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A FRAMEWORK FOR EXPLORING THE SENSE OF COMMUNITY AND SOCIAL LIFE IN RESIDENTIAL ENVIRONMENTS

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Abstract

Sense of community and social life are two key concepts related to social cohesion, which have been the subject of extensive studies in several disciplines including sociology, psychology and built environment. Social life studies have been mostly conducted in the built environment discipline focusing on city centres; while sense of community studies were mostly the target of sociologists and psychologists focusing on neighbourhoods. As a result, the role of the built environment on the sense of community and social life of neighbourhoods is considered as a missing gap in the literature. This paper, through defining the concepts of social life and sense of community, aims to develop a conceptual framework for further implementation in future research. Accurate implication and interpretation of the concepts show that neighbourhoods can include the sense of community in the residential environment and the social life in the commercial environment. This is because residential environments are where residents' requirements can be met through their commitment to the community and commercial environments are the fulcrum of interaction and communication.

Keywords: Neighbourhood; Sense of community; Social life; locality.

INTRODUCTION

Sense of community and social life are two key concepts in the literature of the built environment discipline, which have been discussed in regard to the effect of the physical characteristics on the residents' socializing patterns. Sense of community is a feeling of belonging and shared interests among members of a community while social life of a place refers to the patterns of socializing behaviours among residents. Social life has been mostly discussed in the literature of the built environment discipline whereas sense of community has been mostly the subject of several studies in other disciplines such as sociology and psychology (Figure 1).

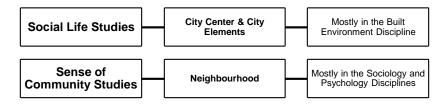


Figure 1: Previous studies on Sense of community and Social life in regard to cities and neighbourhoods (Source: Authors).

Social life studies have mostly focused on city centres, therefore, when it comes to residential environments, the number of these studies decreases dramatically and it can be considered as a gap in the literature of the built environment (Figure 1). Additionally, most studies on the sense of community among neighbourhoods' residents are from the disciplines of psychology and sociology. A neighbourhood is the realization of a geographical community known as community of place(Glynn, 1986). As a result, scholars from social and psychological disciplines have

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repeatedly selected this context for investigating and comparing the residents' sense of community; however, in these studies, the influence of the built environment on creating a sense of community have been mostly overlooked. Therefore there is a need for research on both concepts of sense of community and social life in the context of neighbourhoods from a built environment perspective.

This study suggests that both concepts of social life and sense of community can be included in neighbourhood studies (Figure 2). The neighbourhood environment consists of a residential part, which is the key to feeling a sense of community, and a non-residential environment, which is the place for socializing behaviours. This study argues that socializing patterns in a neighbourhood have a twofold perspective, which can include both concepts of sense of community and social life.

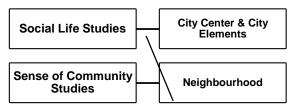


Figure 2: Neighbourhood can be the place for both sense of community studies and social life studies (Source: Authors).

The aim of this study is to develop a better definition and understanding of these concepts. This paper, by developing a conceptual framework on neighbourhood's socializing patterns, can contribute to future community studies and especially neighbourhood planning research. This study will explore the established key theories around sense of community and social life from the built environment perspective and will investigate how the related theories can be applied to the neighbourhood environment. Physical characteristics in the neighbourhood environment can influence the way in which residents in a neighbourhood environment feel a sense of community.

BACKGROUND

Public life and the neighbourhood's environment were historically a cohesive unit. Historical neighbourhoods grew little by little in accordance with their residents' changing needs. Residents' requirements had to be satisfied within the neighbourhood's boundaries and through their commitments to the local communities. Therefore, historically neighbourhoods were places with a high degree of socializing patterns and sense of community among residents. Two occurrences changed this process: the shift to industrial cities and the shift to the media and virtual societies.

First, the shift to industrial societies had a major impact on the way people were living and socializing. Industrialization caused people to migrate to cities in search for jobs and social welfare. Migrations and population growth in cities changed the way people live. People moved to places where they were no longer able to get to know all the residents and therefore they structured "imagined communities" (Anderson, 2006) in which people could not and would not know each other. Consequently, the social ties and the form of everyday interactions were affected and that led to the theories of loss of meaningful relationships by many sociologists (Webber, 1963; Wellman & Leighton, 1979).

Industrialization was not the only occurrence to change the community patterns in the neighbourhoods. The invention of media and virtual networks has also affected the way people contact and create their communities. Throughout history, cities have been regarded as the fulcrum of human communication and social life; however, the emergence of virtual societies and electronic public spaces in recent decades has changed the role of public places in the social life of cities. The progress made in modern technologies and the emergence of media and virtual



networks have contributed to some transformations in the form of communications, transportation and as a result people's social life.

Parallel to the virtual societies there is still a need for face-to-face interactions and non-virtual local communities which neighbourhoods can provide the opportunity for their development. The built environment in the neighbourhood may enhance the chance of encounters through promoting walkability and stationary activities. Therefore, there is a need, in the literature of public life studies, for research on the social life and community patterns in residential neighbourhoods.

Social life studies started in the 1960s, when criticism on modern architecture and urbanization was peaking due to the neglect of social needs and marginalizing human interactions. Consequently, the public life studies were initiated by scholars such as Jacobs(1961) and Gehl (1987), who are considered as the key authors in this area of knowledge. Following Jacobs and Gehl, several scholars have studied how the built environment and the related characteristics can affect social life of public places. These studies were mostly focused on city centres and city elements such as streets and plazas (Figure 1) and the significance of residential environments in contributing to the social life of cities was neglected.

SENSE OF COMMUNITY

Sense of community is a concept in the field of community psychology, which has been defined as "the sense that one was part of a readily available mutually supportive network of relationship" (Sarason, 1974). In the early 1970s, Sarason pointed to the popularity of the books with the themes of loneliness, isolation and the feeling of not belonging. He described this occurrence as "a decline in psychological sense of community" (Cochran, 1994). McMillan and Chavis (1986), whose study is frequently used in the psychology literature, argue that sense of community is composed of four elements: 1) Membership- the feeling that who belongs to the community and who does not; 2) Influence- the ability to express and influence the group which works both ways, some influence by the group on its members is needed for group cohesion; 3) Integration and fulfilment of needs- the feeling that members are awarded and some needs are satisfied by being a member of the community; 4) Shared emotional connections- the common history of members in a community, which includes the extent and quality of interaction between members.

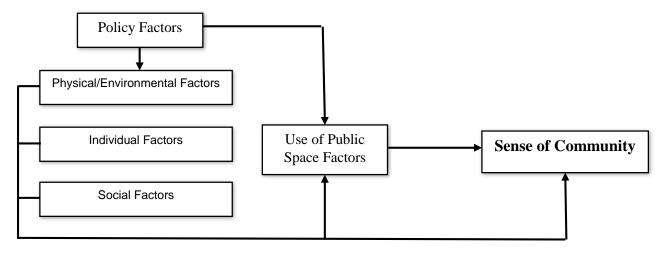


Figure 3: Conceptual model of relationship between public space and sense of community (Source: Francis et al., 2012).



These definitions of sense of community, which were raised in the context of community psychology, have dominated the few studies of sense of community in the fields of architecture and urban planning(Kashef, 2009; Kim, 2001, 2007; Moustafa, 2009; Talen, 1999, 2000, 2003). Most studies on the sense of community in neighbourhoods have been conducted by psychologists and sociologists. They have adopted psychological and social science methodologies and as a result, the influence of the built environment on the sense of community has not been adequately addressed(Plas & Lewis, 1996). The few studies in the built environment discipline have also adopted the psychological definitions and indexes. However, Kim and Kaplan have tried to develop a framework based on the physical factors in order to add another dimension to the mentioned psychological aspects(Kim & Kaplan, 2004).

Whether physical characteristics in the built environment can encourage a sense of community or not is a debate among scholars. Talen (1999) argues that built environment characteristics can promote interactions, but they cannot create a sense of community directly. She believes that the built environment can encourage human interactions, but it is not clear whether these interactions will lead to feeling a sense of community among residents. She argues that there are numerous variables affecting the sense of community among residents and the role of the physical factors has been overestimated in the built environment discipline(Talen, 1999).

In spite of these criticisms, studies have found a correlation between physical built environment characteristics and feeling a sense of community. These studies are not limited to the built environment discipline. According to community psychologists such as Plas and Lewis, environmental factors may be crucial for the development of a sense of community in urban communities(Plas & Lewis, 1996). Cochran also argues that planners are able to preserve and strengthen a neighbourhood's sense of community through both social policies and physical design strategies(Cochran, 1994).

Therefore, from these debates it can be concluded that the built environment is able to influence the feeling of sense of community either directly or indirectly through increasing the chance of interactions among residents (Francis *et al.*, 2012). Informal interactions in neighbourhoods with lead to some acquaintanceships which are known as weak ties in the literature(Granovetter, 1973). High levels of weak ties among neighbours are believed to increase the occurrence of strong ties and social affiliation(Granovetter, 1973; Greenbaum, 1982). Ties between neighbours may contribute to security on the basis of regular action and interaction, recognition between people during occasional encounters, while doing the everyday tasks (Henriksen & Tjora, 2013). According to Mehta(2013), weak ties are possible beginnings of deeper more enduring social interactions which might contribute to feeling a sense of community.

The built environment is able to increase the chance of interaction by two identified factors: first by improving walkability factors and second by encouraging the stationary activities. Developing pedestrian friendly environment, easy pedestrian access and encouraging walkability are believed to be the key factors in increasing the sense of community in neighbourhoods (Lund, 2002, 2003; Wood *et al.*, 2010). The presence and quality of public places such as parks have been associated with a strong sense of community among residents(Francis *et al.*, 2012). In contrast, it has been argued that vehicular traffic and car parking negatively affect perceptions of sense of community and neighbouring behaviours in residential areas (Appleyard, 1981; Mullan, 2003). Additionally according to Lockwood (1997) the existence of a neighbourhood main street can help bring about a strong sense of community and provide an opportunity for the occurrence of stationary activities(Mehta, 2007; Mehta, 2008, 2013).



Conceptual Frameworks

Scholars from the built environment discipline are increasingly trying to develop frameworks to facilitate the study of sense of community in neighbourhoods. Francis *et al.* (2012) have developed a conceptual model for the relationship between public space and the sense of community. They define four categories of policy, physical environment, individual and social factors that directly or indirectly effect the sense of community (see figure 3). Either these characteristics influence the sense of community among residents, or they increase the use of public places, and the sense of community will increase as a result of the increase in interactions in public places.

Kim and Kaplan (2004) have also developed a framework to study the sense of community regarding physical aspects of neighbourhoods. The framework identifies four domains, which are hypothesized to relate to an important aspect of residents' feeling that they belong to the community (see table 1). The four domains of sense of community are described as: 1) Community or place attachment, refers to residents' connections to their community; 2) Community identity, refers to personal and public identifications with a specific community with its own character; 3) social interactions, is defined as formal and informal social opportunity in which residents attend to the quality of their relationships; 4) pedestrianism implies that a community is designed for walking and encouraging street side activities, are the four domains. However, all these domains consist of some subcategories and are interconnected in several aspects(Kim & Kaplan, 2004). In their hypothesized relationships model, Kim and Kaplan (2004) show that the domains of sense of community have a range of social to collective characteristics and also another range of physical to psychological characteristics. While community identity and community attachment is meaning-based, pedestrianism and social interaction are activity-based. The built environment characteristics that influence the feeling of sense of community can be summarized in four categories (see figure 4): Presence of public places such as parks, plazas and commercial streets, easy pedestrian access and walkability, human scale developments, mixed land use developments and greenery. In several studies, these categories have been identified as promoting factors for feelings of a sense of community among residents.

Table 1: Sense of Community: Theoretical Dimensions (Source: Kim and Kaplan, 2004).

Domains of Sense of Community				
	Community Attachment	Community Identity	Social Interaction	Pedestrianism
Primary action	Bonding with community	Identifying (with) community	Being involved in community	Knowing community
Subcomponents	Community satisfaction Connectedness Sense of ownership Long-term local integration	Uniqueness Continuity Significance Congruence Cohesiveness	Neighboring Casual social encounter Community participation Social support	Walkability Pedestrian propinquity Mass transit Pedestrian scale/street-level activities



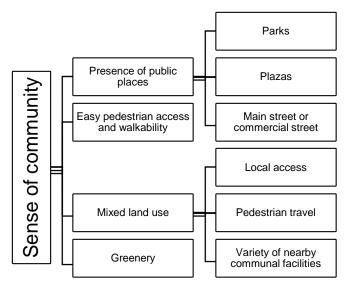


Figure 4: Summary model of the built environment influence on feeling a sense of community (Source: Authors).

SOCIAL LIFE

Sociability is a primary role of public places in cities and neighbourhoods. Good public places in cities provide an avenue for communication and socializing behaviours. Public life has been acknowledged as everything that occurs in public spaces between buildings: sitting, chatting, walking, cycling, running, standing and playing, which form "the life between buildings" (Gehl, 1987). Being alive for architecture is about being complex: forming, transforming and maintaining a structural organization that consists of multiple constituents arranged in specific patterns (Bhat, 2014). Similarly, being socially alive refers to the complex socializing patterns in a specific context. According to Bianchini, public social life is "the interacting of socialising or sociability...that occurs within the public realm" (Bianchini, 1999).

In the periods of rapid urban growth, the social life between buildings was reduced as a result of automobile dependency, large-scale designing and overly rationalized, specialized processes. Jacobs was a dominant critic who called for a change in the social life of cities. Jacobs stressed the importance of high-density neighbourhoods, mixed land use and promoting public places in cities for creating vitality. She claimed that the physical structure of cities can lead to experiencing cohesive community and life (Jacobs, J 1961). In 1971, Jan Gehl in his book *Life Between Buildings* stressed the qualities of urban life and how the built environment can encourage social life of public places and especially city centres. He repeatedly criticize the neglect of the human dimension in urban design, the emergence of car-dominated cities, and the loss of pedestrian-oriented environments for their negative influence on the public life of cities (Gehl, J 1987).

After Gehl, several studies were conducted in order to critique and analyse the social life of cities. However most of this research has focused on city centres(Gehl, 2010; Gehl & Gemzøe, 2001; Whyte, 1988) and some have addressed city elements such as streets(Appleyard, 1980; Appleyard, 1981; Jacobs, 1993). The role of residential environments in creating social life has been neglected. In most of these studies, it has been assumed that the city life is associated with the city centres' sociability. But is the city life exclusively limited to the centre? Are the residential environments able to contribute to the social life of cities?

Social life of neighbourhoods can benefit residents and cities in terms of mental health and well-being and feeling of safety and security. Empirical findings have shown that experiencing a sense



of community may create psychological benefits in neighbourhoods. In studying the town of Seaside, Florida, Riger and Lavrakas(1981) showed that sense of community can be an explanatory tool for individual well-being. Additionally, lack of vitality in neighbourhoods may decrease the feeling of safety and security. In a study Ross and Jang(2000) argue that social ties with neighbours have buffering effects on neighbourhoods fear and mistrust.

Only a few studies have focused on the sociability of residential environments; however some of the factors that have been studied regarding the public life of city centres and streets are applicable to residential environments (see Figure 5). Qualities that are thought to provide opportunities for social interactions in public places include the factors that encourage residents to walk or which encourage them to engage in stationary activities. The factors that encourages walking behaviours are higher density (Amick & Kviz, 1975; Franck & Stevens, 2007; Gehl, 1987; Jacobs, 1961; Pendola & Gen, 2008; Talen, 1999), human scale development (Amick & Kviz, 1975; Gehl, 1987, 2010; Langdon, 1997), mixed land use (Alexander, 1977; Audirac & Shermyen, 1994; Jacobs, 1961; Mehta, 2013; Montgomery, 1998), easy pedestrian access and walkability(Cooper Marcus & Francis, 1998; Gehl, 1987, 2010; Gehl & Gemzøe, 2004), improvement of cyclist conditions(Gehl, 1987).

The qualities that are studied to encourage stationary activities in public places are provision of seats and sitting areas(Gehl, 2010; Gehl & Gemzøe, 2004; Mehta, 2009, 2013; Mehta & Bosson, 2009; Whyte, 1980), provision of community gathering places (Lofland, 1989; Oldenburg, 2009), improvements in sidewalks and building edges (Mehta, 2013),greenery (Al-Hagla, 2008; Sullivan, 2004; Whyte, 1980), using a fine hierarchy(Chermayeff, 1971; Chermayeff & Alexander, 1966) and activity generators (e.g. food)(Carr, 1992; Franck, 2005; Whyte, 1980). These qualities have been summarized from several studies in order to make a comparison between the qualities that are believed to improve the social life of cities and those that create feeling a sense of community from a built environment point of view.

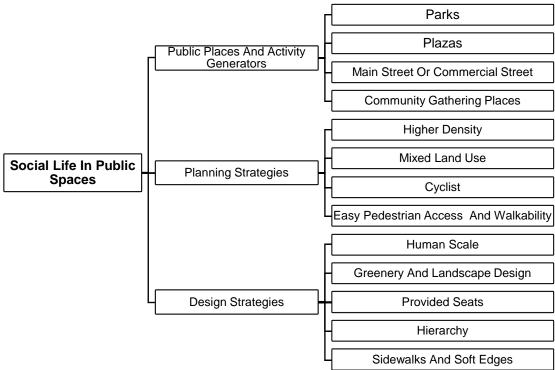


Figure 5: Physical Characteristics that affect the social life in public places (Source: Authors).



Comparing social life studies to sense of community studies (see Figure 4 and 5) shows that built environment characteristics that promote the social life in cities are similar to those discussed in the sense of community section. There are two accounts for this similarity. First, since for both a social life and a sense of community, the built environment must provide an avenue for encounters and increase the chance of interactions, the contributing factors are mostly similar. Second, in the built environment literature, the meanings of sense of community and social life have sometimes been misinterpreted and misplaced.

In the literature of the built environment, the boundary between the meaning and interpretation of the terms sense of community and social life is not rigid and clear. To fully grasp this misinterpretation, I use the New Urbanism Paradigm as an example. New Urbanism is an urban design movement, which arose in the United States in 1980s with the goal of promoting walkable neighbourhoods and encouraging a sense of community among residents. In the literature of New Urbanism, the term sense of community has been mostly used to show the effect of design on socializing patterns in neighbourhoods. Talen (1999) criticizes New Urbanism for overestimating the effects of the built environment on the sense of community. She argues that the claim of the New Urbanism in encouraging sense of community via physical design factors is ambiguous and built environment characteristics can promote interactions, but they cannot create a sense of community directly. However, some studies have shown a higher sense of community in the neighbourhoods developed by New Urbanists(Kim, 2000).

There can be two accounts for this contradiction. First the meaning of sense of community has not been interpreted correctly in the literature of the built environment. Second the target of New Urbanism has been mostly to encourage social life of neighbourhoods and not promoting the sense of community among neighbours. Taking Lund's study into consideration clarifies that New Urbanism has been successful in promoting pedestrian-friendly environments and streetscapes (Lund, 2003); and therefore, the claim of New Urbanism in promoting social life has been successful.

SENSE OF COMMUNITY AND SOCIAL LIFE IN THE CONTEXT OF NEIGHBOURHOOD

Neighbourhoods are the connecting points between homes and the city. Therefore, the social life of a neighbourhood is the interface of the private life of residents and the social life of the whole city. Neighbourhoods have been defined in several ways and with several characteristics. Brower(1996) accounts three dimensions for a neighbourhood: Ambience, Engagement and Choicefulness. Engagement refers to the extent of intensity among residents and the presence of facilities and features that foster or inhibit the interactions. Engagement is the interface of the private home life to the public city life. The dimension of engagement in neighbourhoods occurs in two manners: first the feeling of sense of community among residents and second the social life of the whole neighbourhood.

Neighbourhood environment provides a twofold opportunity for socializing behaviours among residents. Neighbourhoods are a combination of housing units and extended housing units (Brower 1996). The Extended-housing unit is the place for home-related facilities outside homes, such as parks, community gathering places, and commercial streets. Since extended housing units are shared between several housing units, they are considered as points of connection, which can provide a chance of encounters for residents. Brower explains that some points of connections are mostly for neighbours and some connect the neighbourhood's residents to non-residents or strangers. Therefore, in each neighbourhood, there are two parts to study in terms of public life. First, the residential environment and second, the neighbourhood centre or commercial street or as Brower has defined extended housing unit (Brower 1996).

Similar to the hierarchy of the urban-public and family-private or individual-private (Chermayeff & Alexander, 1966), a hierarchy of socializing behaviours can be traced in neighbourhoods. The neighbourhood environment can provide the space for this hierarchy. From



private-family-home to semi-private front yard to the quasi-public residential street and the public-commercial street or neighbourhood centre. The residential street can provide the avenue for community interactions and neighbouring behaviours (sense of community); while the commercial street as the most public space in the neighbourhood provides the chance of encounters between residents and non-residents (social life) (Figure 6).

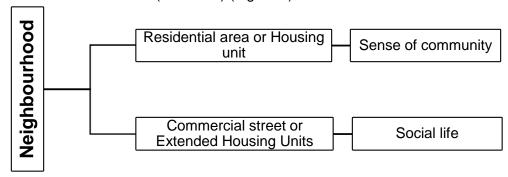


Figure 6: Model of the sense of community and social life of neighbourhoods (Source: Authors).

Residential streets are the fulcrums of feeling a sense of community among residents. The residential environment is where neighbours get to know each other; they change their relationship from strangers to acquaintances, neighbours or friends; in other words they become a community. According to Unger and Wandersman, neighbouring consists of a social component, a cognitive component and an affective component. The affective bonds between neighbours are categorized in three forms: sense of mutual aid, sense of community, and attachment to place (Unger & Wandersman, 1985) (Figure 7). This classification shows that the sense of community as a component of neighbouring can be just considered among immediate neighbours and not the whole neighbourhood. Additionally, according to Banerjee and Baer residents experience a sense of community at the smaller scale of neighbourhood or block (Banerjee & Baer, 1978).

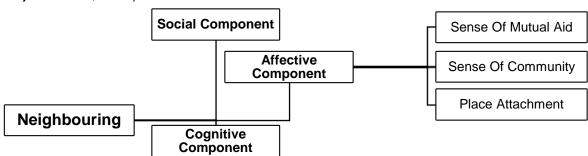


Figure 7: Neighbouring components (Source: Unger and Wandersman, 1985).

Studies conducted on the sense of community of neighbourhoods have not separated the residential environment from the commercial non-residential environment. There are few key studies that have been partially dedicated to the social life in the residential environments. Appleyard (1981) in the study of three streets in Italian residential neighbourhoods in America noticed that the traffic has affected the number of interactions in the streets. As it can be seen in figure 8, the number of neighbouring and visiting activities is much higher, in the light traffic street in comparison to the heavy traffic street. He also found that in the light traffic street the area that people identify as their home territory is much wider than the heavy traffic street. Therefore, it can be concluded that traffic affects people's perception of the home territory and this will indirectly affect social life of residential streets.



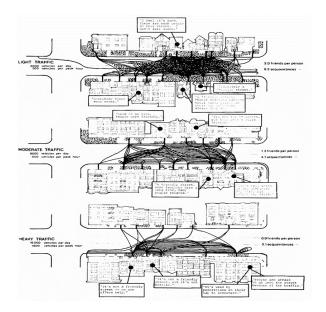


Figure 8: Study of neighbourhoods interactions in relation to traffic (Source: Appleyard, 1981).

Gehl's 1976 study of Australian terrace houses with semi-private front yards shows that front yards are the starting point of many activities which can encourage the social life in residential neighbourhoods(Gehl, 1980). A great number of the observed staying activities (76 percent) took place in (or was related) to the front yards. The study also showed that semi-private front yards can create a buffer zone between the street and the house which enables residents to control the degree of interaction and intimacy. Gehl argues that front yards should be narrow enough to enable a quick chat between the sidewalk and the house and wide enough for staying activities to feel safe from the unwanted intrusions (From 1.5 meter to 4 meters wide is the range which Gehl believes is convenient for the front yards).

Alongside residential environments that bring the sense of community to the locality, neighbourhoods also consist a commercial component. Commercial streets or neighbourhood centres are the fulcrums of creating social life in neighbourhoods. The function of the commercial street in a neighbourhood is similar to the function of the main street in a town. Emergence of main streets in towns, neighbourhoods and suburbs encourages the economic activity and increases the chance of encounters and the sense of community among residents (Lockwood, 1997; Pendola & Gen, 2008). Therefore several studies have been conducted on revitalization and vitality of main streets and their influence on the social life of cities (Ewing *et al.*, 2005; Francaviglia, 1996; Lagerfeld, 1995; Orvell, 2009; Pendola & Gen, 2008; Robertson, 2004; Southworth, 2005; Wolshon & Wahl, 1999). Commercial streets in a residential neighbourhood act similar to a main street for a town. Commercial streets or neighbourhood centres are the avenues for interactions and communications. Residents can meet their everyday needs through the commercial streets and become the regulars while socializing with other residents.

A recent study by Mehta shows that the commercial street in neighbourhoods can influence the social, land use and the physical qualities (Mehta, 2007; Mehta, 2013). Encouraging these qualities will affect the public life of commercial streets and the whole neighbourhoods. Land use qualities are related to the business variety, presence of independent stores, personalization and permeability of stores. Physical qualities include commercial and public seating, sidewalk width, shade and building articulation. Social qualities are related to community gathering spaces. To improve the social life of commercial streets, Mehta (2013) has developed a design guideline that can be seen in Figure 9.





Figure 9: Characteristics of the neighbourhoods' commercial street (Source: Mehta, 2013).

Reviewing the studies on main streets or commercial streets illustrates that neighbourhoods' commercial streets can be the place where residents interact and particularly the place for stationary activities and spending time on enduring activities (Mehta, 2013). Increasing in the chance of interactions might lead to a stronger sense of community among residents. Design and physical characteristics of the commercial streets have a contributing role in promoting the chance of encounters and providing pedestrian-friendly environments. Therefore, a crucial part of the social life of neighbourhoods is assigned to the social life the commercial street. The commercial street in a neighbourhood is where people can experience public life. It can be a lively place, which provide safety and security for the neighbourhoods while encouraging the social life and creating healthy communities (Figure 10).

In today's world, localized interactions are not the requirements for building a sense of community. Residents are also involved in placeless communities, which are famous as communities of interests. However, the neighbourhood as a geographical place has the benefit of locality, which makes it more worthy in comparison to the communities of interests. Proximity and locality give neighbourhoods an advantage. According to Unger and Wandersman (1985) neighbours' social support consists of personal and emotional support, functional and instrumental support, and informational support which come with the privilege of proximity. Two decades have passed from Unger and Wandersman's study and the role of informational support has partially lost its importance due to the progress in the information technology. Nonetheless neighbours supportive interactions can still provide the emotional and functional supports.

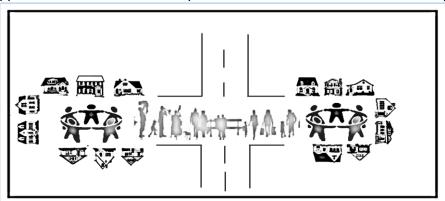


Figure 10: Conceptual model of presenting sense of community (residential environment) and social life (neighbourhood centre) in neighbourhoods (Source: Authors).



CONCLUSION

Residential environments in neighbourhoods may provide the feeling of sense of community among residents. The built environment characteristics can influence the intensity of this feeling through increasing the number of interactions and providing pedestrian-friendly environments. Interactions and weak social ties are the starting points of deeper and stronger interactions. Neighbours interactions in the residential environment may increase the feeling of sense of community. Additionally improving the walkability parameters and promoting the stationary activities influence the social life of the neighbourhood in commercial streets. Sense of community and social life of neighbourhoods make the community healthy, safe, socially sustainable, and strengthen the local economy.

Neighbourhoods consist of residential environments and commercial streets which are the avenue for socializing behaviours among residents. In regard to the definitions and implications of sense of community and social life, neighbourhoods can be investigated with two different approaches: in residential streets, the sense of community can be explored, while in commercial streets, creating vitality and encouraging social life can be considered.

There is a gap of sufficient studies, in the literature of built environment, in regard to the social life of residential neighbourhoods. While several social life studies, in this discipline, have focused on city centres, plazas and streets, the importance of residential neighbourhoods in providing social life in cities has been neglected. With the absence of necessary public life and social bonds, many neighbourhoods and suburbs around the world have been transformed to "bedroom communities"; and accordingly, this study aims to stress the significance of residential environments in creating the social life of cities through the prospect of the given framework.

The analysis of the literature presented in this paper clarifies the meanings and implications of the concept of sense of community from a built environment perspective. Furthermore, exploring the literature with an interdisciplinary perspective shows that the proposed framework can fit the existing relevant research. The framework is offered as a way to facilitate future studies in the context of neighbourhoods through differentiating the residential environment from the non-residential environment.

This study recommends that distinguishing the residential streets from commercial streets can provide a prospect for future researchers to identify the effective elements in the public life of neighbourhoods. However, this division of neighbourhoods does not suggest that sense of community in residential streets and the social life in commercial streets are non-related. Rather this differentiation and clarification can facilitate future studies and increase their accuracy in finding the built environment affective elements in terms of social life in neighbourhoods.

Several suggestions for future research can be presented. First, there is still a need for research on the built environment characteristics that encourage a sense of community in residential streets and social life in commercial streets in neighbourhoods. Since previous public life studies in neighbourhoods have sometimes misinterpreted or misplaced these two terms, this study can create a convenient standpoint for future research in this area. Future research may also investigate the extent to which neighbourhood communities can be affected by the physical environment. This study also lays a foundation for future debate over the place of local communities, in a world where residents are mostly involved in non-local or virtual communities. Although previous research investigations provide some insight into the application of the sense of community in neighbourhoods, there is a need for continued research on the necessity of the existence of local communities in neighbourhoods.



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