

## **A Review of Gardening as a Recreation Impact on People's Psychological wellbeing**

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### **Abstract**

*The main purpose of this research paper is to identify how home gardening affects the mental well-being of people. Secondary source of data was used to thematically analysis the impact of gardening on an individual's mental wellbeing. Thus, purposive sampling method was employed to select relevant literature for understanding effect of home gardening towards mental wellbeing. By reviewing the sources of relevant literature made it possible to identify factors which are related to home gardening effects on mental well-being of people. The results shows that gardening helps to reduce depression, stress, anxiety, improve life satisfaction and self-esteem. As future research implication, researchers can use this factors to investigate notion of home gardening impact on person's mental wellbeing in different context and age groups.*

**Key words:** *Mental well-being, Home gardening, Depression, Stress and anxiety, life satisfaction, self-esteem.*

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### **I. Introduction**

Psychological health create a positive feeling about yourself as well as the others and biological, social, environmental and psychological factors are influenced on mental well-being (Bhugra et al., 2013). The American Psychiatric Association defines mental health as a changes of the feeling and behavior that are associated with problem or risk encountered while engaging in social and family activities (Hennekam & Richard, 2019). According to the World Health Organization define, mental health is a state of wellbeing which a person re-evaluates his or her own abilities, others abilities, can be able to face the normal stresses of life can work effectively and efficiently (WHO, 2014). According to the World Health Organization (2003) one person out of four families has to face mental issues in the present society.

Commonly the risk factors of mental wellbeing are mainly lower socio economic status, psychological illness, poor reproductive health, gender disadvantage and physical illness. Anxiety, depression, mental illness and schizophrenia are identified as usual mental problems in the World. For improving the mental wellbeing of a person, several factors have been identified by the psychologist such as education of individuals, employment, family, social relationships, opportunities for achievement and economic outcomes, preventing violence and crime (Schmutz et al., 2014a). Further, according the data reveal by the World Health Organization highlighted that between 35% to 50% of people in developed countries suffer from mental health problems, and 76% to 85% of people in developing countries still have not cure the mental health problems (Mental Health Foundation, 2016). Thus, depression and anxiety were identified as a most common psychological health issues. Psychological health is largest single sources which is negatively influence on global economy. The estimated cost for mental health treatment was indicated US\$ 2.5 trillion which was larger than the cost of cardiovascular diseases, chronic respiratory diseases and cancer (Mental Health Foundation, 2016).

Now a day's people are more concern about their mental health. Therefore, people are maintaining their mental health engaging several day to day activities such as participating sports, doing aesthetic activities, going on trips, preparing foods and gardening. Gardening is useful to improve mental and physical well-being of individuals as well as home gardening is used by countries around the world to strength their economies and reduce the food poverty. Furthermore, giving people to access physical activity can also reduce chronic non-

communicable diseases and stresses, while engaging in physical activity such as gardening can improve people's well-being through social interactions, culturally valuable activities, and food poverty reduction.

Lovell et al.(2014) and Van Den Berg & Custers(2011) researchers found that 86% of segregated home owners reported a reduction in stress after viewing their plots (Young et al., 2020). Meta-analysis done by Soga, Cox, et al.(2017) has shown people more involved with home gardening than just because cheapest solution, and it also reduces people's stress, anger, fatigue, depression and anxiety. Gardening is good for health as it combines social interaction and physical activity with sunlight, control blood pressure, gets vitamin D in summer, and burns calories by engaging in physical exercise. People can easily get exercise through home gardening and green spaces in cheapest way rather than doing exercise in gym (Thompson, 2018). As well as, UK government policy recommends gardening as a means of improving health and well-being (Genter et al., 2015). Current study is investigating how gardening influence on mental wellbeing of a person and provide future research implication for researchers to do empirically research regarding gardening and mental wellbeing.

## **II. Methodology**

This study is based on secondary source of data. The data were collected using qualitative research approach. The thematic literature review was used for understanding factors and information regarding mental wellbeing and gardening. The secondary source of data was collected from relevant journal articles, text books, reports, magazines and other academic works. The data were collected using the purposive sampling method, which used key themes such as reduce depression, stress, and anxiety, life satisfaction and self-esteem. The data were critically analyzed according to the selected themes. current study was used by Marcus et al., (2012), Hawkins et al., (2013), Craske et al., (2009), Adwas et al., (2019), Koay & Dillon, (2020), Schmitt et al., (2014) and Veenhoven, (1996), Swank et al., (2016) research work for critically analysis how home gardening influence on an individual mental wellbeing.

### **Gardening and Mental wellbeing**

Gardening was a major component of the refugee regime in the earliest 19<sup>th</sup> century. Home gardening is a very popular topics especially in the context of adults in recent times and it helps to alleviate their depression and control their emotional states (Heliker et al., 2001). Gardening can help you to have inner peace, reduce anxiety, increase cognition, get fresh air, and build self-esteem and self-sufficiency in adults (Scott et al., 2015). Moreover, Soga, Gaston, et al., (2017) asserted that home gardening has a profound effect on people. These include life satisfaction, mental well-being, positive impact, sense of community, stress and anxiety, anger, depression and fatigue. He also points out that "Horticultural therapy" can be used as a treatment even for people with mental health problems. Home gardening activities have also been shown to have a positive effect on people's health and mental well-being, with the results of 130 eco therapy reports launched across the England by the UK charity "Mind", in 2013, which showed that being active outdoors can help people with mental and physical health and well-being by supporting people to be active outdoors, doing gardening, food growing or environmental work (Schmutz et al., 2014). Current review aims to identify the effects of home gardening on the psychological well-being of people.

### **How Gardening as Recreation effect on an individual mental wellbeing**

#### **Reduce Depression**

Mental problems can be defined separately, depression is a common mental disorder that presents with depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, distributed sleep or appetite. Depression also called "clinical depression", and it also mental disorders that causes distressing symptoms that affect how people feel think and behave daily activities (Depression Basics, 2016). Depression often comes with symptoms of anxiety. Depression affects a significant proportion of global diseases and affects all over the world. It is estimated that depression, currently affects 350 million people in around the world (Marcus et al., 2012). Also around half of all psychological health issues start by age 14, and the second leading cause of death in young people aged between 15 and 27 is suicide due to depression (United Nation, 2020). Symptoms of depression include suicide attempt, poor language handling, negative classification, confused appearance, insomnia, fatigue, loss of appetite, muscle and joint pain (Rondón Bernard, 2018). Meditations for depression can be treated with psychotherapy or a combination of both, and if not reduced, brain stimulation therapy can be used as an alternative (Depression Basics, 2016).

Home gardening can be used as a tactic to alleviate people's depression. Home gardening is used to maintain the mental well-being of the elderly people, especially in urban areas and to alleviate depression. Home gardening has been shown to be a treatment for depression in adults (Hawkins et al., 2013). Physical and mental health deteriorates as a result of physical inactivity, and it is impractical to engage in physical exercise (Austin et al., 2006). Home gardening can be seen as a way for some seniors to improve their self-esteem and mental

satisfaction and reduce depression with leaving the work place and playing role of a full time as parents (Scott et al., 2020).

### **Reduce Stress and Anxiety**

Reduce the Stress and anxiety is another benefit of home gardening effect to mental well-being. The world health organization has named "stress" the "health epidemic" of the 21<sup>st</sup> century. And a study in United states found that more than 50% of people are negatively affected by stress (Fink, 2009). Seventeen of the adults, aged between 71 and 98, showed positive and negative moods and a significant increase in stress levels, although there was no significant change in mood after engaging in outdoor gardening activities (Rodiek, 2002). American Psychological Association (2021) mentioned that, anxiety is a feeling caused by physical changes, such as stress, anxious thoughts, and high blood pressure. Anxiety disorders can be identified as the most common or frequent mental disorders, but can also be understood as the pathological opposite side of general fear(Adwas et al., 2019). There are six main types of anxiety disorders and their symptoms are common. That is, irrational and excessive fear, apprehensive and tense feelings, difficulty managing daily tasks and/ or distress related to these tasks(Rector et al., 2011).

The two main psychological theories (Restoration theory and Stress recovery theory)that home gardening can contribute to reducing stress in adults (Hawkins et al., 2013). Researcher Ulrich in 1991 developed the theory of stress reduction to explain our emotional and physical reactions to natural elements. Also this theory explains how, through nature, people's happiness, serenity and positive emotions can be created(Sullivan, 2014). This theory is used to reduce stress in order to explain the emotional physical reactions to natural spaced. Being in a natural environment or looking at a natural source has positive effect, thereby reducing negative emotions, which can also lead to a higher psychological state(Hawkins et al., 2013). Also recovery stress theory shows that the levels of stress in people's lives vary according to the levels of exposure in nature, and people with more green space have the ability to focus on social support, stress and well-being(Durability, 2016). These theories have been reported on socio economic, demographic and overall health and stress management. Also when people live near green areas which is influence to reduce and rehabilitated the stress(Hall & Knuth, 2019).

For people in the suburbs, home gardening can be used as an ideal solution to reduce the financial and health-related stress associated with increased urbanization. Their mental health can lead to self-well-being, Stress relief, self-esteem and optimism(Koay & Dillon, 2020). Elings (2006) pointed out that the benefits of therapeutic horticulture described three mechanisms through which share gardens might promote health and well-being, increased physical activity, increased social cohesion, and reduced stress (Hawkins et al., 2013). Growing literature has shown that gardening as a recreation help to maintain persons' mental wellbeing.

### **Life Satisfaction**

Life satisfaction is simply, subjective assessment of one's quality of life (Gilman, 2001). Factors of influencing life satisfaction include income level, quality of housing, recreational facilities, and physical health (Proctor et al., 2017).According to the global assessment, life satisfaction is a matter of self-satisfaction and can be considered as an aspect of global well-being, subjective well-being and quality of life(Tufecka Maria, 2020). In 1960s, various surveys raised doubts about the satisfaction of life. But since human life satisfaction cannot be the same and each person's perceptions are different, there is no definite measure for life satisfaction. But research uses interviews, Questionnaires and surveys to measure people's life satisfaction(Veenhoven, 1996).

Many researchers has shown that advancing age decreases life satisfaction both physically, mentally and socially (Cho et al., 2018). With urbanization, people have moved away from nature, they will often only have economic benefits. Connecting with nature through gardens and green spaces contributes to not only physical but also mental well-being and life satisfaction (Waliczek et al., 2005). There is a significant increase in the adult population in the United States, and research in that country has found that low levels of exercise in adults, poor diet and lifestyle can lead to many diseases.

In addition, the consumption of fruits and vegetables and physical activity by people over the age of 60 in Unites States has been added to the healthy diet and home gardening has been introduced as one of the most popular activities in the country to control disease and increase people's life satisfaction (Sommerfeld et al., 2010). Researchers, Waliczek et al., (2005) Found that interacting with nature through hobbies such as gardening can have a positive effect not only on people's physical well-being, but also on people's mental well-being. That also supports to keep people's life satisfaction. While gardening can be used as an effective tool in life with adults 50 years of age or older in United states, they point out that home gardening provides an opportunity to reconnect with nature and promote healthy living conditions(Sommerfeld et al., 2010).

### **Self-esteem**

Gardening can improve an individual self-esteem. It is the process of evaluating and influencing emotional reaction to oneself and it will be important in protecting the behavior of adolescents and young adults

(Vaughan-johnston et al., 2020). In other way, it is a person's cognitive or self-esteem and a sense of self-worth and self-confidence. Self-esteem is very helpful in defining interpersonal values broadly, measuring one's own success, and understanding the value of lives of young and adults (Vaughan-johnston et al., 2020). Research involving 31 school children showed that home gardening experience is very important for children to developed healthy self-esteem, prevent violence, and thereby reduce their ability to successfully develop negative social skills proved to be respective (Swank et al., 2016). As well as gardening is important for adults to have a positive attitudes when they get older. Engaging in activities such as gardening will stimulate self-esteem, creativity and mental health as well as a healthy life (Scott et al., 2020). A study of 32 randomly selected undergraduates at Compton Community Collage found that gardening promotes positive feelings about self-esteem and enhances academic performance(Hoffman et al., 2007). Foncham, (1998), researcher shown that community gardening can be used to improve household nutrition, save money, as well as teach children responsibility and build self-esteem with positive attitudes.

### III. Conclusion

Gardening is benefited on every age level to improve their self-esteem and life satisfaction and also reduce their depression, stress and anxiety. Comprehensively analyzing the gardening literature heightened that gardening as recreation benefited for senior citizens to maintain their mental wellbeing and physical fitness. Moreover, people are doing gardening as a hobby which can be seen good mental wellbeing rather than who does not engage in. Furthermore, home gardening is effective way of maintaining mental wellbeing of urban people and people who are working more than 8 hours in the day. In contrast, gardening is effectively and positively influence on improving self-esteem and life satisfaction of college students as well as on the other hand it is impact to reduce anger, violence behavior and negative social skills. Thus, gardening is benefited for college students to improve their academic performance. Reviewing the literature regarding gardening and mental wellbeing can be seen that it has significant influence to maintain good mental and physical wellbeing. Further, garden is benefited for busy person (who are working in office environment which has less contact with nature) to maintain their work life balance. According to the review, current study can be suggest future researches to investigate how gardening is influence on maintain mental wellbeing of people who been in lockdown situation due to COVID-19. Thus, researchers can discover the relationship between gardening and academic performance in different context to validate past literature. Further, researchers can do empirical research garden as a recreation impact on mental wellbeing of adults and working people's by using different samples and context. It will be benefited to comprehensive understanding of psychological wellbeing and gardening.

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