



Community Gardens and Social Connectedness Among Rural Older People

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Abstract

Community gardens are growing in popularity as a strategy to effectively deal with population health at a local level. Community gardens can offer a range of psychosocial and health benefits to individuals who utilize them including nutritional, social, psychological benefits, as well as the opportunity to become connected to nature. This chapter addresses these issues among a group of older persons who reside in a rural town. There are several benefits associated with participation in a rural community garden including forming social support networks in order to cultivate social capital. Community gardens created social connectedness among the participants, which could lead to better overall health and well-being. The main reason for their initial involvement with the community garden was that they were

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new to the area. Joining the group to develop support networks within the local area would allow them to cultivate social support capital in their new living environment. The present findings can inform government policies regarding localized food sustainability programs, which is important given the increasing popularity of such programs Australian-wide and elsewhere.

Keywords

Community garden · Rural Australia · Social connectedness · Social capital · Well-being · Qualitative research

1 Introduction

In addition to food, physical activity, mental health and environmental benefits, community gardens provide opportunities for social inclusion and increased social capital. (Mmako et al. 2019, p. 350)

Today, approximately seven million Australians live in regional, rural, or remote areas of Australia, and these individuals currently experience a rather substantial health-status differential when compared to Australians living in major cities (Australian Institute of Health and Welfare 2020). Individuals living in rural or remote locales can suffer from factors such as geographic isolation, reduced access to public services, and a loss of connection with family due to distance (Smith 2007; Crouch et al. 2016). As a direct result of these factors, people can become socially isolated, which can lead to conditions such as poor health or depression (Toepoel 2013; Crouch et al. 2016). Individuals who experience isolation and are without adequate support networks are two to four times more at risk of mortality (Baum 2016).

Gardening has been shown to have positive influences on many aspects of the life of individuals (Wang and MacMillan 2013), particularly older people. It has become increasingly seen as a “desired health management strategy” for older individuals. In Western societies in particular, gardening has been one of the active leisure activities that older individuals enjoy. It provides them a means to enjoy the outdoor and to exercise. In Australia, gardening is advocated by the Australian Department of Health and Ageing as a moderate physical activity that older individuals can perform in their daily lives as a way to keep them physically active. Gardening can contribute to healthy aging by providing opportunities for participation in order to enhance health and well-being as people become older.

One form of gardening that involves community members is community gardening. Community gardens have their origins in the allotment gardens in Europe in the mid-1800s for supplementing food supplies to people in the areas (Armstrong 2000; Twiss et al. 2003). There have been several definitions of community gardens, but in this chapter, the definition given by Kingsley et al. (2009, p. 209), who refer to community gardens as “plots of land allocated to individuals to create 65 gardens of their choice in a communal environment,” is borrowed. Worldwide, community gardens have taken many forms and been used for food production, creating

employment, generating income, and improving local environments (Irvine et al. 1999). In urban settings, community gardens have also offered individuals to become socially and physically active and to become part of a community (Kingsley et al. 2009; Egerer et al. 2018).

Literature suggests that community gardens can offer a range of therapeutic benefits to individuals who utilize them including nutritional, physical, social, and psychological benefits, as well as the opportunity to become connected to nature (Kingsley et al. 2009; Hale et al. 2011; Okvat and Zautra 2011; Wang and MacMillan 2013; Wood et al. 2016; Egerer et al. 2018). However, as a result of physical function involved in gardening, health improvement has been seen as the most important benefit of gardening (Teig et al. 2009; Firth et al. 2011; Michaels 2013; Lanier et al. 2015; Wood et al. 2016).

Community gardens are growing in popularity Australia-wide as a strategy to effectively deal with population health at a local level (Teig et al. 2009; Firth et al. 2011). In Australia, gardening is considered to be one of the most common leisure activities undertaken by individuals, and research has shown that there are considerable psycho-social benefits to be gained by gardening daily (Kingsley et al. 2009). Studies that have examined the benefits of community gardens have found that community gardening benefitted physical, mental, and spiritual health and led to benefits such as increases in the consumption of fruits and vegetables, improved physical activity, improved mental health, and the development of social networks (Guitart et al. 2012; Hale et al. 2011). Community gardens can provide a space where individuals can learn to grow their own fruits and vegetables, while also engaging in physical activity and improving their social well-being through the development of social connections with other gardeners (Kingsley et al. 2009; Mmako et al. 2019).

This chapter discusses the perceptions of community gardens and experiences of social connectedness from the perspective of older persons. The chapter is based on the present qualitative research exploring perceptions and experiences of community gardens among older persons residing in rural Australia. The community garden case study that was the focus of the present research has been active for approximately 14 years and is a mixture of collective and individual garden beds, with members able to choose how they would like to garden when joining the group. The members meet for 2 h weekly to communally work on the garden and amenities.

2 Community Garden: A Place for Social Connection and Participation

For all older persons in the present study, community garden was perceived as a site where they could share their experiences with the other gardeners, whom they would not have met had it not been for the garden. For older persons, community garden provided the opportunity to continually learn new skills and knowledge gained from other participants and also from the skills workshops that are often held in the garden. Past studies have suggested that community gardens provide a space where ideas and stories can be shared while overcoming social and cultural differences that exist

between members (Austin et al. 2006; Wakefield et al. 2007). Most older persons spoke of the knowledge they had gained such as an increased understanding of the principles of permaculture, and skills they had been able to develop including gardening and cooking techniques, as important aspects of community gardening experiences. This finding confirms previous research which has found that most individuals value the knowledge they gain through participation with a community garden (Ashton-Shaeffer and Constant 2006; Kingsley et al. 2009).

Living in a rural setting could provide limited opportunities for individuals to gain these skills or knowledge. Based on these responses and as theorized by the social support theory (Cohen 2004; Firth et al. 2011), it is suggested that this community garden is fulfilling a need within the local region by providing older persons with the resources and space to learn in a supportive environment. The gardeners' development of skills and knowledge can contribute to sustaining their well-being through an ever-evolving understanding of fruits and vegetables, including how to grow them, the varying varieties, and different ways to cook and prepare them. The ability of the garden in providing the older persons with the opportunity to sustain and maintain their well-being is also supported by the principles of the therapeutic landscape framework which suggests that a site can be considered therapeutic if it promotes wellness and enhances an individual's well-being (Gesler 1992; Liamputtong and Suwankhong 2015).

The community garden, to older persons, was considered to be an asset to the local community. It brought people into the rural town, including both themselves and other interested parties. This corroborates with findings of previous studies which suggest that community gardens can assist with developing social capital (Lanier et al. 2015; Veen et al. 2015) within communities, by encouraging the development of links between organizations and individuals and the garden (Firth et al. 2011; Ohmer et al. 2009). This social capital, as theorized by the social support theory (Cohen 2004; Firth et al. 2011), can then enable the garden access to resources that can benefit the gardeners. This was evident in some of the gardeners' responses, as they started a relationship developed with the local supermarket had resulted in the donation of plants for the garden and a connection with the local newspaper had led to articles promoting the garden to the wider community. Additionally, they suggested that this had provided them with the opportunity to develop networks within the local area and promote the gardens' ethos of sustainability to the wider community. A systematic review conducted by Guitart et al. (2012) found that one of the primary benefits that community gardeners associated with the experience of community gardening was the opportunity to contribute to environmental sustainability solutions. Similarly, Holland (2004) states that the community garden site provides a model where sustainability is able to be put into action, through the encouragement of community involvement, environmental improvement, and organic food production, to lead to sustainable community development.

The older persons in the present study identified the community garden as a gateway to the wider community (see Fig. 1). It was through the garden that they had been provided with the opportunity and encouragement to join other activities or groups within the region. This has created social connectedness among the

Fig. 1 The original community garden, now communal plots



participants, which could lead to better overall health and well-being (Bourdieu 1986; Wang and MacMillan 2013; Lanier et al. 2015; Veen et al. 2015; Mmako et al. 2019). Previous research has suggested that community gardens are often catalysts for individuals' engagement in other community activities, allowing for the development of increased social connections and extended social networks (Armstrong 2000; Ohmer et al. 2009; Teig et al. 2009; Mmako et al. 2019). The social support theory can provide further insight into this finding. There are four subtypes of social support: emotional, instrumental, appraisal, and informational (Fleury et al. 2009). As theorized by Cohen (2004, p. 676), the "provision of psychological or material resources intended to benefit an individuals' ability to cope with stress." The community gardeners' ability to encourage the development of extended social networks within the local region for each other is an example of both informational and emotional support. For example, emotional support is shown through the gardeners developing a mutual sense of trust with each other, allowing for them to discuss their interests with each other. Further to this, the informational support is evident in the gardeners' provision of ideas for activities or groups to join within the local area that suit one another's interests.

3 Joining the Community Garden: Reasons

There were two main reasons why older persons in the present study began their involvement with the community garden. For some, their initial reason for joining the community garden was to develop knowledge or learn new skills. Previous research suggests that the desire to learn and gain skills is often a primary reason for individuals joining community gardens. This was evident in the study conducted by Evers and Hodgson (2011) on community gardens in Perth, Australia, that revealed that increasing their gardening knowledge was a primary reason for some of their participants in joining the community garden in the first place.

For most older persons in the present study, however, the key justification for their initial involvement with the community garden was that they were new to the

area and joined the group to develop support networks within the local area. This would allow them to cultivate social support networks or social capital (Bourdieu 1986; Wang and MacMillan 2013; Lanier et al. 2015; Veen et al. 2015). Descriptions of the community garden as a preventative measure for the development of mental health issues such as depression due to social isolation were prevalent among older persons. Research that has been conducted into the motivations behind individuals involved with community gardens in upstate New York found that one of the primary reasons for the study participants joining the garden was to develop relationships with other members of the community (Armstrong 2000). Further to this, a study conducted in a community garden in Port Melbourne, Australia, found that members initially joined the community garden as they were new to the area and felt socially isolated, so decided to join to develop social networks within the area (Kingsley et al. 2009). The older persons recognized that by joining an interest group, their social isolation would be reduced, and therefore, this would also lessen the possibility of developing a mental illness. This is similar to the relatedness dimension of the self-determination theory (Ryan and Deci 2000). The self-determination theory postulates that all humans possess three basic psychological needs: autonomy, relatedness, and competence. The relatedness motivation refers to the necessity for an individual to feel connected to, or understood, and that they are significantly involved with the wider social world in which they reside (Ryan and Deci 2000). The older persons acknowledged their need for social connectedness within their new environment, and through joining the community garden, they were fulfilling their basic human requirement of becoming a part of the community. This helped to promote their well-being (Mmako et al. 2019) (see Fig. 2).



Fig. 2 Some of the individual plots in the garden

4 Perceived Benefits of Community Gardening

Community gardens provided everyday therapeutic landscapes to older persons (Milligan et al. 2004; Liamputtong and Suwankhong 2015). There were various benefits that older persons had gained through their participation with the rurally based community garden. These are discussed below.

4.1 Physical Benefits

Most older persons spoke of the physical aspects of community gardening, often describing the gardening as a moderate physical activity that was not too strenuous but allowed them to improve or maintain their fitness levels (Kingsley et al. 2009). One participant, Ross, remarked that he had been recovering from a recent knee reconstruction, and the gardening activity had provided the right amount of physical activity each week, without feeling like he was overdoing it. Previous research has also found that gardening requires a moderate level of physical activity and is suitable for individuals of all fitness levels (Milligan et al. 2004; Kingsley et al. 2009).

Although some older persons experienced some physical pain following their time in the garden, they believed that the benefits they gained from participation far outweighed the experience of pain. The community garden provided them with physical benefits over a sustained period of time, thus positively influencing their health (Wood et al. 2016; Egerer et al. 2018).

For those who were physically incapable of completing certain tasks, such as one individual who was unable to tend to the garden bed due to lower back issues, the support provided by the fellow gardeners allowed them to complete tasks that they were physically able to complete, while still receiving the benefits of fruits and vegetables from the plots and enjoying the experience (see Fig. 3). The inclusionary space of the community garden allows individuals to gain support from their fellow gardeners and prevent them from feeling overwhelmed with gardening tasks that they may be physically incapable of completing (Milligan et al. 2004).

Fig. 3 Produce from the garden available for all participants to take home



4.2 Accessing Fresh Fruits and Vegetables

Research has suggested that community gardens help to increase the consumption of fruits and vegetables among the members (Lanier et al. 2015). For most older persons, the community garden provided them with the opportunity to broaden the range of fruits and vegetables that they consumed, as the garden grew many varieties not commonly available in supermarkets, particularly in rural areas (see Figs. 3 & 4) at the bottom of the page. This is a clear benefit of everyday therapeutic landscapes on the health and well-being of individuals (Milligan et al. 2004; Liamputtong and Suwankhong 2015; Wood et al. 2016). A study conducted in the United States regarding the fruit and vegetable intake of community gardeners also reported that the community garden positively influenced participants' diets through the increased selection and availability of fruits and vegetables.

This therapeutic benefit has also been illustrated in previous work which has found that participation in a community garden is strongly associated with increased consumption of fruits and vegetables (Kingsley et al. 2009; Draper and Freedman 2010; Wang and MacMillan 2013).

For most older persons, through participation with the garden, their fruit and vegetable intake had been broadened, as the garden aims to grow many traditional varieties not commonly available in supermarkets (see Fig. 4). Some learned new ways of cooking these fruits and vegetables from the other gardeners, which provided them with the motivation to eat more of what they were growing. This clearly illustrates the informational support that the gardeners provided to each other through the offering of cooking tips and recipes (Fleury et al. 2009).

4.3 Forming Friendships and Support Networks

Research has revealed that the community garden environment encourages sharing among members and leads to the development of a bond of trust and friendship with one another (Milligan et al. 2004; Hale et al. 2011; Okvat and Zautra 2011; Lanier

Fig. 4 Fresh vegetables ready for picking



et al. 2015; Veen et al. 2015). All older persons made reference to the garden as a site for the formation of friendships and the development of support networks within the local area. This was especially important for those new to the area that did not have these networks already in place.

Moreover, most older persons remarked that the relationships developed with their fellow gardeners had extended beyond the garden and had led to them participating in activities or organizing fieldtrips outside of the garden. Thus, social connectedness was created for them (Teig et al. 2009; Woodgate et al. 2012; Lanier et al. 2015; Veen et al. 2015; Walker et al. 2015; Mmako et al. 2019). A study conducted in Denver also reported that older people believed that the personal relationships developed within the community garden were able to be relied upon outside of the garden, especially during periods of hardship (Teig et al. 2009). This suggests that community gardens can assist in building and nurturing the community. This, in turn, enhances a community's ability to promote health and well-being (Firth et al. 2011; Lanier et al. 2015; Wood et al. 2016; Egerer et al. 2018).

The notion of perceived and received support is also relevant to the present research (Ryan and Deci 2000; Richmond and Ross 2008; Lanier et al. 2015; Veen et al. 2015; Suwankhong and Liamputtong 2016). Previous research has found that individual's perceptions of support can provide stress-buffering benefits prior to an issue occurring, while received support is considered more important when an issue occurs (Uchino 2006; Richmond and Ross 2008; Suwankhong and Liamputtong 2016). In the present study, the older persons focused on received support. Some of them gained a great deal of support from fellow gardeners; this highlights the received support that is experienced within community gardens. It suggests that community gardens create social capital (Bourdieu 1986; Putnam 1995; Lanier et al. 2015; Veen et al. 2015) within the local area.

The ability of the garden to draw people of a wide range of backgrounds and personalities was often mentioned as a positive aspect of the experience. According to Parry et al., community gardens are not only about gardening, but they can be more about community. They "offer places where people can gather, network, and identify together as residents of a neighbourhood endeavouring to join the community effort and work toward a common goal" (p. 180). To the older persons in the present study, community garden allowed them to become friends with people whom they often would not have, had it not been for the garden.

Through working in the garden, I've made a lot of friends here who I wouldn't have really made otherwise, as they come varying parts of the area. . . I love that we're able to develop these social networks while also helping out this community at the same time. (Sophie - pseudo name)

For some, the rewarding experience, although at times challenging, of working with these varying personalities in the one environment. It helped them to become more open-minded and learn to live with others in society.

We attract a wide range of people from varying personalities here and we all have to coexist. I think the challenge is to remain open to everyone and just learn to accept everyone for who they are. . . Often in a rural community, you're a little bit isolated, especially some of us have to travel a distance, so. . .this does bring all walks of life of different people together, and to be able to get along and garden together is great. (Holly - pseudo name)

Due to the supportive nature of the community garden, the time at the garden was often spent socializing as well as gardening. This motivated the participants to return to their community garden each week (Milligan et al. 2004). Observations of the present study confirmed what older persons told us. Often, they spent time discussing their personal lives with each other and providing support and feedback with one another, both while gardening and also after gardening when they visited the neighboring café for coffee. Social support was again evident within these interactions, with each gardener often providing various types of support to different people (Fleury et al. 2009). For instance, one person may have provided instrumental support to one individual by offering to move mulch to their gardening site, while also providing emotional support to another individual while discussing their lives. Research by Fleury et al. (2009) supports this observation, suggesting that a wide and varied social support network such as that found at the community garden is ideal for someone to feel socially integrated into a community.

4.4 Development of Sense of Belonging

For most older persons, the community gardening provided them with a sense of belonging and connection to the local community (Ohmer et al. 2009; Teig et al. 2009; Hawkins et al. 2013; Wang and MacMillan 2013; Lanier et al. 2015; Veen et al. 2015). As Wang and MacMillan (2013) content, group activities can “help to facilitate an increased sense of community and decreased isolation” (p. 154). This was especially evident for those who had been new to the area when joining and had no previous connections to the region.

Community gardens helped them to cultivate social connectedness with others in their new living environment (Wang and MacMillan 2013; Lanier et al. 2015; Veen et al. 2015; Mmako et al. 2019). These comments confirm findings from previous studies that have illustrated that participants of community gardens often develop a sense of belonging to the local community where the garden is located (Ohmer et al. 2009; Teig et al. 2009; Lanier et al. 2015; Veen et al. 2015).

The isolating aspects of a rural community can result in individuals feeling socially isolated and lonely (Crouch et al. 2016). Community garden provided older persons with the opportunity to settle into the local region and develop a network of social contacts. Essentially, it helped to reduce social isolation in rural communities, especially for those living far from others. One older person, Phoebe (a pseudo name), discussed the isolating aspects that she experienced, but she highlighted the important role the community garden had played in helping her settle into the area.

(Living in a) rural community can often be isolating and I think it (the garden) has helped me integrate here. . .It can be quite lonely when you live that far away from other people, especially coming from the city. But we've been able to make friends easily and settle in. . . the garden has been a big part of me settling in here.

As theorized by the principles of therapeutic landscapes (Williams 2002; Liamputtong and Suwankhong 2015), the therapeutic ability of the garden to provide improved mental health by allowing for individuals to develop social networks within the community, thus decreasing the possibility of mental health conditions such as depression. It suggests that the community garden can be fulfilling a mental health service deficit in the local area by providing a site where individuals can meet with other like-minded individuals and gain support from their fellow gardeners.

It has been suggested that community gardens can assist individuals to cultivate their sense of ownership of their locality (Ohmer et al. 2009; Firth et al. 2011; Veen et al. 2015). For most older persons in the present study, the community garden provided them with the opportunity to become a part of the town in which the garden is located. Hence, not only it offered a sense of belonging, but also allowed them to develop a sense of ownership in the local area.

4.5 Providing a Sense of Purpose and Accomplishment

The community garden provided older persons with a sense of purpose of achievement. Particularly for those who had retired, it provided them with the motivation to get up at the beginning of the week and go to their garden plots to spend time with their fellow gardeners (see Fig. 5).

It is something I know I would like to do on a Monday, it is my ambition to get to the garden for our regular time even though I may not really feel fit, and that way you talk to other people who are just the same, which really helps. (Abby - pseudo name)

Fig. 5 Community gardeners working together to mulch the garden



This idea is present in previous research which found that community gardeners found purpose in the gardening process and this purpose provides them with the encouragement to attend the community garden (Firth et al. 2011; Hale et al. 2011).

Furthermore, most older persons remarked on the sense of achievement they felt when they were able to see the changes the collective group had made to the garden at the end of the day, or when they took home the produce they had worked hard to grow. This sense of accomplishment motivated them to continue returning to the garden. Previous studies have also shown that community garden participants gain a sense of achievement and purpose from their involvement as they get excited to attend the garden and see the progress their plants have made while also sharing their experiences with their fellow gardeners (Hawkins et al. 2013; Kingsley et al. 2009; Milligan et al. 2004). This development of a sense of purpose or achievement can greatly contribute to the mental health and well-being of individuals and provides further support for the notion that the community garden should be considered as a therapeutic landscape (Gesler 1992; Williams 2002; Liamputtong and Suwankhong 2015). As Parry et al. theorize, when community gardeners are able to make positive changes to their locality, they “gain a sense of pride and accomplishment” and this in turn can harbor their “feelings of self-worth and self-confidence.”

5 Community Garden and Improvements

Despite their perceptions of the benefits of community gardening, many older persons discussed ways in which the community garden could be improved. The predominant responses pointed to the need for the government to provide increased support for local food sustainability programs, the need for more members at the garden, and the desire for increased participation of the wider community in the community gardens events and activities. In regards to the need for increased governmental support, Holly suggested that:

I would like to see a little bit more support from government. . .they should be focusing on producing food at a local level, and people being more sustainable in their own environment. Whether it's in their own backyard or whether it's in a community garden. . .It doesn't have to be financial although that would be good, but it. . .could be educational or just taking part.
(Holly - pseudo name)

While research is limited regarding community members opinions on possible improvements, one study conducted by Wakefield et al. (2007) on community gardens in Toronto reported that community gardeners felt that support for the gardens and similar programs was lacking, and stated that they felt increased support would allow for improved infrastructure and increased promotion of community development.

Most people commented on the need for more members at the garden. Due to the physically demanding aspect of the work and size of the garden, more members are needed to ensure the garden is properly maintained all year round. They would also

like to see younger members join, although they had found this problematic as younger community members often would not have the time to commit to such a leisure activity.

In terms of the therapeutic nature of the community garden (Michaels 2013; Liamputtong and Suwankhong 2015), the addition of more members could further improve the health and well-being of older persons, as they may feel less pressure to participate in some of the more taxing activities that may result in pain. More members would also result in a wider social support network within the garden and therefore the possibility for each gardener to experience more of the different types of support from various fellow gardeners (Fleury et al. 2009).

The community gardeners placed the utmost importance on ensuring the community garden was a place where the whole community could gather and enjoy, and often hold events throughout the year to encourage this. A few people stated that they would like to see more community members attend these events, but said that thus far they had struggled to achieve this. Once again, increased participation from community members would provide the opportunity for increased social support from fellow gardeners and may assist individuals to further develop a sense of belonging to the local community, and social connectedness could be developed further (Fleury et al. 2009; Walker et al. 2015; Mmako et al. 2019).

6 Conclusion and Future Directions

The present research highlights the health-related benefits associated with participation in a rural community garden including physical, nutritional, psychological, and social. The findings of the present study mirror the definition of health of the World Health Organization that embodies not only the physical but also the psycho-social components of life (Kingsley et al. 2009; Egerer et al. 2018).

Importantly, these findings not only contribute to conceptual understanding about the health-related benefits of community gardens, but also provide the unique addition of the rural perspective. Despite having more access to green spaces and nature in rural areas, the older persons in the present study embraces community gardens as a crucial part of their life, particularly to those who need to form new social connections in their new living environment (Armstrong 2000; Milligan et al. 2004; Teig et al. 2009; Lanier et al. 2015; Veen et al. 2015; Mmako et al. 2019). Community gardens offer green spaces that allow the opportunity to engage all senses while connecting to nature and experiencing all that the natural landscape offers and the rewarding work of growing fruits and vegetables (Milligan et al. 2004; Mmako et al. 2019).

These findings have the potential to inform current and future rural community gardens on the health-related benefits associated with participation, and also possible improvements or barriers they may face in setting up such as limited members or difficulty involving the wider community. It is theorized that community gardens can be used to encourage healthy aging for older people living in rural communities (Wang and MacMillan 2013). Community gardens should also be embraced as an

important means for the promotion of health among older Australians in rural settings. It is imperative that health policy makers should pay great attention to the potential benefits of this grassroots initiative and promote them in the rural locality (Kingsley et al. 2009). Additionally, the present findings can be utilized to inform government policies regarding localized food sustainability programs in rural areas, which is important given the increasing popularity of such programs Australian-wide. Further research could explore the benefits of community gardens from other rural and remote locations around the globe.

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