantic points and symbols of each neighborhood such as historical, natural, and semantic characteristics of the neighborhood. The identity of a neighborhood can be improved through amplification and signalizing the points in the last indicator.

Concluding from the stated points and based on the final extracted indicators and factors, the perfect and new definition of the neighborhood can be expressed as follows:

The Neighborhood is a district with an area of 20-200 hectares, surrounded by distinct and recognizable boundaries which supply daily and weekly requirements for the residents by efficient land uses and appropriate accessibility. A neighborhood can be distinguished from other regions of city by its natural, historical, physical and semantic particular characteristics. The residents of a neighborhood are rather socially and economically homogeneous and have no main and basic differences. Moreover, efficient and appropriate social relations are developed among the residents of a neighborhood by suitable design of civic-public spaces, active centers and sub-centers, and open public spaces among residential blocks. This neighborhood is governed and controlled by local management and the neighborhood decision-making is accomplished by its residents.

Comparing the results of this research with the other similar ones introducing the definition of the neighborhood and its characteristics, it would appear the main distinct point of this research is the application of both expert approach- related to specialist- and perception approach-

related to residents. Studying the theories such as Roger and Park's article and new urbanism's theory- from the first approach- and reviewing the results of the famous theorist such as Banergee and Chaskin- from the second approach- the neighborhood can be merely defined through one of these approaches. It can be asserted that the neighborhood definition presented in this approach is more perfect and more comprehensive than the previous ones, since it includes expert viewpoints of specialist and theorists and have considered the perception approach by residents' definition.

In fact on the basis of an experts-oriented and people-oriented spectrum, results of this research led to introducing two main approaches for the neighborhood definition. Finally, a perfect and unique definition was obtained by extracting and introducing indicators of a comprehensive neighborhood definition by using two approaches. Therefore, based on other viewpoints that may be rooted in other sciences, various analyses can be done. Moreover, similar or different conclusions can be made that can definitely be effective in completion of the results obtained in this study.

REFERENCES

Alexander, C., Ishikawa, S., & Silverstein, M. (1977). *A Pattern Language: Towns, Buildings, Construction.* Oxford, UK: Oxford University Press.

Alidoust, S., Bosman, C., Holden, G., Shearer, H., & Shutter, L. (2017). The Spatial Dimensions of Neighborhood: How Older People Define It. *Journal of Urban Design*, 22(5), 547-567.

American Planning Association. (2006). *Planning and Urban Design Standards. Hoboken*. NJ: Wiley.

Bailly, P.C. (1959). *An Urban Elementary School for Boston. Cambridge*. MA: Massachusetts Institute of Technology.

Banergee, T., & Bear, C.W. (1984). *Beyond the Neighborhood Unit, Resident Environment and Public Policies*. New York: Springer Science.

Calthrope, P. (1993). *The Next American Metropolis: Ecology, Community, and the American Dream*. New York: Princeton Architecture Press.

Campbell, L., Robitaille, E., Riva, M., & McLaren, L. (2009). Subjective Construction of Neighborhood Boundaries: Lessons from a Qualitative Study of Four Neighborhoods. *Journal of Urban Affairs*, 31(4), 416-490.

Chaskin, R.J. (1997). Perspectives on Neighborhood and Community: A Review of the Literature. *The Social Service Review*, 77(4), 521–47.

Cooke, P. (1980). *Localities, the Changing Face of Urban Britian*. London: Unwin Hyman.

Coulton, C.J., Korbin, J., Chan, T., & Su, M. (2001). Mapping Residents' Perceptions of Neighborhood Boundaries: A Methodological Note. *American Journal of Community Psychology*, 29(2), 371-384.

Cowan, R. (2005). *The Dictionary of Urbanism*. London: Street Wise Press.

Engstrom, R., Ofiesh, C., rain, D., Jewell, H., & weeks J. (2013). Defining Neighborhood Boundaries for Urban Health Research in Developing Countries: A Case Study of Accra, Ghana. *Journal of Maps*, 9(1), 36-42.

Farr, D. (2007). *Sustainable Urbanism: Urban Design with Nature*. Hoboken, NJ: Wiley

Flowerdew, R., Manley, D. J., & Sabel, C. (2008). Neighborhood Effects on Health: Does It Matter Where You Draw the Boundaries?. *Social Science and Medicine*, 66, 1241–1255.

Galster, G. (2001). On the Nature of Neighborhood. *Urban Studies*, 38(12), 2111-2124.

Galster, G.C., & Garry W.H. (1982). The Social Neighborhood an Unspecified Factor in Homeowner Maintenance?. *Urban Affairs Review*, 18 (2), 235–54.

Gharshi, M., Azkia, M., & Mahdavi, M.S. (2016). Sociological Redefinition of the Concept of Neighborhood from the Residents' Viewpoint: A Phenomenological Study of Kan Neighborhood in District 5 of Tehran, *Journal of Community Development (Rural and Urban Communities)*, 7(2), 221-240.

Gibbs, R.J. (2011). *Principles of Urban Retail Planning and Development*. Hoboken, NJ: Wiley.

Gould, J., & Kolb W.L. (1964). *A Dictionary of the Social Sciences*. New York: Free Press of Glencoe.

Grant, J. (2006). *Planning the Good Community: New Urbanism in Theory and Practice*. London: Routledge.

Guest, A., & Lee, B.A. (1984). How Urbanites Define their Neighborhood. *Population and Environment*, 7(1), 32-57.

Habibi, M., & Masaeli, S. (1999). *Per Capita of Urban Land Uses*. National Organization of Land and Housing Publication, Tehran, Iran.

Haeberle, S.H. (1988). People or Place: Variations in Community Leaders' Subjective Definitions of Neighborhood. *Urban Affairs Quarterly*, 23, 616–634.

Haney, W.G., & Knowles, E.C. (1978). Perception of Neighborhoods by City and Suburban Residents. *Human Ecology*, 6, 201–214.

Hart, C.H., & Waller, J. (2013). Neighborhood Boundaries and Structural Determinants of Social Disorganization: Examining the Validity of Commonly Used Measures. *Western Criminology Review*, 14(3), 16-33.

Hoppenfeld, M. (1967). A Sketch of the Planning-building Process for Columbia, Maryland. *Journal of the American Institute of Planners*, 33(6), 398–409.

Kallus, R., & law-yone, H. (2000). What is the Neighborhood? The Structure and Function of an Idea. *Environment and Planning (Planning and Design)*, 27, 227-245.

Kearns, A., & Parkinson, M. (2001). The Significance of Neighborhood. *Urban Studies*, 38(12), 2103-2110.

Keller, S. (1968). *The Urban Neighborhood: A Sociological Perspective.* New York: Random House.

Kitchen, R., & Blades, M. (2002). *The Cognition of Geographic Space*. London: Tauris & Co.

Lebel, A., Pampalon, R., & Villenueve, P.V. (2007). A Multi-perspective Approach for Defining Neighbourhood Units in the Context of a Study on Health Inequalities in the Quebec City Region. *International Journal of Health Geographic,* 6(27), 110-125.

Lee, B.A., & Campbell, K.E. (1997). Common Ground? Urban Neighborhoods as Survey Respondents

See them. *Social Science Quarterly,* 78, 922–936.

Lupton, R. (2003). Neighborhood Effects: Can We Measure Them and Does It Matter? London: Centre for Analysis of Social Exclusion, London School of Economics.

Marans, R.W., & Rodgers, W. (1975). *Toward an Understanding of Community Satisfaction*. In: A. Hawley, A., & Rock, V. (Eds.), Metropolitan America in Contemporary Perspective, 299-352.

Martin, D.G. (2003). Enacting Neighborhood. *Urban Geography*, 24(5), 361–85.

Minnery, J., Knight, J., Byrne, J., & Spencer, J. (2009). Bounding Neighborhoods: How Do Residents Do It?. *Planning Practice and Research*, 24(4), 471-493.

Orford, S., & Leigh, C. (2014). The Relationship between Self-reported Definitions of Urban Neighborhood and Respondent Characteristics: A Study of Cardiff. *Urban Studies*, 51(9), 1891–1908.

Park, Y., & Rogers, G.O. (2014). Neighborhood Planning Theory, Guidelines, and Research: Can Area, Population, and Boundary Guide Conceptual Framing? *Journal of Planning Literature*, 30(1), 18-36.

Perchoux, C., Chaix, B., Broundeel, R., & Kestens, Y. (2016). Residential Buffer, Perceived Neighborhood, and Individual Activity Space, New Refinement in the Definition of Exposure Areas- the Record Cohort Study. *Health and Place*, 40, 116-122.

Rivlin, L.G. (1987). *The Neighborhood, Personal Identity, and Group Affiliations*. Human Behavior and Environment, Advances in Theory and Research, Neighborhood and Community Environments, New York.

Roosa, M.W., White, M.B.R., Zeiders, K.H., & Tein, J.Y. (2009). An Examination of the Role of Perceptions in Neighborhood Research. *Journal of Community Psychology*, 37(3), 327–341.

Seghatoleslami, A. (2012). *The Concept Neighborhood in Contemporary Iranian Cities (with Analyzing Residents 'Cognitive Maps)*. Mashhad, Iran: Sokhangostar Publication.

Seghatoleslami, A., & Aminzade, B. (2009). Analytical Approach to Recognition of Neighborhood Concept in Contemporary Cities of Iran; Case Study in Mashhad. *HONAR-HA-YE-ZIBA Journal*, 39, 81-92.

Spreiregen, P., & De Paz, B. (2006). *Pre-design.* Chicago, IL: Kaplan Architecture Education.

Stephenson, B. (2002). The Roots of the New Urbanism: John Nolen's Garden City Ethic. *Journal of Planning History,* 1(2), 99–123.

US Green Building Council. (2006). *LEED for Neighborhood Developments*. Washington, DC: U.S. Green Building Council.

Vidyarthi, S. (2010). Inappropriately Appropriated or Innovatively Indigenized? Neighborhood Unit Concept in Post-Independence India. *Journal of Planning History,* 9(4), 260-276.

Walters, D., & Brown L.L, (2004). *Design First, Design- based Planning for Communities*. Oxford: Architectural Press.