

The Role of Intangible Features in Developing Open Spaces

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Abstract—this paper focuses on the role of intangible elements of the public spaces in the residential areas such as a neighbourhood. The main emphasis is the significance of the factor of social satisfactions on developing public spaces. The research to date has tended to focus on examining the physical quality of public space, particularly tangible features, but fewer have dealt with the intangible features that related to the residents' social life and community interaction. Consequently, in this research, the analysis includes some important intangible elements such as a sense of community, social satisfaction and safety and security in the public spaces and the local initiatives. The research includes two case studies in Misurata, Libya. Both cases are neighbourhoods type with similar in size, population, number of houses and distance from the city centre. However, one case is a Governmental Neighbourhood GNs while the other one is a Traditional Neighbourhood TNs. This inquiry is a qualitative research, however, it adopted mixed methods approach, and i.e. both questionnaires and in-depth interviews were utilized for data collection. The results of this study show that there are a several crucial findings related to the importance of these intangible elements, these findings suggest some practical guidelines to be considered in new development projects.

Index Terms: intangible elements, public spaces, neighborhoods, social satisfaction, sense of community.

I. INTRODUCTION

Everyone can realise the level of the quality of the public space in their neighbourhoods by observing good quality of their open spaces and the reasonable range of physical elements such as children playground, seats, footbaths and good landscaping attractions. These are physical elements, they can be clearly appeared to everyone uses these spaces. On the other hand, there are some other important components known as '*intangible*' features also should be recognized and involved in a part of public spaces form. These elements are commonly untouchable and cannot be seen directly by eyes but ones yet can feel about them. Furthermore, these intangible features have an essence impact on our daily life during dealing with public space as they are important part of our surrounding built environment.

Consequently, this paper examines how intangible elements can be measured in which fulfill the level of residents' satisfaction in two neighbourhoods types as a case study. It presents the research findings with regard to the social satisfaction, safety and security and the local initiatives. Finally, it concludes the main results which should give clear guidelines for urban designers and suggest appropriate indications for redevelopments of the current situation of the public spaces in Libyan cities.

II. LITERATURE REVIEW

The sense of community has a broad meaning. In this context, attention is drawn to the question of what makes the community valuable; or, put another way, why people choose the neighbourhoods beyond the consideration of the individual house. Hanibuchi et al. (2012) suggest that the quality of life starts from the community scale as the unit that provides a range of comfort and pleasure to all the residents in that community. The sense of community is a much greater association with those around you in the vicinity of their residence where people spend most of their time (Wood et al., 2010).

Roger S. Ahlbrandt (1986) explains that the idea of the community is to prevent individuals from the effects of alienation and increase their level of sociability. Therefore, the main aim of creating a quality community is to establish a proper context that can protect the residents from the impersonal world and enhance their feelings of engagement through a range of activities they can take part in within the public and semi-public spaces. Residential areas, or 'neighbourhoods' are the middle stage of organising space, decreasing the impact of the gap between the public and private realms (Madanipour, 2003).

The sense of community gives a clear indication of the public space's quality. Measuring the sense of community of the residents is necessary in order to evaluate their satisfaction within the local community (Cattell et al., 2008). Therefore, it is not only the physical boundaries of the public space which have a direct influence on the quality of the neighbourhood that need to be examined; the perceptions of the residents about their well-being and social satisfaction are also crucial (Middleton et al., 2005).

Received 22 April, 2019; revised 26 May, 2019; accepted 28 May, 2019.

Available online May 29, 2019.

III. RESERCH METHDOLOGY

A. Methods

Since this study is based on a case study and it is essentially is social inquiry, qualitative methods offer an effective way of data collection and analysis (Yin, 2013, Merriam and Tisdell, 2015, Creswell, 2013). However, this study adopted the combination of quantitative and qualitative case study work. Furthermore, the mixed methods techniques (questionnaire and in-depth interview) were utilized in this study in order to increase the validation of results by triangulation of the data (Creswell, 2013).

A total 200 questionnaires were distributed out to the residents of the two above sites, a total of 158 questionnaires were returned as following: case A, 9th July neighbourhood 77 participants while case B, Almegawba neighbourhood 81 participants. For the interview, eventually, around 16 people, living in Misurata with different social-backgrounds, were interviewed. This sample size is a quite acceptable and common with similar studies (Creswell, 1998).

B. Case Studies

he case study includes two sites, a) Site A named 'Almegawba' which is a traditional neighbourhood (TN) and b) Site B named '9th July' which is a governmental neighbourhood (GN) in the city of Misurata, Libya (see **Figure 1**, **Figure 2** & **Figure 3**). All the quantitative data gathered from the questionnaires has been input to the statistics programme 'SPSS' for data analysis. The Nvivo version 10 software has been used for analysing the qualitative data gathered from the in-depth interviews.



Figure 1. The Location of the Libya and the City of Misurata, the Location of the Case Study Sites: a) Almegawba (TN). b) 9th July (GN) c) The City centre (CC), (Source, World Atlas and Google Earth).



Figure 2. (Case A) 9th July Neighbourhood (GN).



Figure 3. (Case B) Almegawba Neighbourhood (TN)

IV. RESULTS AND DISSCUSIONS

C. Sense of Community

The research findings indicate several interesting points to help clarify the role of sense of community in making successful neighbourhoods. According to **Figure 4**, it can be noticed that more than 40% of the respondents in 9th July GN either disagreed or strongly disagreed with the statement, in this neighbourhood residents have a strong sense of community, while about 30% answered 'neutral' which is also significant. As evidenced below, in the local community the expression of the word 'neutral' means that the person is not satisfied which might differ from its meaning in other cultures. Therefore, it can be considered that around 70% of the respondents are not feeling a sense of community in their neighbourhood.

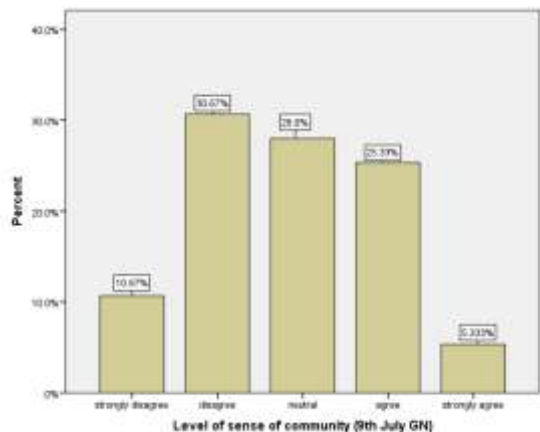


Figure 4. The Percentage of the Respondents who are Satisfied with the Sense of Community in their Neighbourhood GN. (Source, Filed Study, 2018).

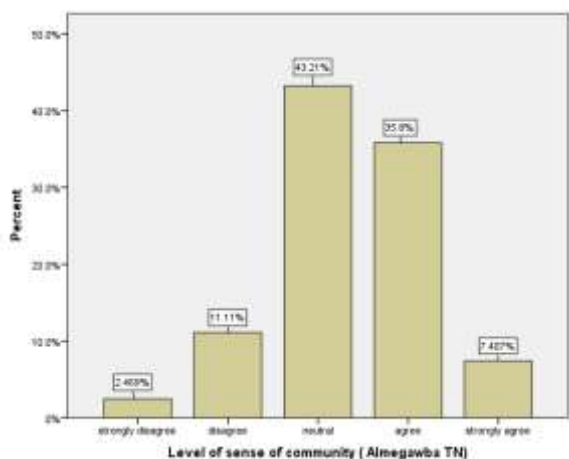


Figure 5. The Percentage of the Respondents who are Satisfied with the Sense of Community in their Neighbourhood, TN Almegawba.(Source, Filed Study, 2018).

On the other hand, Figure 4& Figure 5 show that only 13% of participants do not feel the sense of community. The percentage of the participants who answered 'neutral' is high in both sites, which has encouraged the researcher to find out the reason for this indication. From the interviews, further questions were asked to the local community to identify this point and it appears that when the respondents answer "neutral" in fact it means 'not satisfied'. Thus, it can be considered that more than 55% of the participants of this neighbourhood are not feeling the sense of community. This result indicates that the sense of the community of the residents in the TN is higher than among the residents of the GN; however, both are still between 30% and 55% which clearly shows strong potential for improvement.

One of the most important measurement tools to investigate the sense of community is to find out the level of interactions between the residents in the public spaces of the neighbourhood. The interaction can be in many forms. In this context, more evidence was collected from the in-depth interviews to specify the results and provide more details about the feeling of a sense of community within the public space of the neighbourhoods.

This view is concurred with by a participant, AG, from the professional’s group, who indicated that the feeling of a sense of community depends on the residents themselves, it is about their feeling and emotions towards each other and the level of the social interaction between them. The TNs usually have better feelings of sense of community than the GNs because their residents have lived together for a long time and they own the houses from one generation to the next. In the GN most of the residents still linked to their original community and they are staying in this neighbourhood for 5 to10 years; however, they always look forward to building their own house in their original place where their relatives live.

From another point of view, participant, HB, who is one of the decision-maker group and the head of General Services Company GSC, stated that the physical elements such as green areas, playgrounds, landscaping the open areas and other facilities have a positive impact on the residents’ satisfaction which promotes their sense of community even though they are in a GN. The quality of the neighbourhood public spaces is one of the major encouragement features that make the residents happy and satisfied inside their neighbourhood. Therefore, residents who live in a good-quality GN are more likely to have a better sense of community through time than those in the new GNs that have less quality.

The opportunity of improving social interaction is higher when the place provides more chances of meeting and participation which finally might impact positively to make the residents feel the same sense of TNs. Another interviewee, IB, from the residents’ group, lives in a GN and pointed out that the activities that take place in the public space of the neighbourhood are important in terms of engagement with others and might develop the feelings of satisfaction. People within the same community need to feel socially similar to participate and interact together in the public spaces, which finally leads to a high sense of community.

D. Social satisfaction

Social satisfaction of the residents within their neighbourhoods is often one of the aims that designers, urban developers, local authorities and the decision makers of the local community are caring of especially in the design of residential neighbourhoods. Social satisfaction can be measured by examining many factors such as length of stay, sense of community, attachment and even the psychological comfort of the residents inside their community. This section discusses the research results and the most significant findings that show the perception and the level of satisfaction of the residents towards the quality of the public space in their neighbourhoods.

Research has been conducted in many regions to examine the satisfaction of the residents referring to the fulfilment of their social needs particularly in the public spaces of the residential areas. For instance, Nasution and Zahrah (2014, .p585) state that, “one of the urban environment’s elements is public open space. Thus, the satisfaction level with public open space can be an

indicator of satisfaction with the urban environment and next can affect people’s quality of life”.

Meanwhile, in a similar research Kamalipour et al. (2013, p134) concluded that, “... the results of the interviews and questionnaires indicate that most of the participants (72%) were not satisfied with the quality of the public realm”.

Therefore, measuring the quality of life directly depends on the level of the residents' social satisfaction and their feelings in which the public space can fulfill their local needs (Beck, 2009).

The results of this study (as shown in Figure 6, Figure 7& Figure 8) show that the social satisfaction indicators of the participant towards the level of the public space's quality and meeting their social needs. It can be clearly seen that the majority of the participants (70%) are not satisfied with the current quality of the public space in the GN 9th July neighbourhood while around 34% of the respondents from the TN Almegawba stated that they are socially not satisfied.

Therefore, it can be concluded that most of the residents of GNs are not satisfied with the current quality of the public space. On the other hand, residents of the TNs are more satisfied; this can indicate the value of social satisfaction in the local communities. Thus, creating a link between the new neighbourhoods and providing the features that keep the value of the TNs is one of the recommendations for new projects.

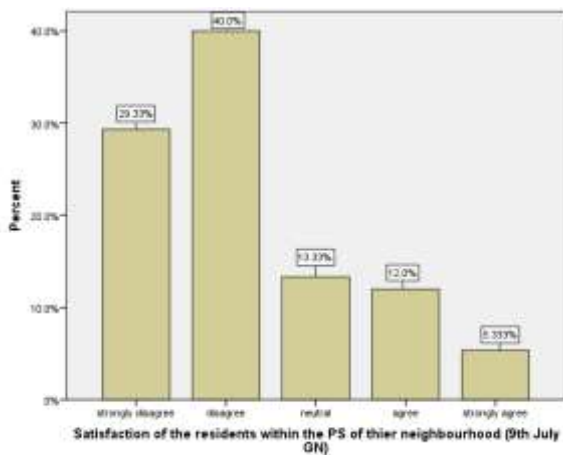


Figure 6. Participants' Satisfaction towards the Public Space of their Neighbourhood, 9th July GN (Source, Filed Study, 2018).

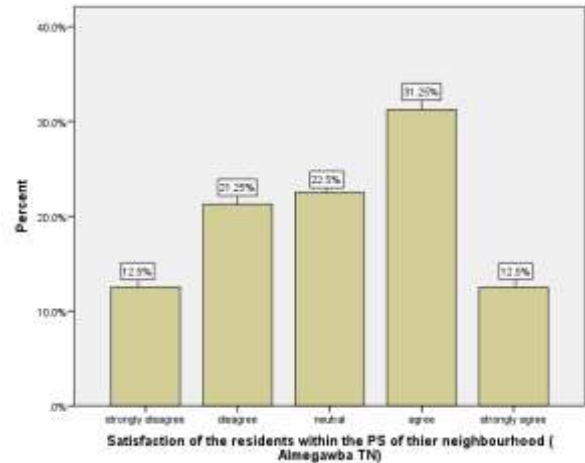


Figure 7. Participants’ Satisfaction towards the Public Space of their Neighbourhoods, Almegawba TN (Source, Filed Study, 2018).

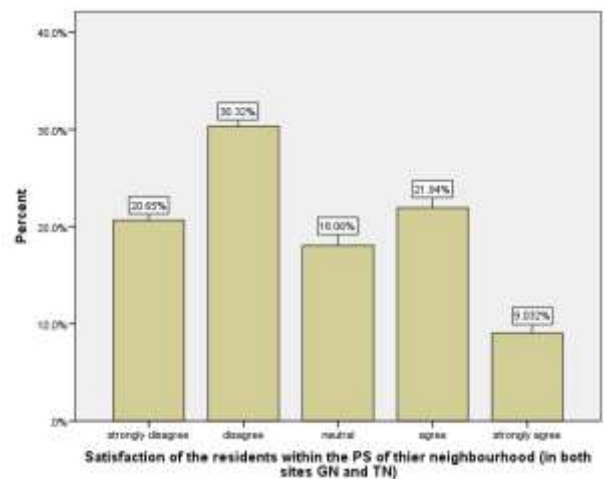


Figure 8. Participants’ Satisfaction towards the Public Space of their Neighbourhood, in both Neighbourhoods the GN and TN (Source, Filed Study, 2018).

Figure 9 shows the overall percentage of the respondents of both sides; it clearly shows that the highest percentage of the families within the neighbourhoods have children. This indicator describes the extent of the facilities for children that are required in such spaces in order to support and enhance the use of the space and, therefore, the residents' social satisfaction. Relevantly, there is a massive need for identifying the local features of the residents such as the common games and habits; this can give the designers an overall understanding of what to include in the new projects and how these are going to best serve the users to satisfy them not only physically but also socially. This is one of the research tasks which are going to be illustrated in the last chapter with the overall results and recommendations.

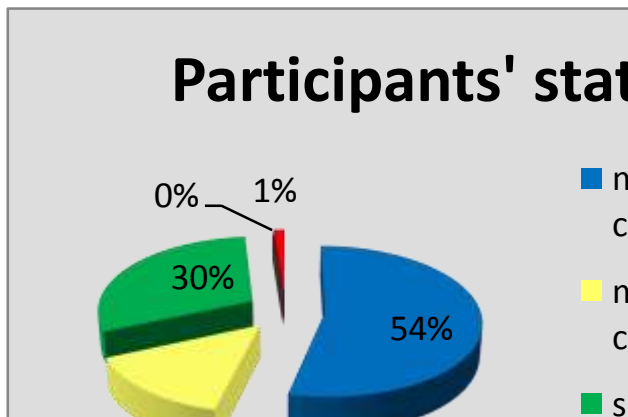


Figure 9. This Graph Shows the Totals of Participants' Status in the Two Neighbourhoods, the GN and TN (Source, Filed Study, 2018).

E. Safety and Security

Safety and security are essential in residential areas where people spend most of their time. The quality of the neighbourhoods is also related to the safety and security level, particularly in the public spaces around the houses. In general, research data indicate high levels of safety regarding the interview and the survey questionnaires. The following graphs suggest that most of the respondents feel safe and secure in the public space of both the GN and the TN (see Figure 10). As mentioned previously, participants who answered "neutral" means they are in the acceptable level, of being just satisfied with a score of 50%, (see Figure 11 and Figure 12).

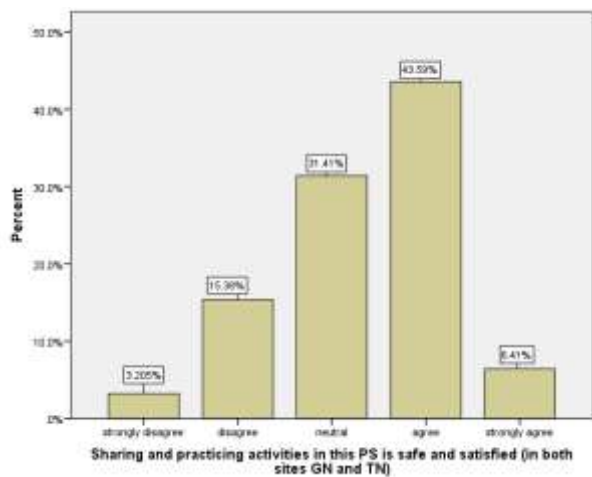


Figure 10. The Respondents who Feel Secure and Safe in the Public Spaces of the Neighbourhood (both sites) (Source, Filed Study, 2018).

With regard to a further illustration on this issue, data gathered from interviews show that most of the participants feel safe and secure, although residents need more improvement in terms of environmental quality in their neighbourhoods; for instance, the children's trips from their houses to the playground, and the possibility of using the paths that connect the houses to join the public spaces, Fences around the playground are also needed as many respondents stated that fences can add more confidence to the parents and let them enjoy being with

other parents to chat and engage in adult activities while their children play. The accessibility for the cars inside the neighbourhoods also should be limited. This can decrease the risk of accidents that can affect the children during their play time (see Figure 13). Therefore, safety is one of the significant issues that need to be improved for better quality, particularly for new development projects.

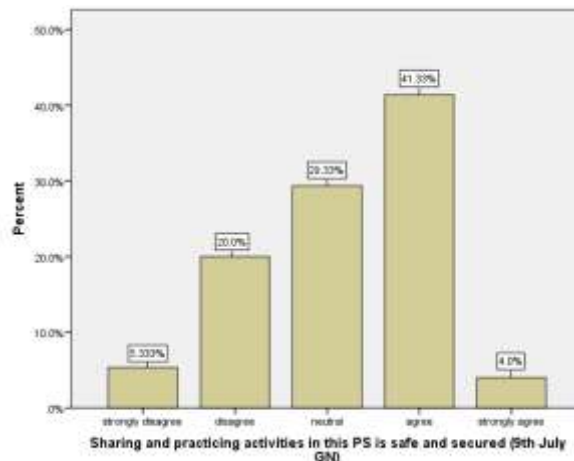


Figure 11. The Respondents who Feel Secure and Safe in the Public Spaces of the GN (Source, Filed Study, 2018).

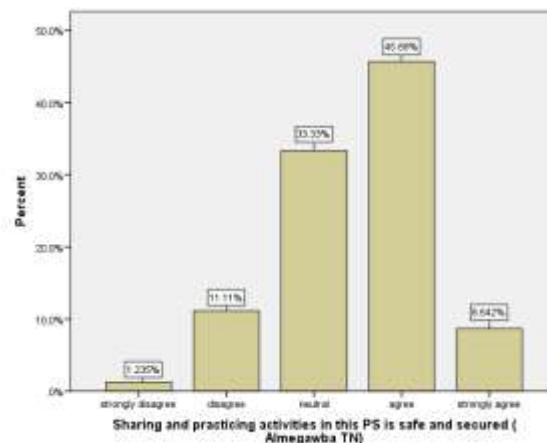


Figure 12. The Respondents who Feel Secure and Safe in the Public Spaces of the TN (Source, Filed Study, 2018).



Figure 13. Children Play Football on Streets, 9th of July Neighbourhood, Misurata, Photo by the Author 12/08/2015.

From a different perspective, safety is very important for all the residents. The information from the interviews highlighted some issues regarding the safety and security of the residents, even though it might be that this is the first time this has been addressed in Libya. For instance, many residents in GNs are originally not from Misurata city, but some have already integrated with the neighbours and local society. Others preferred to be isolated from the neighbours and they spend their holidays and free time back in their original places.

During the 2011 revolution, the residents of the TNs were covered by the social environment and nobody argued with them, because, they were well-integrated with each other. As a result, they did not face any social problems. The opposite happened with the residents in the GNs when the interaction between the neighbours are far less than in the TNs, so these people had to leave the city because their neighbours could not protect them as they did not know them very well and they were isolated from the rest of the local residents. Although this situation has only happened once, it is important to be considered in future developments in order to create more safe and secure communities.

V. CONCLUSION

This paper has pointed out that the level of social satisfaction towards the quality of public spaces is low, particularly in the GNs. Residents of both sites believe that good-quality public spaces enhance their desire to interact with and share more with other neighbours. One of the important indicators in this chapter is the attachment to the neighbourhood. The GN residents show a low level of community attachment because they consider this neighbourhood as a temporary residence and they will move back to their original residence, TN, in a few years. This makes them less motivated to contribute in the local initiatives and less likely to use the public space as much as the other residents do. In this essence, it appears that residents of TN feel more satisfied towards their quality of life than those living in GNs, particularly in terms of social aspects, although the GNs are often better than TNs in their design, infrastructure and physical settings. These results lead to the statement which has been highlighted by many scholars such as (Woolley, 2003, Gehl, 2013) that, in some regions, the residents' satisfaction depends on social values more than on the physical elements.

Moreover, findings have shown that the level of psychological comfort can be improved by providing high-quality public spaces which bring neighbours together in an area where they can get engaged and enjoy sharing some interesting activities. Actually, the results illustrate a good level of privacy within both sites, even though there is some evidence of a few disturbing actions which are not acceptable to some of the residents. Nevertheless, the most dominant result shows a high level of feelings of safety and security in both sites. The only concern about safety was shown about the children's

playground areas, which need more consideration by either being relocated, or provided with a surrounding fence.

Finally, based on the research results, it can be suggested that social satisfaction and sense of community are fundamental elements that should be a focus of future projects. As Woolley (2003, p21) states, "*sense of community can be provided by open spaces of different types of different people and communities. These opportunities include small and large events and both organised and informal gatherings*". In addition, the TNs clearly have advanced social advantages which can be modified to be included in the new governmental neighbourhoods. The local initiatives of the neighbourhoods need more attention from the responsible firms so it can be more effective and practical to benefit the whole neighbourhood. A combination of the advantages of each type of neighbourhood can establish a new framework for future projects which at the end satisfies more residents and improves the social and physical features of new housing projects.

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