Community gardening and the capacity to enrich social bonding in urban neighborhoods

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Abstract. This paper argues that the selection of the type of urban green spaces to be integrated into urban neighborhoods is critical in addressing these well-being problems. One of the drivers is the urban migration, where people are relocating themselves to new neighborhoods, cities or countries often with the hope of better economic opportunities and social infrastructure, therefore changing the landscape of the new society and the place they reside. It is worrying as these people might not receive enough social support due to their limited social network. It could further escalate to social well-being problems such as individualism and social isolation and could later be manifested mentally or psychologically as loneliness. Community gardens, as part of urban green spaces, offer meaningful social interaction opportunities that often being missed in the context of modern societies and urban lifestyle. Therefore, there is a need to review the effects of community gardening activities as an intervention strategy to strengthen the degree of social bonding to identify its capacity in integrating isolated people back into community life. As a conclusion, urban designers and policymakers are suggested to adopt community gardens as a safe open space in cities to encourage more people-people-places interaction.

1. Introduction
Urbanization is demonstrated to be impacting urban population health [1-4]. Therefore, it has attracted academics and researcher’s interests to study the reality of urbanization in the context of modern societies. A study has reported the impacts of urbanization to Malaysia perspective [4], which has highlighted industrialization as the driver of urban migration. The migration leads to demographic changes in the cities because of the large population, especially the young people migrating in search of better economic opportunities.

Debates among academics and researchers continue to find the most effective solution to mitigate the impacts of urbanization in local context and reality. The effort to address the impacts of urbanization is reflecting the call for the Sustainable Development Goals, Indicator 11.A.1: Urban and regional planning needs to support positive economic, social and environmental links between urban, peri-urban and rural areas [5]. However, there are still rooms for improvement as academics and researchers should be in the frontline to investigate future challenges especially the social links to facilitate city and urban designers in building cities and surrounding regions, alleviating the impacts of urbanization on economic, social and environment.

2. Research methodology
2.1. Urbanization and reduced quality of life

It has been observed that urbanization has intensified the trade-off needed to survive the modern lifestyle in urban areas. It limits the population's opportunities to participate in community life in public open spaces and hamper social interaction opportunities in neighborhoods [6]. Modern lifestyle or urban living is often characterized by long working hours, low wages, high cost of living, crime, social problem, environmental deterioration, unemployment and poverty [2]. It is worrying as more people might consider the impoverished way of living as the new normal, especially amongst the vulnerable people; the poorly educated and the economically marginalized.

2.2. Urbanization and the shrinking of urban green spaces

Rapid urbanization has, for example, motivates government of Malaysia to concentrate more on building physical infrastructure such as affordable housing scheme for the growing urban population to address substandard urban housing condition [7]. However, it leads to a decline in the acreage of public open space in the city areas primarily because of conversion to other types of uses and development [8]. It is worrying as it decreases the opportunities for people to have enough access to safe, inclusive and accessible, green and public spaces by 2030 as recommended by the Sustainable Development Goals indicator 11.7.1: Access to open spaces in cities [5]. Hence, it means opportunities for the urban population to enjoy more public open spaces are diminishing, which could limit the occasions for the urban population to access urban green spaces to experience community life while doing their recreational activities.

3. Results and discussion

This section would discuss the impacts of urbanization on the modern lifestyle. It will also elaborate on how a high level of social attachment could contribute to urban population’s well-being.

3.1. Sense of community and its impact on community health

This sub-section shall discuss the importance of having a sense of community amongst the members of the neighborhood. It also discusses the needs of infrastructure to emphasize social well-being as one of the components to health in creating a robust social attachment or bonding in the context of urban neighborhoods.

Evidence has suggested that meanings and attachment formed by the urban populations to places can sustain place identity and sense of place, thus promoting emotional well-being, fulfilment and happiness [9]. However, a study by Parigi and Henson has elaborated that the modern lifestyle is commonly associated with the declining of the traditional bonds that used to connect people to their communities and extended kinship groups [10]. It is signaling to the weakening sense of community amongst the urban population. Sense of community is a central construct in the field of community psychology, and it can be defined as feelings of membership or belongingness to a group; a feeling that members matter to one another and the group, and a shared faith that members needs will be met through their commitment to being together [11,12].

For this paper, the sense of communities will be reviewed from the social dimension perspective, that is from the social bonding construct. Researchers have established several scales to measure the social bonding level amongst community members. Plenty of evidence pointing out to the need of investigating (a) strength of social ties; (b) sense of belongingness; (c) level of familiarity [13] to measure the level of social boundedness or social attachment in a community level.

Sense of community is necessary to address social isolation and loneliness. Social isolation and loneliness are both related, although both are not the same thing and often confused with each other [14]. A recent study has defined social isolation as the absence of a support system or having reduced social interactions or relationships with (a) family and friends at an individual level and with (b) a general, low-level of social participation in community life [15]. On the other hand, loneliness is usually considered to be the psychological manifestation of social isolation [16]. For a context, it has been observed in the study of Malaysia that showed that 49.8% of older Malaysians are at risk for social
isolation [3]. Therefore, it is suggested urban population to participate in community activities to nurture a reliable social network and well-being and decrease the likelihood of being socially isolated and lonely. Since several studies have indicated that social isolation and loneliness are more common in older adults, many researchers and academics have concentrated their effort to investigate the impacts of these problems on health amongst the age group [17], therefore neglecting people from lower age bracket. It is quite unfortunate as most developing countries have a population from the lower bracket of age groups. Malaysia, for an example is one of the countries with the most significant population currently is from the 25–54-year-old age bracket [18]. However, it has been observed that there is minimal research on how urbanization has impacted these lower age group of people, especially in the developing world, which calls for a need to investigate the degree of their well-being, and how proactive planning decision could facilitate them to prepare for heir later stage of adult life. It is theorized that a community that has a strong level of social attachment would be more empowered to be sustainable. It is also necessary as reflected in SDG indicator 11.7.2, for green spaces to be safe, inclusive and accessible [5], through forming social relationships, receiving adequate social support, little or no social strain, some social participation, social inclusion in one's society, secure and well-functioning social networks [14]. In general, the sense of community can reduce the risk of social disconnectedness and perceived isolation amongst the population. However, the focus of this paper is to identify which initiatives can increase the social bonding amongst the participants to mitigate the impacts of social isolation and loneliness due to rapid urbanization. It is theorized that an urban green space strategy could improve social health or social well-being in the cities areas.

3.2. Urban green spaces and their capacity to improve community health and well-being

It will analyses how social bonding could improve community health and well-being. Urban green spaces are deemed crucial for meaningful socio-spatial interactions, especially at a small-scale neighborhood [7,19]. It can safeguard people health and well-being as it nurtures a stronger sense of attachment and supporting healthy behavior [20]. A recent study by Astell and Feng [21] has suggested that living near green spaces may support the population's mental and general health. The study has also indicated that access to green spaces may also prevent depression amongst the people. However, as previously pointed out, not many of the urban population are economically capable of living near or having access to urban green spaces, which further deprive them of managing their health and well-being. Several studies have also highlighted that living and working in a substandard urban environment: a densely built environment with little nature contacts; have made researchers believe that it also leads to the rise of social isolation and loneliness amongst the urban population and further eroding community ties [1,15,16,22,23]. The policymakers and city planners need to start putting more weightage to the aspects of meanings and attachment, strengthening social capital, which can be developed through meaningful engagement to the people and place [24,25], especially if safeguarding public health is one of its main concerns. As outlined by Viljoen et al [26], strengthening ties and regenerating urban and other communities live by providing them with access to community activities to foster pride and identification within local communities, which would translate courage for more people to participate in public affairs. Hence, there is a real pressure for academics and researchers to address social health problems, especially in urban neighborhoods, by providing more access to green spaces to everyone. Thus, it is suggested to investigate community gardening as the initiative to urban green spaces intervention strategy to create a socially cohesive community that encourages community member’s participation and interaction regardless of social backgrounds. In general, to safeguard community health, the community members need to have access to the social network to increase the likelihood to receive social support, primarily to mitigate the impacts of urbanization to the population in safe spaces in cities.
3.3. Community gardens as urban green spaces initiative to address weakening social attachment in urban neighborhoods

This section explores the potentials of community gardens as urban green spaces strategy to address weakening social attachment and how it facilitates in nurturing social cohesion in urban neighborhoods.

Several studies have linked community gardening with the ability to foster a sense of community, improving community integration, and promoting sustainable community development [27]. It is not surprising as the essential feature that separates community gardens with other green spaces network is its strong local involvement; commonly managed for, and by, local community groups but sometimes run as partnerships with local [26]. More extensive group benefits such as active community movement can be established and enjoyed from having a strengthen social tie, which to is achieved through a sense of belongingness to a place as cited in Scannel and Gifford [28]. However, the evidence of community gardening and the degrees of its capacity to strengthen social bonding or attachment is still minimal. Community gardens are physical spaces in which urban population can establish and sustain relations with people, nature and the neighborhood [29,30], perceives to be able to bring people from different demographic backgrounds to be working in shared goals and interests.

Figure 1. A conceptual framework to investigate the effects of community gardening on social bonding/attachment components [28].

At the community level, participating in community gardening activities allow us to access people from different demographics and becomes a platform for people who are socially isolated to be able to integrate and extend their networks [26]. At an individual level, the increased knowledge and skills could improve their self-confidence, thus fosters pride and identification within a local community, hence encourages people to participate in public affairs.

Figure 1 shows how academics and researchers could identify the capacity of community gardening to foster social attachment by measuring several components of social connectedness amongst its participants. The findings could support the notion to integrate community gardening as part of the urban green space initiative to improve community health and well-being. In general, participating in the community gardening initiative is proposed to be able to foster social bonding amongst the community members in urban neighborhoods. It is suggested that when it is not possible for allocation of a new piece of land to community application, the governing body should work hand in hand with the community to retrofit existing landscape for them to work on gardening activities.
4. Conclusion
It is theorized that participating in community gardening could offset the impacts of urbanization on the cities and its population, therefore decreasing the likelihood of social isolation and loneliness. The lack of opportunities for integration and participation into community life is unfortunate as any positive personal or relational to other people would lead to positive impacts on the well-being of people. There is a need to improve the capacity of urban green spaces with attention to social attributes to fulfill the needs and requirements of users to nurture positive relationship and attachment between users’ and to their environment. The study acknowledges the limited access to lands but seeks to find a reconciliation strategy between the governing body and the communities to develop sustainable cities and communities. It is proposed that the integration of community-managed green spaces such as the community gardens would facilitate the development of people individually and collectively, thus enriching the social capital of the urban neighborhood. A community gardening activity needs to correspond to the local context by respecting local values, norm and culture to empower the community to be more active and socially cohesive. It is important as maintaining and managing community gardens need substantial social capital to sustain the projects in transforming cities into resilient and sustainable societies.

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