

THE IMPACT OF CORONA PANDEMIC ON QUALITY OF URBAN LIFE

(CASE STUDY: USERS' BEHAVIOUR IN RESIDENTIAL COMMUNITIES OF AN INTIMATE SCALE – OCTOBER 6th CITY)

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Abstract:

The concepts of the urban environment are closely related to society& the relationship between them through a set of physical &non-physical connections that connect the human being with the components & elements surrounding him, by explaining & analyzing the concepts & relationships of society as one of the basic elements that affect the environment as a whole & the urban environment in particular, in a way to identify the social action& its types, also, the impact of the social environment and its relationship to social and cultural erection, besides, the concept of culture & its relationship to society, to monitor the set of changes that affect the urban environment, as well as the basic processes in understanding human behaviour within society, then analyze the elements and components of the urban environment in terms of dimensions, characteristics, features, and monitor the impact of Corona pandemic. The behavioural changes of individuals socially and culturally in open spaces, which has a great impact on improving the quality of life for users of different types.

Key words: Corona Pandemic – urban changes – quality of life - urban life - residential communities.

1. Introduction:

Urban environment is still rich in many components and characteristics that are closely related to human needs to reach the highest levels of satisfaction, well-being and quality of life. .

The Corona virus pandemic is considered one of the most important changes facing the entire world since the first cases of Corona virus appeared in November 2019, and the World Health Organization (WHO) declared that it is a global pandemic in March 2020.

Where the pandemic constituted a great burden on all social, health and economic levels, to play a pivotal role in changing the urban and human image of the environment as a whole, to be the main motive for man to change his habits and perhaps his ideas, and to reconsider his behaviours and methods of practicing various activities within urban branches, which made societies on The global level is facing a great challenge - Not only at the level of physical interaction with the components of the urban environment, but rather in the combination of all elements of the urban formation of an environment that enjoys a high level of quality of life and optimal use of resources.

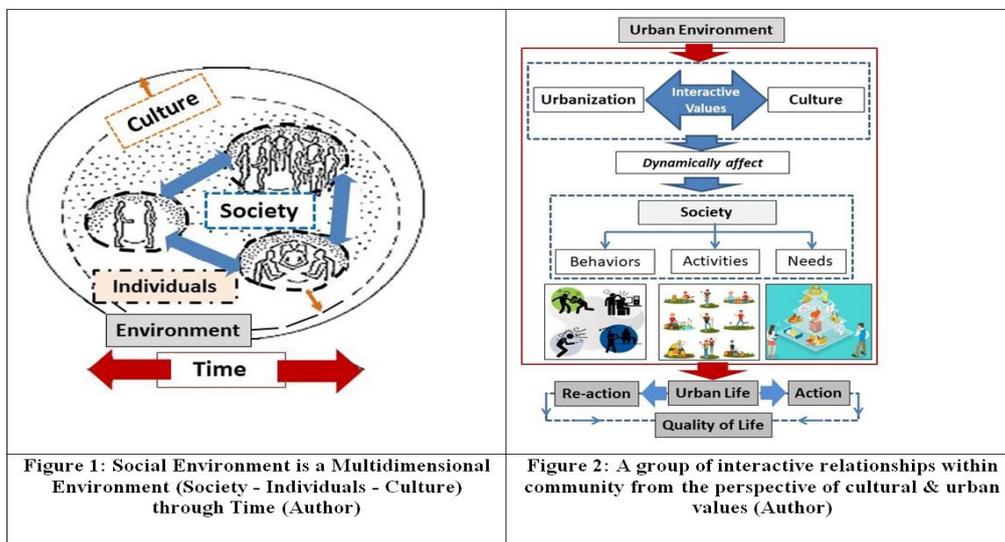
2. Objective of the Study:

In the current research studying the impact of the Corona pandemic on the quality of life in the urban environment, the focus is first on understanding life satisfaction or the so-called Well-being in dealing with the urban environment, through a two-dimensional understanding of both quality of life and quality of place, taking into account the influence of Culture on individual's behaviour and relationships between each other's through time – fig. (1).

3. Covid-19 Pandemic:

Since the beginning of the pandemic, Egypt and other countries around the world have been suffering from the damage caused by the Corona pandemic at all economic, social and urban levels, as most of the activities and events that users of the public space are accustomed to have stopped, in compliance with social distancing measures and limiting meetings between individuals or groups, except if there is any urgent need for that, so the research focuses on shedding light on the methods of dealing with public spaces in that period, and presenting the experience of urban communities of intimate scale (small gated compounds) in using those spaces to enjoy and communicate socially amid the restrictions imposed for reasons of security and health safety among individuals.

4. Society & Urban Environment:



It is possible to identify the characteristics of the urban environment by understanding the structure of the society and the orientations of its members socially and culturally, where the person must deal with it through a set of disparate behaviours related to the needs of each group of society (Ayob, Zulkefle, et al., 2013) (Murgas, Frantisek et. al, 2019), and the changes that occur at close or distant time periods become the standard that can evaluate and analyzes both

the environment and society – fig. (1 & 2) - To achieve sufficient quality of life generally and the quality of urban life particularly.

4.1 Society:

Max Weber(Becker, Sophia, et. al, 2021) (Scholl, Wolfgang, 2013)considers that society is a system of values that determine the interactions between people, and on the basis of which forms of human behaviour are established, as the purposeful behaviour.

Tallcot Parson sees that society throughout his concept in which the cultural, economic, social & personal systems are integrated into a frame of a functional potency, considering it the basis for social action (Weiss, R., Gomes Neto, J, 2021).

4.2 Culture and Social Action:

Culture (Luce, Stephanie, 2017) (Pala, Yavuz, 2021)can be identified as the way of practicing life through a shared group of individuals, which makes us look at some Actions and describe them from a cultural perspective according to the nature and structure of the environment surrounding.

		
<p>Figure 3: How to greet between people - China</p>	<p>Figure 4: special celebrations reflects culture of individuals - Spain</p>	<p>Figure 5: How to carry things – Tanzanian women</p>
<p>Source: https://www.insider.com/how-to-greet-people-around-the-world-2016-8</p>	<p>Source: https://traveltriangle.com/blog/spanish-festivals/</p>	<p>Source: https://www.thetraveltart.com/transport-logistics-tanzania/</p>

4.3. Social Action:

In sociology, a social action is an act that takes into accounts the actions and reactions of individuals or groups, fig. no.2. According to Max Weber, "Action is being "social" insofar as its subjective meaning takes account of the behaviour of others and is thereby oriented in its course (Fadul, J. and Estoque, R., 2010).

Planned, purposeful social action attempts to make a social change that may be assumed to maximize satisfaction for the members of a particular social system or systems (WHO, 2010).

Besides, instigated social action may be thought of as a process of deciding objectives, making choices concerning methods, and involving people in carrying out the objectives. In this respect, Social Action is a collective action - although it does not deny the importance of individual or family decision-making units.

Social action is about people coming together to help improve their lives and solve the problems that are important in their communities. It can broadly be defined as practical action in the service of others, which is (a) carried out by individuals or groups of people working together, (b) not mandated and not for profit, (c) done for the good of others – individuals, communities and/or society, and (d) bringing about social change and or value (Cabinet Office., 2015)

In summary, Sociologists have a different viewpoint about the nature of social action and the extent of its impact on society through the behaviours of individuals and their different reactions, as follows according to (Max Weber & Tallcot Parsons) fig. (6):

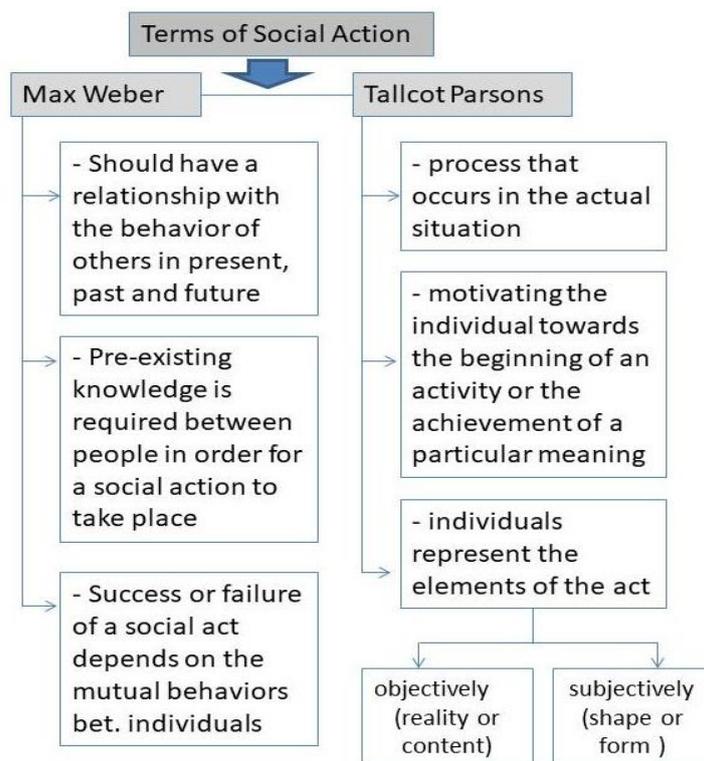


Figure 6: Terms of Social Actions according to Weber & Tallcot (Author)

4.5. How Social Action correlates with achieving better Quality of Urban Life:

Social action comes as an embodied process when the place is prepared for various interpersonal activities or an organized group of activities, and Social action is usually part of the fabric of local and social life, which has many challenges that make it more important than ever. To achieve a better quality of life in an urban environment, people must have experienced some opportunities for urban life through various combinations of social actions which are reinforced by the following factors – fig. (7& 8):

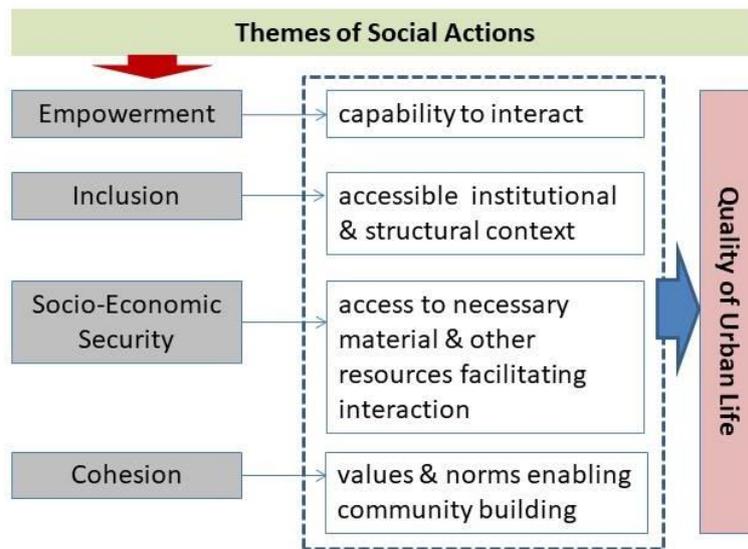


Figure 7: Factors affecting social action to achieve better quality of urban life (Author)



5. Quality of Life and Quality of Urban life:

5.1. Quality of Life:

Quality of life is a concept that has gained a wide range of attention from researchers in various fields, where the concept of has appeared & increased on a large scale after World War II, in the 60s and 70s of the last century as a new concept and an alternative to the materialistic tendency aimed at raising the standard of living, and it also includes - the concept of It includes the immaterial aspects of living conditions, such as health Social relations and quality of the surrounding environment (natural & built).

5.2. Quality of Urban life (QOUL):

Quality of urban life is considered one of the international new issues that focus and be labelled as both (Taqi, Omar et. al., 2021) (Psatha, Eva et. al., 2015): (a) the objective assessments in which evaluates the built environment that surround users, and (b) the individuals' subjective assessment on their level of quality of life. The term Quality of Urban Life in general leads to understanding the quality of the environment that surrounds a person and the wellbeing of people in this environment. It is, also, the part that describes the influential relationship between the built environment and personal life, and refers to all the elements of the conditions in which people live, that is, all their needs and requirements (Shoja, Saeedeh, et. al, 2015). In economic literature, urban quality of life is usually assessed through the standard revealed-preference approach, which defines a QOL index as the monetary value of urban amenities.

Lee explained that quality must be subjective & the most appropriate way for discovering life quality is to ask for people's perception of their lives (Lee, 2008). He believes that subjective indicators are preferable to objective indicators & have a great impact on planning & policy-making as these indicators provide valuable feedback for planners & policy-makers.

The key assumption of the study is that the physical and social environment can influence other aspects (abstract & concrete aspects), like the economic, happiness, and collective well-being of individuals; making it a multidimensional concept (Shoja, Saeedeh, et. al, 2015), where many different approaches to the concept can be found in the context of the same scientific field. Although there has recently been a large number of comparative studies and papers concerning the evaluation of QOUL in different, the factors taken into account are – some way - far from being standard or measured.

It is important to highlight the impact of Covid-19 Pandemic on urban life and its quality as well; it is known that when we examine QoUL, traditional issues such as crime, poverty, & social exclusion, loss of identity, environmental degradation, and overcrowding are at the fore, along with other less obvious issues such as quality of life. Public places and accessibility. Therefore, the research undertakes the task of studying the impact on one of the gated communities of intimate scale and monitoring the most important changes and influences on the nature of urban life in it before the pandemic and during it.

6. Case Study:

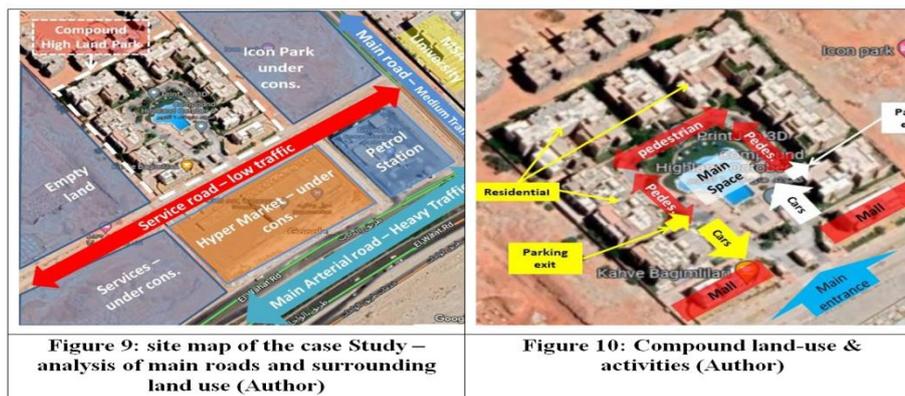
Gated residential communities have grown exponentially since 1980, with the aim of preventing crime in residential areas. Blandy & Atkinson defined it as: “the development of housing projects of a special nature that limits public access to it, and this is often done by using gates, walls and fences, or by using security personnel or CCTV systems (closed-circuit television) to monitor access, and these communities possess a variety of in-services such as shops and entertainment” (Noterman, E. (2018), Blakely (2007) added that in these residential areas, public spaces are converted to private, and they have an administrative and executive system that ensures the development of new housing and the preservation of existing residential areas.

Gated communities spread within new cities and their various extensions spread around them, known as Compounds where it has a range of services and different types of housing. Sizes of these compounds vary between large, medium, to small (with intimate scale), case study of the research was chosen to monitor and track the behaviour of users in public and open spaces, before and during the Corona pandemic, seeking the impact of the pandemic on the daily and periodic activities that take place within those spaces.

6.1. Reasons to choose the Case Study:

(1) It is suitable for the size and area for the purpose of the study, (2) & Being of an intimate human scale, (3) The occupancy rate of the residential units has gone through gradual stages that coincide with the completion of services inside and around the compound, (4) Diversity in the age group of the population, (5) Diversity in the social and economic segments of the population (middle-income - above average income - high-income).

6.2. Location and distinctive features:



Compound Highland Park is located in the extension area south of the neighbourhoods in October 6th City, Giza Governorate-Egypt, with total area of 40 acres, and consists of 11 residential buildings (each block consists of 5 -story), offering housing for 165 family, with a central space in the middle as a water lake (can be used as a swimming pool) surrounded by a path for pedestrians and motorized movements (if necessary), plantations and green areas,

benches and complementary elements to serve the residents and their families, in addition, it has a gymnasium at basement level adjacent to parking area as well, besides, private gardens in ground floor level that visually connected to the central space (the lake).fig. no. (9&10).

6.3. Steps and procedure

Through a survey of a one-year study on a sample of 20 families, with average number of 3 to 5 persons/family, to study how residents' interact with the main central space in the compound & the effectiveness of practicing different activities at the individual or group level. Besides, Flexibility to respond to & coexist in space, & type of problems & obstacles that prevent enjoyment or entertainment before & during pandemic, & through a set of questions in a questionnaire form for the residents' opinion, to explore the following features:

Survey Sample members are average of 55 people, the age groups varied between young adults, children, the elderly & housewives (Middle & Old Age Adults), the ratio of males to females was 1: 6, questions included number of points, as follows:

- (1) The importance of being in the main square, (2) its importance as a main breathing space for residents and its attractiveness, (3) Considering the central space as a human and social place, (4) the importance of the lake, (5) designer's success or failure in distributing spaces, sub-spaces, elements & how they are connected together, (6) residents' response to main space, sub-spaces & the quality of the activities that take place, (7) the capability of space to accommodate distinctive urban activities, (8) the role of the Occupants Union in monitoring the main space & activities, (9) the allowed timings of celebrations or events hosted privately or publicly in or around the lake, (10) the size and adequacy of services, (11) The visual image of space & satisfaction of the residents with it, (12) the services that must be added to raise the efficiency of space & improve the quality of urban life, (13) the importance of awareness to preserve the main space from any damage or misuse, (14) the adequacy of landscape elements & the quality of the floors, (15) residents' satisfaction with the shape of facades around the central space, (16) continuing maintenance work during the pandemic.

6.4. Aging group of the sample (Aging group with aging range) (Baht, Dipali et al., 2016):

Age Group	Age Range	Sample Number
child	0 - 16	11
Young Adults	17 - 30	6
Middle Age Adults	31 - 45	28
Old Age Adults	Above 45	10

- 11 Child's opinion - about preventing them from doing their usual activities (playing, riding a bike, chatting...etc) - showed their strong relationship to the central space, considering it a means of recreation and enjoyment – fig. 13.
- 6 Young people expressed their dissatisfaction with the complete lockdown period, they used to meet for study or have fun with each other, especially those who study in MSA University and are residents in the compound – fig. 14.

- 28 middle aged adults (most of them are housewives), used to sit entertaining the fresh air, get benefits of the sunshine, chatting, walking in groups – fig. 12.
- 10 old aged adults were mainly chatting, celebrating events, walking around the lake and taking advantage of the sunshine (3 of them at age of retirement).

6.5. Conditions of research study before and during Corona:

The study went through two stages, the first before the outbreak of the Corona virus, and the second during the crisis, as for the first stage that was based on monitoring the behaviour of users within public and open spaces in residential areas of intimate scale, and its impact on improving the quality of urban life for residents, but the emergence of the Corona virus directly changed the scenario of urban life for people in general, and for residents of closed residential communities in particular, because of the fear of direct infection as a result of continuous and accustomed gatherings of residents inside public places.

As for the case study, the research indicated the nature of dealing with public spaces and the behaviour of users during the crisis, and the study resulted in the utmost importance of the main space (the lake and surrounded subspaces), Residents' dependence on being in the central space and practicing various activities (walking, talking, eating, birthday celebrations...etc).

6.6. The time frame for the impact of the virus on urban life of the case study:

6.6.1. Monitoring Residents' reactions since the beginning of the pandemic:

Residents adhered to the precautionary measures with the onset of the crisis and social distancing on a large scale, for a period that lasted more than 6 months, but the situation changed with the negative impact of staying at home and changing the mood and health of many residents, and social gatherings returned again within the main space with commitment by wearing a medical mask and keeping the social distancing, With the announcement of the emergence of vaccinations, residents were able to return to the usual activities of gatherings, celebrations, or meetings, whether formal (official meetings of compound administration) or informal (related to entertainment, celebration, relaxation, walking, etc...), fig. 11.to 17.

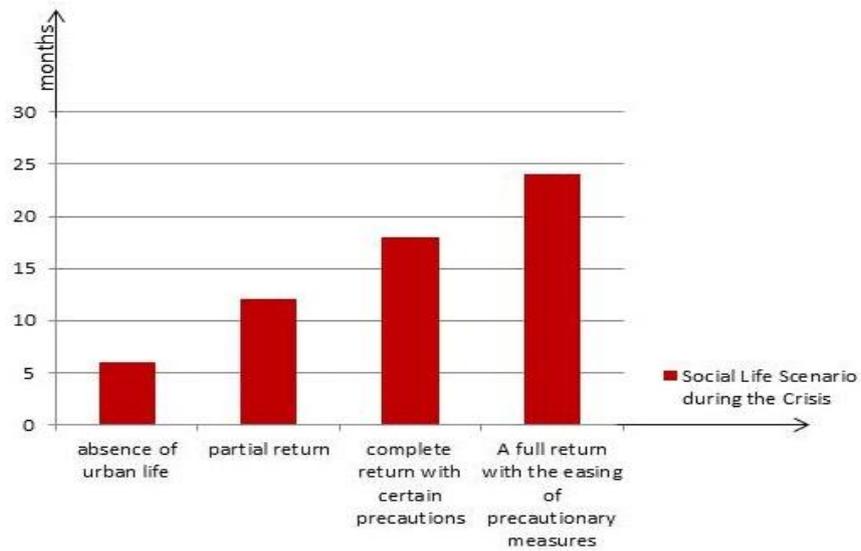


Figure 11: Corona virus vs. urban life – (of case study) (Author)



6.6.2. Findings- Questionnaire Results Analysis:

The study ended up with some key points ensuring the importance of the study, and it was found that:

- 60% stressed on the importance of the central space and the need to preserve it and maintaining it in a good condition to help in facing any unexpected crises and to consider it the only source of entertainment in case of lockdown again, as there were 85% consider that space is attractive, suitable and could host residents and activities.
- More than 79% assume the central space is for social reasons more than environmental or healthy ones, as it has a human intimate scale.
- 80% believe that the designer's decision to put the lake in the middle is perfectly done that it added a great value to the place, while the remaining 20% believe that it needs continuous maintenance and daily cleaning work. The lake, also, represents one of the most important reasons for the residents' desire to interact with, and adds to the aesthetic image of the space.
- 83% stated that the Occupants Union has an important role in facing crises in general, through the continuous maintenance of the space and its provision of the necessary green spaces and furnishing the residents, while 17% believe that it can be benefited from investing in commercial activities (renting the place to shoot advertisements or photo sessions) from outside the compound To increase financial resources for maintenance work.
- Positively, during the lockdown, due to the lack of use of the main space and subsidiary spaces, the amount of preventive maintenance work was halved.

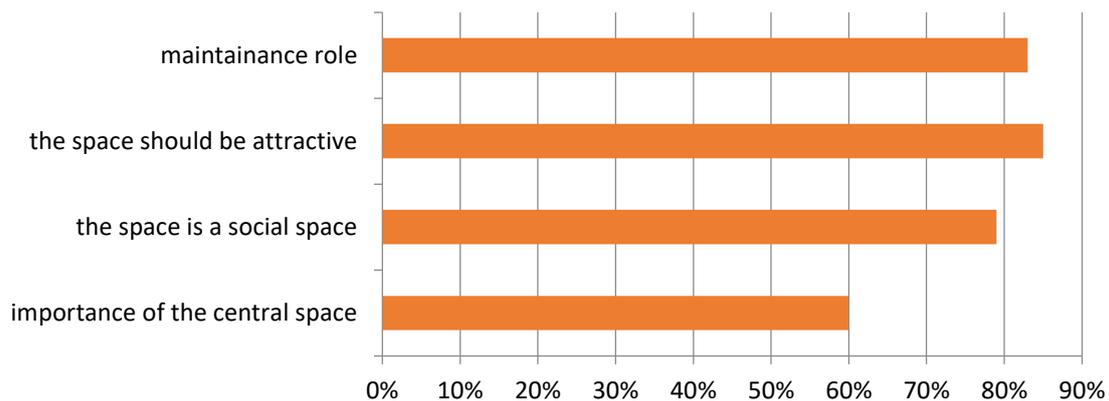


Figure 18: key features of the survey (Author)

7. Conclusion and discussion:

- Urban spaces are centers of social and cultural activities, which are always affected by changes taking place both locally and globally. These activities are considered as catalysts for Social Actions, which has some themes, including: empowerment (the ability to interact), inclusion (the accessible institutional and structural context), social and economic security (access to the necessary resources that facilitate interaction), and cohesion (the presence of values and standards that enabling building the community).
- Despite the negative impact of the outbreak of Corona virus, which has had many negative effects on the economic, social and health levels, the importance of urban space and its impact on the quality of urban life appeared clearly for everyone, the need for the exposure to sunlight and fresh air to add to enhance the efficiency of immunity system and protect it from infection has become an inevitable matter.
- The case study showed that relationship between the urban environment and the amount of Social action that are taking place during the day, and reflect the urban life quality of residents.
- It is recommended in small intimate scale communities to improve the quality of urban life through a set of procedures involving the community participation in making a decision when dealing with an unpredicted crisis, raising the overall awareness of the importance of public open space.
- It is worth noting that the residents' interaction with the public space involves a strong desire to interact with it; by adding some special elements and preparations on the fences of the gardens on the ground floor or around the lake, which express celebrations and special or public events, such as: celebrating the New Year, the beginning of Ramadan, etc.

References:

- 1 Becker, Sophia, Bogel, Paula, Upham, Paul, (2021). "The role of social identity in institutional work for socio technical transitions: The case of transport infrastructure in Berlin", *Technological Forecasting & Social Change*, Elsevier, Science Direct, Vol. 162 (2021) 120385
- 2 Pala, Yavuz, (2021). "What is Cultural Sociology?", *Cultural Trends*, 30:3, 284-286, DOI: 10.1080/09548963.2021.1930516.
- 3 Taqi, Omar et. al.(2021). "The Importance of Quality of Urban Life Indicators in Developing New Urban Communities in Cairo", *Mansoura Engineering Journal*, (MEJ), Vol.46, ISSUE 2, June 2021, pp: 58-66
- 4 Weiss, R., Gomes Neto, J, (2021). "Talcott Parsons & the Sociology of Morality", *the American Sociologist* (2021) 52:107-130 <https://doi.org/10.1007/s12108-020-09466-w> Pala
- 5 Murgas, Frantisek & Drapela, Emil, (2019). "Quality of Urban Life in Socially Excluded Communities of Liberec Region", *International Journal of Community Well-being*, springer.
- 6 Noterman, E. (2018). Book review essay: Rowland Atkinson and Sarah Blandy, *Domestic Fortress: Fear and the New Home Front*. *Urban Studies*, 55(2).
- 7 Luce, Stephanie. (2017). "living Wages: a US perspective." *Employee Relations*, vol. 39, no.6, 2017, pp.863-874. doi: 10.1108/ER-07-2017-0153

- 8 Shoja, Saeedeh et. al. (2015). "Subjective Assessment of Urban Quality of Life Indices, Case Study: Yazd 2011-2012", *Armanshahr Architecture & Urban Development*, 8(14), 165-175, Spring Summer 2015 ISSN: 2008-5079.
- 9 Psatha, Eva et. al., (2015). "Defining The Quality of Urban Life: which factors should be considered?", *European Regional Science Association, 51st European Congress Barcelona, Spain*.
- 10 Cabinet Office. (2015). *Social action: Harnessing the potential: A discussion paper*, available at: www.gov.uk/government/publications/social-action-harnessing-the-potential , accessed: Monday 21st Jan.2022, 03:21pm.
- 11 Ayob, Zulkefle, et al., (2013). "Urban Life & the Changing City", *Asian Social Science*, Vol.9, No. 9, 2013, ISSN1911-2017, published by Canadian Center of Science & Education.
- 12 Scholl, Wolfgang (2013). "The Socio-Emotional Basis of Human Interaction & Communication: How We Construct our Social World." *Social Science Information* 52:3–33.
- 13 Fadul, J., Estoque, R. (2010). "A Textbook for an Introductory Course in Sociology", Lulu Press.
- 14 WHO (2010). "A conceptual Framework for Action on the Social Determinants of Health – Social Determinants of Health Discussion Paper 2 – Debates, Policy & Practice, Case Studies", WHO Press, Geneva, Switzerland
- 15 Xu, Q., Perkins, D. D., & Chow, J. C.-C. (2010). "Sense of Community, Neighboring, and Social Capital as Predictors of Local Political Participation in China", *American Journal of Community Psychology*, 45, 259-271
- 16 Lee, Y. J. (2008). "Subjective Quality of Measurement in Taipei". *Building and Environment international journal*, ISSN0360-1323, 43, 1208.
- 17 Al-Boroloso, L. A. & Effat, N. M. (2022). Multi-Criteria decision-Making Methodology According to Hierarchical Analysis & ABC method. 17(06),pp: 1566–1588. <https://doi.org/10.5281/zenodo.6768688>