



## FIFTEEN SHADES OF GREEN: A CULTURAL PORTRAIT OF EMPOWERED FILIPINO ELDERLY VERTICAL GARDENERS

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**ABSTRACT** – This ethnographic study intends to describe the culture-sharing group of empowered Filipino senior citizens in a neighborhood-initiated vertical gardening engagement. Guided by the empowerment framework, the descriptive characteristics and the empowering attributes were cultivated from the emic (vertical gardeners) and etic (researcher) perspectives through a 20-month immersion as a participant observer. Photographs of their gardens and their gardening engagements substantiate the richness of the description. Findings of the study highlights the fifteen shades of green represented by the different facets of Filipino elderly vertical gardeners, their vertical gardens, and their resonating cultural values. Empowering attributes that fosters sustainable vertical gardening engagements include: Grounding on values, beliefs and language; Growing desire to create vertical green space and a sense of place; and Grasping for knowledge, skills and sustainable practices. The cultural portrait elucidates understanding on the value of contextualization and inclusion for empowering the elderly in community greening. Further research could be undertaken to identify other attributes that could enhance the propensity of the senior citizens to engage in vertical greening.

*Keywords: empowerment, ethnography, senior citizens, vertical gardening*

### INTRODUCTION

Urbanization comes with challenges affecting the elderly population. One of the greening initiatives undertaken by communities to alleviate the negative effects on urban health is gardening. The Makati City urban greening program promotes tree planting and organic urban farming in schools. To be inclusive, there is a need for community to value each member of the society, which includes the senior citizens. This can be achieved by empowering them through changing attitudes toward ageing, capacity building, ensuring independence and enabling policies from the government (Beales, 2012) because powerlessness brings about lack of self-worth and purposeful living, and high level of dependency for social services. This could be brought about by disempowering social processes that allows for social exclusion. One of the most vulnerable and marginalized sectors of the society affected by these processes are the elderly. Vulnerability emanates from physiological psychological and social health problems associated with aging and marginality, from limited economic resources (Aday, 1994; Tanjani, Montlagh, & Nazar, 2015; WHO, 2018) Further, social environments influence sense of elderly well-being. The World Population Prospects, reported that population with age over 60 years is the fastest-growing age group (WPP, 2017). This demographic reality necessitates call to action to address the needs of this population.

Drawing from empowerment framework, this study intends to describe how a neighborhood-initiated vertical gardening engagement among empowered Filipino elderly fostered and could be considered as a model for developing community greening initiatives. It specifically answered the following questions: [1] How may the senior citizens be described and characterized in their vertical gardening engagement? [2] What empowerment attributes the senior citizens achieved in engaging participation in sustainable community greening through vertical gardening? The cultural portrait of Filipino elderly vertical gardeners is hoped to elucidate how policy makers could provide an enabling environment and capacity-building that fosters community greening among the elderly.

## METHODS

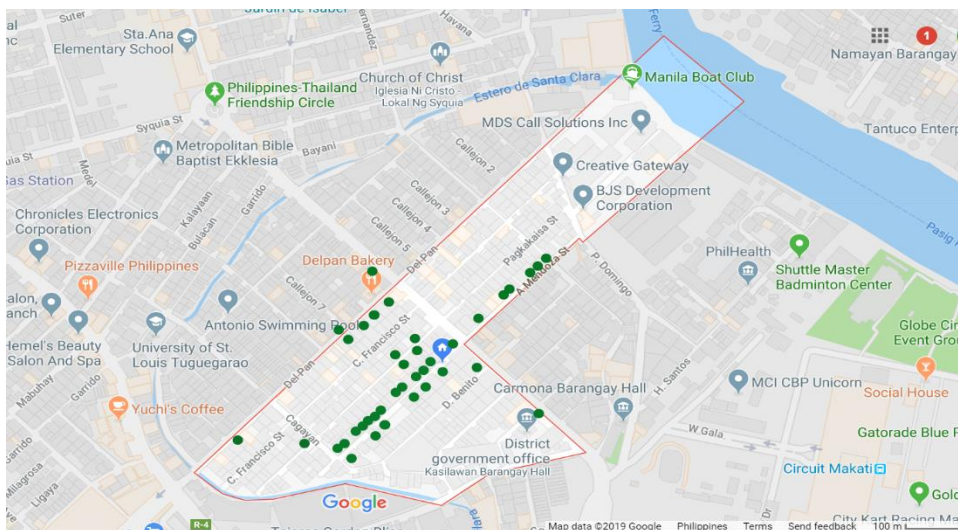
This study was conducted in *Barangay* Kasilawan, Makati City, a predominantly residential area, belonging to Makati City's first district and a member of the Northwest Cluster (Cluster 3). It is the smallest *barangay* in Makati city, with a total land area of only 0.946 square kilometers that is 0.30% of its total land area as shown in Figure 1. The exact location of the existing wall gardens at the households in *Barangay* Kasilawan is shown in Figure 2.



**Figure 1.** Geographical location of Barangay Kasilawan (Source: Created from Google Map).

This qualitative study is part of an ethnographic-exploratory research conducted on a 21-month immersion being a participant observer. Ethnography is a qualitative design where the shared and learned patterns of values, behaviors, beliefs and language are being described and interpreted by the researcher (Creswell, 2013). It is both a method and a product (Bloomberg & Volpe, 2016 Chap 3, p. 47). The descriptive characteristics were supported by emic (narratives from the vertical gardeners) and etic (researcher's field notes) perspectives that distinctively describe each vertical gardener, their vertical gardens and their resonating cultural values. Narratives from the respondents through interviews were

translated in English language and translated back in Filipino language for its accuracy. Photographs of vertical wall gardens and their gardening engagements substantiated the richness of the description.



**Figure 2.** Location of existing wall gardens (Source: Created from Google Map).

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## RESULTS

### **The Fifteen Shades of Green: Characters, artifacts, and resonating cultural values**

The fifteen shades of green represent the different facets of the fifteen senior citizen vertical gardeners (characters), their vertical gardens (artifacts), and the resonating values they uphold in their vertical gardening engagements.

#### ***The Gate Keeper (VGCB) in a “Garden of Generosity”***

As a designated gatekeeper in my research, VGCB is my constant companion in the neighborhood in our gardening engagements. Familiarity with people and places in the community can be attributed to her sociable character and her residency in the neighborhood for 44 years. She is a 75-year-old lady who has devoted herself caring for her 73-year old husband suffering from hemiplegia of 20 years. She is also

a breeder of three Siamese cats. She is very diligent in sourcing out plants and garden accessories for her vertical garden. At 75 years old, she can still climb a four feet ladder, pull a half sack of garden soil and inspect vertical gardens around the neighborhood any time of the day. Noticeably, she is always seen wearing her gardening paraphernalia (hat and gloves) and fashionable outfit while gardening. She is inherently artistic, creative and meticulous in organizing her wall garden. I was impressed with the way she organized the arrangements of her plants according to variety, textures and colors. VGCB is a cheerful giver. She believes that giving will result to abundant blessings. Among the vertical gardeners, she is the most generous in giving plants, pots, and soil to whoever requests them. Most often, she untiringly gives her time, energy and even shares her knowledge and skills in gardening. VGCB characterizes her vertical garden as:

*“This garden is a garden of generosity because I’m very generous in giving plants, advices, my thoughts and feelings. I share everything that is good about vertical gardening.”*

A reflection of the generosity is manifested through the lushness of her vertical garden as I described in one of my observation:

*I was mesmerized by the lushness of the wall garden as I came to observe five months later. The eight varieties of Coleus (Plectranthus scutellarioides) catches my attention with its textures and colors highlighted by the afternoon sun. The six pots of Moses in the Cradle (Tradescantia spathacea variegata) with its sturdy pointed form and purplish pink color complements and bounds the wall garden and the front door of the house. The plants were arranged horizontally per variety in alternating colors of red, purple and green shades.*

### ***The Lupon (VGEM) in a “Garden of Creativity”***

VGEM is a 77-year-old proud, self-confessed “*anak ng magsasaka*” (daughter of a farmer) always dressed up in fashionable clothes while gardening, projects an image of “gardening with style”. She is a part time member of *Lupon Tagapamayapa* (Pacification Committee) in the local *barangay* where she deals with peaceful mediation for minor disputes within the community. Long before their family settlement in the urban area, she was already exposed to farming in their province. She is consistent with her multi-tasking and gardening engagements: watering the plants between 9:00 to 10:00 o’clock in the morning; cleaning the garage mostly with cat’s liter while at the same time washing the front hood of my car (parked near their house) marked with her pet cats’ paws and talking to neighboring gardeners at the sides. She is joined by her ten cats while tending her garden. Her vertical garden was the most admired garden in the neighborhood because of its grandiosity. She has the biggest vertical garden in the neighborhood with foliage of predominantly alternating brightly colored, variegated Mayanas (*Plectranthus scutellarioides*) and other varieties of ornamental plants. As I put it in my notes:

*The lushness of the variegated Mayanas (Plectranthus scutellarioides) in monochromatic assembly entices me. The colors of the plants blend as the morning sun reaches the foliage leaves of the plants. The shadows created by the sun gave life to the wall garden as it portrays like flowers painted on a canvass. The potted plants placed above, below and its side, define the boundary of the vertical garden. This time the entire concrete fence was covered with plants.*

Her creativity and artistic inclination are inextricably linked with the way she organized her vertical garden. She often changes the arrangements of plants in different patterns based on plant variety, colors, textures and balance. She remarked:

*I am not satisfied with a fixed garden arrangement. I tend to my garden daily. That is why I need to think what else can I add to this or that portion. How am I going to arrange them according to color so that it will look orderly and beautiful? It is just for my own satisfaction.*

### ***The Couple Power (VGCG) in a “Garden of Balance”***

VGCG is a retired university teacher-administrator and also a member of the *Lupon ng Tagapamayapa* (Pacification Committee) in the *barangay*, where he lives for five decades. At 75 years old, he also manages a cooperative for retired senior citizens. He lives two streets away from us. He was intrinsically motivated by the verdant vertical gardens in our street which prompted him to ask VGEM on how to go about vertical gardening. With his enthusiasm, will, and connections, he was able to set up his own vertical garden. Since then, his wife was his constant companion in maintaining their wall garden. Ingrained in the couple’s heart are the principle of purpose, passion and positivism applied to their gardening engagements: Why do they garden; their commitment; and their hope for a greener environment. Owing to this principle, their vertical garden becomes a model to four gardens in their street. Vertical gardening became part of the couple’s everyday activity expressed as:

*It (vertical garden) is a symbol of couple’s power because I attributed the success of my wall garden to the efforts of my wife. I cannot do that alone. When we started vertical gardening, we are now aware of our time. We used to wake up early because my wife and I watered and talk together. I am the one in charge of the hose, while she cultivates. We see to it that before we will leave the house, before we go to church, we already have watered, cultivated and fix the dried portions of the plants. Simply put, we have developed passion and commitment to our plants.*

The couple had three successful children who lives separately from them. This activity offers diversional therapy for their empty nest living. Tending to their vertical garden can be paralleled to nurturing their children as VGCG metaphorized:

*With our garden, its support. We provide them just like our children, we clothe, we care, we nurture them. That’s it! What you try to show to them, it’s the same satisfaction that is given back to you in the way they grow and show-off their beautiful colors. It is being reciprocated. You reap what you sow. You will see that if you are caring for them, it is beautiful! Is it not true with our children? You care, you clothe and you educate them. Those are our responsibilities.*

### ***The Sitio President (VGTL) in a “Garden of Service”***

VGTL is a 64-year old retired overseas machinist turned public servant in the *barangay*. Being a resident in the area for almost six decades, he has gained popularity among the people in the neighborhood. Currently, he serves as the *sitio* (area) president of the neighborhood association and a committee member of the city social welfare development. Ironically, he never attended any of our social engagements despite persistent invitations but he can be seen consistently tending to his garden throughout

the day. He is enthusiastically devoted with his vertical gardens as evidenced by the three garden extensions he created. I noted:

*He was busy tending to his garden, propagating his Abelia plants (Abelia grandiflora Hybrid). He was able to prepare almost twelve small vertical pots of it. The right side of the wall carries thirty-one small vertical pots of deep purple and orange Mayanas (Plectranthus scutellarioides), purple hearts (Tradescantia pallida purpurea), oregano (Origanum vulgare) and oyster plants (Tradescantia spathacea). Below it, were three Welcome plants (Zamioculcas zamiifolia) in a recycled plastic container and one pot of snake plant (Sansevieria trifasciata). The left side of the wall hanged twelve pots containing Lourdes (Chlorophytum laxum), variegated Mayana, purple hearts, and cactus variety and at its bottom part, I saw newly potted Gumamela variety and Crotons (Codiaeum variegatum).*

He claimed that he previously initiated the concept of urban farming in the community many years back but did not push through because of budgetary constraints and lack of enthusiasm from the neighborhood. I exercise a reasonable amount of wariness in dealing with him yet his part in promoting vertical gardening in the neighborhood cannot be undermined. He sought budget from his connections to fund materials for the base of the wall gardens for prospective households who intend to have a vertical garden installed at their fences. He pledged support for the green wall movement by encouraging and sharing his resources to people who want to help foster greener neighborhood. He expressed:

*For me, sharing is when I give plants to those who asked for them. Sometimes, I also give some pots. I'm planning to encourage them to be a member of the 'Luntiang Pader' (a movement), the one that my friend organized. I also help other neighbors who cannot tend to their garden when they report for work. I replaced the plants that dried up.*

### ***The Industrious (VGLV) in a "Garden of Empowerment"***

VGLV was a retired educator and school administrator with Master's degree in Business Management. She is still working as an interviewer in an agency that the family built through the years and does not want to stop working. She has been a widow for three decades now. A nephew and a granddaughter assist her with activities of daily living. Some concerned members of the 'Bukluran' (community Bible group) help her out when she attends to activity meetings. During weekends she is being fetched by one of her children to have weekends with them in a suburb nearby. At age 89, she was the oldest gardener in the group and still wants to continue gardening for as long as she can. Thirty years back, she spearheaded the adoption of vacant spaces in the community for vegetable gardening. She is the kind of person who believes in empowerment and thinking of ways by which people can participate in a community project. She recalled:

*"We conducted Bible studies in one of the deprived communities. We had Bible sharing and discuss things with ways on how we can grow as a community. There is a vacant lot there and I suggested that we can use it as a garden and grow onions..."*

VGLV is critical of the programs being carried out in the community. She critically viewed the dole out mentally imbibed by some group of community dwellers. Having heard of the vertical gardening

movement and intended research collaboration, she willingly volunteered to engage in vertical gardening. Exhibiting disappointment and hope, she expressed:

*When people are given awareness, you will not have a hard time asking for their participation. They will volunteer to find solutions to their problems. They will have understanding on different matters. But we are not aligned! What they do is that they will plan and pass it on to us for implementation! What we need is to focus first on the needs of the community. That is what they should look into, elevate to the higher ups then cascade to the community. I am very happy with our project because I am seeing it in many places. People adopted vertical gardening because they see the beauty in it.*

### ***The Caregiver (VGMA) in a “Garden of Caring”***

VGMA is a 64-year-old spinster, who does not have any gardening experience at all. She was fourth to the youngest among her nine siblings designated to take care of their 92-year old bed-ridden mother. She is also an active member of the Basic Ecclesial Community (BEC) and a lector-commentator in the community parish. Though VGMA resides in the neighborhood for almost three decades now, she has limited socialization opportunities among her neighbors until the vertical gardening movement. Initially, she was hesitant to have a wall garden because it would entail additional task for her. With the convincing power of the gatekeeper and the support from other wall gardeners, installing a wall garden at the front fence was definitely embracing for her. As busy as she can be, when requested for assistance in setting up wall gardens of other neighbors, she can spare her time to help set up wall garden or share plant cuttings from her garden. She would always compare her care-giving task to her mother to garden-nurturing. When asked about what her garden is to her, she claimed:

*It (garden) is like life. You are living. You are living by the grace of our Lord. They (plants) continue to live from our care. Giving them fertilizer, watering them, tending them, that is how they live. The Lord is teaching me and guiding me as well with the way I care for my mother. They are like human beings that thirst. Water is their medicine.*

VGMA’s life revolves around caring responsibilities to her mother and her vertical garden. Metaphorically, plants need caring as people do. She emphasized:

*This is my routine every day. First, I will prepare breakfast for my mother, heat the water, and attends to all her needs. Secondly, by 7:00 o’clock, that’s the time that I will be able to water the plants, that is for about 30 minutes. Those plants have life too. It is like human beings. We live. Same is true with plants that need caring.*

### ***The Entrepreneur (VGAF) in a “Garden of Responsibility”***

VGAF is a 60-year-old widow of 15 years, who has been renting in the neighborhood for nearly four decades. She put up a sari-sari store in a small balcony of their house that is currently half-covered by the wall garden. She is also a beauty product distributor, a retailer of home-made peanut butter and occasionally sets up garage sales in front of their house to make ends meet. Most vertical gardeners in the neighborhood were her regular clients. She is a struggling vertical gardener, slowly but surely perfecting her craft in growing plants. She narrates:

*Before, I barely keep plants. But that does not stop me because I really love gardening. I envy my sister who is into gardening that is why I emulate her. At times, my plants withered. But there was a time that I felt happy because I was able to grow and propagate them. Then I told myself that I have a green thumb. Before, I really don't like because even in water, I cannot keep a plant. It withered and turned yellow. Maybe because I am not doing it right.*

The first wall garden she nurtured was handed down to her daughter and the second wall garden she is tending was installed in front of the house and her mini grocery. VGAF and VGCB who both live beside each other are proxy gardeners of their wall gardens when one is away for more than two days. She believes that maintaining a vertical garden is a responsibility. When asked about her opinion on promoting and maintaining vertical gardens, she explained:

*Plants are our responsibilities. It is part of our lives, part of our family because you need to take care of them. They will wither if you miss to water, fertilize and protect them from diseases.*

### ***The Seamstress (VGPF) in a “Garden of Comfort”***

VGPF is a 71-year-old widow and a seamstress who finds comfort in vertical gardening as a leisure activity. She has a son who migrated in another country and another son who lives with her but out of the house most of the time. At her age, she is still working through sewing and busy with church activities. Most of the vertical gardeners in the neighborhood sought her sewing services. She attends bible study sessions and also a prayer warrior when someone dies in the neighborhood. Vertical gardens in the street fascinated and encouraged her to set up her garden on her own initiative. She has extended her garden in the neighbor's concrete fence, garage and all the way to the lavatory area of the compound. She finds vertical gardening as an alternative way of coping when her husband died a year ago. She lamented:

*I feel sad when my husband died because I had nothing much to do. I just stayed at the house and did not accept much sewing services. I want other things to do so that I will not feel sad when I am alone in the house. Sometimes, when I think of Jay, [deceased husband] {teary eyed} I engaged in gardening to keep me busy.*

VGPF introduced me to her neighbor and best friend of 40 years who also has a passion for gardening. She had collections of fuschia, pink, orange, and white bougainvillea varieties that droop from the top of her concrete fence. We would always have a very enthusiastic discussion about gardening. Both of them have two things in common: both were widows and the love for gardening. VGPF finds vertical gardening as her leisure-time activity and finds gratitude in Divine providence. She remarked:

*I find happiness in keeping my garden because it is part of God's provisions. I feel sad when they withered. That is why I begged off when my son wanted me to extend my vacation in Australia. I told him that I cannot afford to lose my plants... Sometimes also I remembered Jay serving him coffee in the mornings. Now, I realized that I am now serving my plants because I want to water them when I wake up each morning.*

### ***The Sweethearts (VGAD) in a “Garden of Compassion”***

VGAD is a 61-year-old is a retired overseas Filipino worker (OFW) who worked for 16 years in Hong Kong and is currently designated by her mother as the administrator of their ancestral house



Unlike her mother who has the passion for gardening, VGAD does not have any experience in gardening at all. The gardener spends little time with her garden because of too many household errands and looking after the grandchildren. Her garden is the most improved one because it has blossomed from a seemingly withering garden into a flourishing one. She has her new-found love in the companion of Mr. BA who lives in the same street. Despite grappling with household chores, she finds respite in her gardening engagements. She claimed:

*“I feel delighted in tending to my garden, because I have other things to do than looking after my grandchildren. It takes away my weariness because I feel more relaxed. Watering them is refreshing because it is as if you are just playing.”*

Mr. BA was a grumpy widow with a feisty attitude with some neighbors in the compound. He would always have untoward incident with one of her neighbors, who happens to be my research gatekeeper, on parking space issues. Initially, he does not want VGAD to join our wall gardening group because he perceives that she will not get anything good on the activity. Ironically, when we begin to invite him in our social activities, the group discovered that he has a space for goodness in his heart. He exhibited compassion when the garden was withering and successfully revived it. He ultimately blended with the group of vertical gardeners, hooked with VGAD’s wall garden and surprisingly became friends with my gatekeeper and other neighbors. He recalled:

*Gardening is really great because I was acquainted with my neighbors. Whenever I see someone gardening I greet them and say: ‘Hi Mommy! Hi Mommy! How are you? Your plants are doing great.’ Now I am acquainted with the elders and converse with them.*

The couple find vertical gardening and their wall garden a breathing space for alternative engagement. These seemingly inseparable couple can be seen together all the time going to market, riding the motorbike, walking down the street and gardening. They are two separate individuals but with one heart and vision for the environment. When asked about promoting vertical gardening, they asserted:

*“There is a need to promote vertical gardening among neighbors or even the whole community to achieve solidarity and livable environment” – VGAD*

*We should promote vertical gardening in other communities as well. I also want to install vertical gardens in my hometown in Cavite, so that they will be encouraged also. Maybe if my garden can speak, they will thank me because I water them. I take care of them. Much so, there is the ‘two of us’ (referring to the couple) taking care of them – Mr. BA*

### ***The Lay Minister (VGBB) in a “Garden of Stewardship”***

VGBB, 69, is a retired supervisor from an airline company. He can be described as a quiet and gentle bachelor who reinvented himself as a lay minister in the community parish church. He was the first male vertical gardener in the neighborhood. The gatekeeper and his sister-in-law facilitated the setting up of the wall garden at the front fence. Prior to vertical gardening, his hobby includes carpentry, doing house improvements and assembling adult model kits. In few cases, he had parking issues at the front house with some neighbors of condescending behavior that has been brought up for pacification at the *barangay* level. In a subtle way, setting up a wall garden at the front house could remind neighbors to be mindful of their

parking habits. His garden is defined by blending varieties and balance in arrangement pattern. As reflected in my notes:

*I remember VGBB specifically chose the Cucharitas in the plant store because of its vibrant red-orange color. He even requested me to have some of my deep red Mayanas in anticipation that it will blend well with his Cucharitas. There is something about blending other colors of plants on the wall garden. It is pleasing to the eyes and gives a nice facade. Even male gardeners have an eye for color and beauty.*

He believes that God entrusted human beings as stewards of His creation. Engaging in activities such as tending a vertical garden, in a way, made him a caretaker of God's provisions and that through vertical gardening the gardener helps by protecting them. He claimed:

*"Initially God created the earth, mountains, animals, then us, human beings. These are God's creation shared to us and there is a need for us to protect them."*

### ***The Early Bird (VGNC) in a "Garden of Beauty"***

VGNC, 67 years old, is affiliated with another church group, who, despite showing great appreciation for the vertical gardens, initially, was hesitant to keep one because she thought that the advocacy is connected with a religious activity. She was the most misunderstood one among the gardeners because she socializes less and would not share her cuttings with other vertical gardeners except to me. With our daily conversations, I learned that she just wanted to maintain the lushness of her garden and trimming it would make it look less abundant. I, together with the gatekeeper, explained to her that wall gardening is part of my research and advocacy toward empowering senior citizens through vertical gardening. After enlightening her, she became one of the busiest hands among the group tending and promoting wall gardens in the neighborhood. In time, she eventually shared cuttings to whoever requested from her.

She practices mindful, reasonable, and practical frugality in her vertical gardening undertakings. She sourced out the wire mesh of her wall garden base from a nearby junk shop. She recycled everything that she finds useful for gardening which includes fertilizing with composts, and reusing plastic bottles and tin cans as planter pots for her new plant cuttings. She is consistent with her attendance, thirty to an hour earlier in all social activities, considering she just live beside our house. She is very artistic in her own way and would always have admiration for the beauty of her garden and other neighboring wall gardens. She also adheres to some superstitious beliefs. As the sun rises, her plants rise with her as she tends to her garden first thing in the morning. She commented:

*I prohibit someone who greets my plants with affliction because they might die. I told them to just appreciate its beauty. I have lots of Welcome plants that propagates itself. I'm with my plants every morning and night time. My husband would always rant saying 'you are in your garden again! There are still plates to be washed'. And I will say 'It is good that the plants complement our house. And now almost everybody appreciates the beauty of the wall garden. Pwera usog! (Bad spell aside!) [laughter].*

### ***The Dedicated Granny in a “Garden of Passion” (VGMU)***

VGMU is a 71-year-old retired correspondent writer, who had the passion for gardening way back in elementary days. She got her inspiration in gardening from her mother who also loves farming and developed her gardening craft by attending workshops and seminars about plant growing. Through experimenting on the use of household fertilizers and other gardening strategies, she was able to propagate her plant collection. She has been observed as being a dedicated caregiver to her developmentally challenged son and grandson. She takes them to school, brings them along in malls and attends to their special needs. Although she has lived in the community for almost six decades now, she does not have much social interaction with the neighbors until having been involved in vertical gardening. When asked about the effects of gardening engagement with her relationship with the neighbors, she uttered:

*Interaction took place because everybody knows each other. Those neighbors whom I do not know before in our street, I am acquainted with them now. We used to just say “hi” or “hello” when I see them in the street or when I go to the market. I am only familiar with their faces and smile at them. But now, I know them by name.*

Though her vertical garden was the smallest one, it has a place on the two gate posts of their front house. Perception of VGMU on some superstitious beliefs serves as motivation for her to foster gardening activities. She is very generous in giving away some of her plants to whoever requests for them. She believes in the power of touching and conversing with her plants. She narrated:

*I talked to my plants. If it is not blooming flowers, I will hold them and say ‘It’s been a long time that you have not been blooming flowers. Please bloom flowers.’ When I talk to them, when I touch or caress them, there you go! They will start to bloom flowers.*

### ***The Happy Hands in the “Garden of Happiness” (VGGG)***

VGGG is a 79-year-old officer of the barangay senior citizen organization. She renders facilitation of documents needed for senior citizen eligibility and report for work to *barangay* hall voluntarily three times per week. She lives one street away from our place but passes by our street to meet with her constant companion. Prior to her vertical gardening engagements, she maintains potted vegetables in the second floor of her house. Without asking assistance from other gardeners, she initiated setting up her own wall garden. She was inspired by the vertical gardens along the street so she started collecting ornamental plants and asked from the neighboring vertical gardeners to fill-in her vertical garden. VGGG pay it forward by encouraging her neighbors to set up their wall garden. Her garden is her source of happiness and favorite past time activity. Happiness resonates from her smiling face, peculiar giggles and fondness for singing while gardening. When asked why she is gardening, she remarked:

*It is because I am so delighted. I am very happy when I came to pass by Mendoza street and see that most houses have vertical gardens. That is why I am so happy when I had mine. My everyday routine is to water the plants and sing for them even though I am out of tune.*

She is quite generous with her neighbors, providing them with plants, soil and even planter pots. She was true to her commitment to encourage neighbors to set up their wall garden. Her garden becomes a model for vertical gardens in their street. Consequently, other neighbors followed to have their own vertical gardens. She also finds joy in gaining new friends and acquaintances because of this vertical

gardening engagements as she facetiously comments:

*“Wall gardening is really effective because, this time neighbors stopped by our house to talk to me to request for plants. That is why it is so delightful [with giggles].”*

### ***The Senior Officer (VGET) in a “Garden of Wisdom”***

VGET is a 73-year-old widow of seven years, who has devoted her life tending to her six children, grandchildren, household chores, four dogs and two cats. She never ceases to wake up every day to prepare food, tend to her grandchildren, does some household chores and keep the plants and pets her husband left her. She is now very active as a senior citizen officer of the *barangay* facilitating requirements of the elders for senior citizenship card. Her husband used to be an active volunteer for the “clean and green” community program. Before she had her vertical garden installed, she has been keeping some potted plants and a three-decade Kamias tree (*Averrhoa bilimbi*) at the veranda of her house. Members of the community sourced the kamias fruit from that tree. She was one of the pioneers to have vertical garden in the neighborhood that became a model for all the vertical gardening enthusiasts in the community. She was very generous in sharing her knowledge in setting up vertical gardens as well as plants and gardening accessories. She believes that knowledge is nothing without action. She narrated:

*The garden taught our family many things: abundance, generosity, love for nature gratefulness and the cycle of life. When the leaves from the Kamias tree fall, sprouting flowers follow. It never ceases to bear fruit. The plants from the wall lush too quickly that most neighbors and passersby request for cuttings.*

## **Gardening Beliefs**

### ***Green Thumb and Brown Thumb***

Most vertical gardeners believe that they possess green thumbs. Possessing one means having a gift for growing and maintaining plants healthy. A number of them would claim that they acquire it from either their mother or father who also has natural talent for growing plants. In contrast, a number of them initially perceive themselves as having brown thumbs because they cannot grow plants either on soil or on water. Through constant engagement in vertical gardening, the perception of having brown thumb changed to as having green thumb.

### ***“Usog”***

The sprouting wall gardens in the neighborhood have attracted the attention of most passersby. Interestingly, some of the vertical gardeners believe in *usog* superstition. Generally, *pwera usog* is a Filipino superstition to ward off the ill effects of a greeting of a stranger to a child. The gardeners practiced this superstition by touching the plants and whispering “pwera usog” once the plants have been touched by a seemingly overpowering appreciating stranger. Usually, this was done when a stranger is already at far distant so as not to offend them. According to one vertical gardener, the movement of the colorful wind spinners allows strangers to look first to these garden accents which divert away the attention directly to the plants.

### ***“Swerteng halaman”***

*Swerteng halaman* (Lucky plants) incorporated above and below the wall garden make them believe that these plants bring prosperity, good fortune and protection. They place Welcome plants

(*Zamioculcas zamiifolia*), Fortune plants (*Dracaena sanderiana*), and Money plants or Pothos (*Epipremnum aureum*) on planter pots in the boundaries of their wall garden, outside the doors and gates, windows and inside their houses.

### ***“Tampo”***

The belief that “plants have feelings too” allows them to gently touch and pat its leaves while literally talking to the plants. Words such as “*tampo*” (acceptable expression of hurt feelings) are often heard from these gardeners when the plants withered due to unintentional abandonment of their plants. Some vertical gardeners perform counter measures by doing acts of rituals and rendering songs to their plants while tending them. Few others enjoy listening to music while gardening because they believe that plants also delight in the sound of music. Talking to their plants is also a way of engaging when requesting for sturdy stems, vibrant leaf colors and attractive flowers.

### ***Color green improves eyesight***

They believe that color green can improve eyesight. They feel that the mere sight of their gardens is enough to give them much pleasure. It pleases not only their eyes but the passersby and on-lookers as well.

### ***Bad Omen***

A number of vertical gardeners believe that something bad might happen if plants are not shared with someone requesting for it. Special mention was given by a vertical gardener specifically to pregnant woman requesting for a plant.

### ***Biophilia Hypothesis***

Biophilia Hypothesis posits that humans have the tendency to affiliate themselves with any form of life which includes plants and animals. All members of the group who tends to gardens, also tends to domestic animals like cats and dogs. One extreme gardener has ten cats, the others having on an average two-three; one has breeding cats; and others attending to stray cats. Some were tending to an average of two-three dogs. They believe that these animals catch whatever ill feelings they have and that the plants that they are nurturing give off oxygen also benefited these animals.

### ***Language***

#### ***Explicit***

The group addresses and regards each other with “sister”, “brother”, or “Ka” before the name. This is mainly because most members of the group are also affiliated with religious organizations. It is their way of addressing and honoring each other as part of one big family. It became customary in the neighborhood to call each other as such in contrast with the traditional addressing of “Aling” (Mrs.) or “Mang” (Mr.).

#### ***Implicit***

On the other hand, implicit values that these vertical gardening engagements try to relay to the neighborhood become a strategy for communicating their advocacy for the environment. The bill postings on the wall that says “*Bawal magtapon ng basura dito*” (“Don’t throw your garbage here”) were replaced by attractive wall gardens. This deters households to pile their garbage in the area. The “*Bawal umihi dito*”

(Don't urinate here) signage on street corners and posts near the tricycle terminal were not anymore self-designated urinal areas but is now a vertical wall space for the garden. Neighbors who utilized other neighbor's fence as clothesline were kept away from hanging their clothes because these fences are now havens for attractive plants. The concrete wall fence with sprayed graffiti writings was covered already by the wall garden implying that vandalism has no place on their wall.

### ***Symbolic***

A symbolic 'hand over' ceremony culminates the setting up of the wall garden activity. This ceremony symbolizes the "passing-on" of the responsibility of maintaining the vertical gardens as an initiative of the movement for sustainable community greening. This is officiated by a vertical gardener who helped facilitate the installation of the wall by symbolically giving a pot of plant to the new vertical gardener with a binding and entrusting words expressed as:

*"May you be able to nurture these plants which symbolize our love for nature and the environment. May God bless you (gestured with the palm of the hands toward the gardener) in fostering the aspirations of our advocacy."*

### **Values**

#### ***Relearning the Concept of "Bayanihan" (Community Spirit)***

"*Bayanihan*" (buy-uh-nee-hun) is a Filipino word that comes from the word "*bayan*" which means in general, town or community. It literally means "being a *bayan*" which represents unity and cooperation among neighbors in the community. In the context of this study, the *Bayanihan* spirit was grounded from the values that resonates from each vertical gardener. The picture of neighborhood with vertical wall gardens visible at front houses were not created by "to-each-his-own" praxis. Experienced senior vertical gardeners help another senior citizen who expresses intention of having their own garden. Support comes in different ways from the installation of the wire mesh through plant propagation and maintenance. Senior citizen volunteers and family relatives also help facilitate in the primer coating, painting and mounting of the welded mesh for the frame of the wall. Ornamental plants are donated by the senior vertical gardeners themselves. This helping system promotes sustainable vertical gardens, thus sustainable neighborhood. This proves to show that, senior citizens can be empowered and empowering in activities they find sense of ownership and stewardship through community spirit. It only takes free-spirited senior citizens who want to do something for themselves and the neighborhood.

### **Vertical gardening engagements**

#### ***Space Utilization***

Aside from the concrete fences, ornamental potted plants can be seen hanging seamlessly on the gates, window grills, balconies and verandas that magnify the appearance of the vertical gardens. Most vertical gardeners had their primary wall garden at the façade of their concrete fences (3a) and later extended and build up in the peripheries. Some of them already maintained nurseries and keep plants on iron gates (3b), window sills (3c), door grills (4d). Some others, had them installed on their inside fences, firewalls, in garage, lavatory areas, and even inside their houses.



**Figure 3(a).** Wall garden on concrete fences.



**Figure 3(b).** Wall garden on iron gates.



**Figure 3(c).** Wall garden on windowsill.



**Figure 3(d).** Wall garden on door grills.

### ***Plant Keeping***

Most senior citizen vertical gardeners keep plants that were passed on to them by other senior citizens who are also maintaining vertical wall gardens. Initial plant collection includes ornamental plants mostly *Mayana* (*Plectranthus scutellarioides*). This plant is appreciated for its brightly colored foliage, making the vertical wall gardens colorful and attractive. It can be maintained and propagated through cuttings, making it a sustainable ornamental plant for wall gardens. Some vertical gardeners also obtain plants from garden stores, friends and relatives that add up to their plant collection. Table 1 show list of plants kept on the vertical gardens while accent plants are listed on Table 2.

**Table 1.** List of plants kept on the wall garden

Common Name	Scientific Name	Local Name
Abelia	<i>Abelia grandiflora Hybrid</i>	Abelia
Bird's nest fern	<i>Asplenium nidus</i>	Dapo
Boston/ Fishbone Fern	<i>Nephrolepis exaltata</i>	Bayabang
Cucharita	<i>Alternanthera ficoidea</i>	Kutcharitas
Cuphea	<i>Cuphea Hyssopifolia</i>	Kupea
Coleus	<i>Plectranthus scutellarioides</i>	Mayana
Lourdes	<i>Chlorophytum laxum</i>	Lourdes
Metallica Crispa	<i>Ajuga reptans</i>	Metallica
Moises in the Cradle	<i>Tradescantia spathacea Variegata</i>	Bangka-bangkaan
Morning glory	<i>Ipomoea purpurea</i>	Morning glory
Oregano	<i>Origanum vulgare</i>	Oregano / Suganda
Orlando	<i>Epipremnum giganteum</i>	Orlando
Oyster Plant	<i>Tradescantia spathacea</i>	Bangka-bangkaan
Picara / Chinese Croton	<i>Excoecaria cochincnensis</i>	Picara
Portulaca	<i>Portulaca oleracea</i>	Gulasiman
Pothos Golden	<i>Epipremnum aureum</i>	Pothos
Purple Heart	<i>Tradescantia pallida purpurea</i>	Violet
Purple Lady Blood leaf	<i>Iresine herbstii</i>	Dahong Pula
Spider plant	<i>Chlorophytum comosum</i>	Spider/ Ribbon plant
Song of India	<i>Dracaena reflexa</i>	Song of India
Swiss Cheese Vine	<i>Monstera obliqua</i>	Monstera

**Table 2.** List of accent plants

Common Name	Scientific Name	Local Name
Citronella	<i>Pelargonium citrosum</i>	Citronella
Chichirica	<i>Catharanthus roseus</i>	Tsitsirika
Croton	<i>Codiaeum variegatum</i>	Croton
Episcia	<i>Episcia cupreata</i>	Episcia
Persian Shield	<i>Strobilanthes dyerianus</i>	Strobilantes
Philodendron	<i>Philodendron Guttiferum</i>	Philodendron
Rhapis	<i>Rhapis Excelsa</i>	Rhapis
Snake plant	<i>Sansevieria trifasciata</i>	Snake plant
Ti plant	<i>Cordyline terminalis</i>	Ti plant
Welcome plant	<i>Zamioculcas zamiifolia</i>	Welcome plant
White angel	<i>Wrightia antidysenterica</i>	White angel



### *Plant Organizing*

Unlike horizontal gardening, vertical gardens can easily attract attention because they are projected face-front toward the gardeners and on-lookers. Its facade presents like a canvass that partly reflects the character of the gardeners who maintain it. Different patterns can be observed in arranging and organizing from plants of the same color per row, same variety of plants per row or in clusters, to no pattern at all (Table 3; Figure 4). Considerably plants are also arranged according to light and water requirements. Some gardeners would incorporate plants of contrasting shape, color or texture to project beauty, create balance and draw boundaries that frame the wall garden.

**Table 3:** Arrangement patterns of plants on the vertical garden

<b>Arrangement Pattern</b>	<b>Description</b>
Rows	Plants of the same variety are arranged per row
Clusters	Plants of the same variety or of colors are arranged in clusters
Mixed/ No pattern	Plants are hanged randomly without definite pattern



**Figure 4(a).** Rows.



**Figure 4(b).** Clusters.



**Figure 4(c).** Mixed/ No pattern.

### ***Wall Accessorizing***

An imagination of a perfect green space by accessorizing vertical gardens with artificial flying birds, bees, and butterflies (Figure 5) amazes me. Some of them would even ornate and incorporate artificial flowers that blend well with the colors of the ornamental plants. Rotating wind spinners and chimes liven up the vertical garden ambience that remind the presence of air around us.



**Figure 5.** Garden accessories: Artificial flowers, birds, flying insects and wind spinners.

*Sustainable practices in maintaining vertical gardens*

Knowledge and skills on sustainable means of maintaining their vertical gardens are acquired through word of mouth among the gardeners. Most of these practices were learned from family traditions, experienced neighbor-gardeners and few others, from seminar participation and garden clinics in the community. These sustainable means and practices include the use of natural household garden fertilizers such as “hugas-bigas” (rice wash); “hugas isda” (fish water) [a]; crushed egg shells [b]; dried banana peels [c], coffee grounds [d], among others. Aside from household resources, fish wash was sourced out from a fish vendor pushing a “kariton” (wooden cart) roaming around the neighborhood (Figure 6 [a]). In exchange for fish water, the gardener replaced it with clean water to be used by the fish vendor in cleaning fish. Coffee grounds were collected for free from nearby coffee shops who has environmental advocacy and is being distributed among the gardeners in neighborhood.



**Figure 6(a).** Fish water from vendor



**Figure 6(b).** Crushed egg shells



**Figure 6(c).** Dried banana peels



**Figure 6(d).** Coffee grounds

## The Empowering Attributes

### *Grounding on values, beliefs and language*

These empowering values, beliefs and language are engrained in their characters and grounded in the spirit of *bayanihan*. They believe that vertical gardens not only help in the beautification of the environment but also foster helping systems within the neighborhood. When asked to describe their garden and the value it projects, one claim:

*This is my garden. I call it a garden of love. Love, because I love life, I love my family. I love my plants. They are my source of energy, my source of health, not only for myself but for my family and also for my neighbors. I love also my cats. I love everything whether it bears flowers or not. I am committed to pursue this vertical gardening activities because we, as senior citizens, can also influence other people. By doing this not only for the sake of art, for beauty, but mostly because we feel that as we grow old, we become useful to the community. -VGEM*

Most Filipino elderly still hold on to some superstitious and folkloric beliefs about plants and gardening. These are socially transmitted among vertical gardeners and handed down to the members of the family and relatives. Although not all are seeded in truth, common garden superstitious and folkloric beliefs enable them to continually promote the value of sharing. VGMR relates when she did not regret sharing her plants:

*Some bad things will happen to us if we will not give in to her request (for plants). That is true! When a woman is conceiving, do not fail her. Recalling from Papa's story: They nearly fell into the cliff. Lucky for him that his brakes worked. Because our place is mountainous and winding road (demonstrating by hand, curve gesture)*

...

Some others continue to nurture plants because they believe that some plant species bring luck to the gardener and the household. Most senior citizen vertical gardeners share plants because they want to share their luck with other gardeners. One vertical gardener claimed:

*This, I attest, that is a lucky plant because it has been proven to be one by my sister. She told me that I can have the luck if I will be able to bloom flowers out of it. True enough, I was able to bloom flowers out of it and I received an unexpected cash gift.*  
– VGAF

Conversely, most senior citizen vertical gardeners believe in the mutual and symbiotic gardener-plant relationship and despise some superstitious or folkloric beliefs in gardening. This group think that gardening requires a considerable amount of responsibility and task of providing care and attention to flourish their garden. When ask if they have some gardening superstitious beliefs, two vertical gardeners simply put:

*Nothing (referring to beliefs in superstitions). Because some says: "Do not touch my plants because it will die". I don't believe that because if you take care of your plants, no matter what kind of plant that is, it will grow. I don't believe plants will die if somebody else touches it.*

– VGAD

*I do not believe in 'bati' (evil eye). Just take care of it. If you maintain your garden it will be fine. It is not like you plant it, then let it grow on its own." – VGTL*

### **Grasping for knowledge, skills and sustainable practices**

Though most vertical gardeners in the neighborhood have seen vertical gardens in some places, they are not familiar with the concept and technical aspects on how to start having one. Collaboration was drawn from the unconscious interactions and conversations directed towards learning the concept of vertical gardening. Experiential gardening enhances their knowledge and skills in keeping vertical gardens and its effectiveness is achieved through experimenting and imitating what the other gardeners are doing. A number of them were able to start their vertical gardens through the encouragement of neighbors while few others, initiated their own because they were inspired by their aesthetic appearance. Two vertical gardeners shared:

*With my experience, I study on where to put my plants in places where they flourish. If it needs sunlight, there they go! If they need to be shaded, I find a place for them. They thrive in right temperature. Some plants like cactus need not require constant watering. The reason why my cactus withered is overwatering, that should not be!*  
-VGLV

*I was intrinsically motivated when passing through Mendoza St. in Kasilawan. The street is really full of verdant plants with different colors. So, I decided to have my own. I tried to start scouting for plants in the three nurseries [pause] three nurseries of the City Gov't of Makati. I also tried to go to schools where I could ask for some plants, later on with my friends. So, within three days I was able to get plants, by batch, with the help of my driver and some with the help of my neighbors. We were able to set up whole day.* -VGCG

### **Growing desire to create vertical green space and a sense of place**

These senior citizen vertical gardeners have always had this desire to fill up empty wall spaces with plants to create wall gardens. They keep plants that are not only aesthetically appealing but also those that can be beneficial to the neighborhood. When asked about plant-keeping, one vertical gardener claimed:

*I keep mostly Mayana because of its attractive colors and my neighbors usually ask for it because it can help them manage their diabetes. I also keep oregano plants because it keeps away mosquitoes and neighbors believe that it can cure dengue. Our neighborhood flourished because of the sharing of plants I kept.* -VGET

This individually created vertical green space put together created an open green space for an eco-friendly neighborhood. The everyday gardening engagements by the senior citizens that convey a message of "This is my garden, don't try to mess with my garden" was replaced by "This is our garden, let's take care of it" dictum. The vertical gardens provide a platform for conveying a message to maintain the aesthetic ambience of the surroundings. Bill postings on the wall were replaced by wall gardens to convey a message for an eco-friendly reminder and orderly neighborhood. VGCB attested:

*Because I realized that it [neighborhood] became orderly and beautiful. Before, I had a posting on "no dumping of garbage". Now they are hesitant to dump their garbage because it will not compliment my wall garden. Though they are not saying*



*a word about it. They just wait for the garbage collector before they take their garbage out.*

This further strengthen the community as not just a place but a construct deeply rooted from the meanings put into it by the senior citizen vertical gardeners. These provisions pulled together create a community of vertical gardeners empowering each other in creating a sense of place through utilization of blank spaces.

## **DISCUSSION**

The shared patterns of values, beliefs, and language of the empowered senior citizens engaged in vertical gardening serves as an empowering groundwork in fostering community greening among themselves and vertical gardening enthusiasts in other communities as well. These empowering values, beliefs and language are engrained in their characters and is demonstrated in the culture-sharing and spirit of *'bayanihan'*.

The desire to create vertical green spaces is deeply rooted from the Filipinos culture of filling up spaces (Lorenzo, 2015). This is very evident in the vertical garden extensions installed in and out of their houses and their desire to promote vertical gardens in the neighborhood and other community. The significance of plant-keeping whether for aesthetic, therapeutic, social or environmental; be it personal or for others, is empowering. This is in concurrence with the Yin, Luo, Xu, Wang, Luo, Zhong, Peng, & Shao, (2015), in their study on the periodical development trends in vertical gardening that further suggested the integration of aesthetics, culture and art in vertical greening for sustainable ecosystems. This was further emphasized in the study of Zakaria, Ahmad & Rashid (2016) on the importance of soft and hard landscape in Malay gardens. Although some superstitious beliefs in plant-keeping are not seeded in truth, these are being perpetually transmitted among the neighborhood. The culture-sharing of gardening beliefs, plant-keeping practices, and their resonating cultural values enable these senior citizens to continue on with their gardening engagement that foster sustainable neighborhood. In the same light, findings of this study on cultural practices on vertical gardening among seniors promotes alternative leisure activity for sustainable greening, which is also reflected in the results of the study of Uren, Dzidic, & Bishop (2015).

The community of practice is often associated with socialization processes where beginners learned knowledge and skills from the experienced ones to gain entry to the community with the purpose of reproducing and imparting such knowledge and skills from one generation to the next (Atkinson, 2017, p.98). The learning strands and the development of culture, behavior and language took place through their constant interaction defined as authentic context (Behrman, 2002). As community learns, they begin to create, innovate, and apply the knowledge learned and experiences to the everyday context of their activities (Stein & Imel, 2002).

The World Health Organization (2018) recommends gardening as one of the leisure time physical activities for the elderly in the context of daily, family, and community activities. Generally, keeping a garden helps promote social interaction, social inclusion and social ties among neighborhoods. Gardens were considered to be part of neighborhood as centers where they can get together, enjoy the pleasant surroundings (Milton et al, 2015; Soderback, Soderstrom, & Schalander, 2004), and get engaged in activities that are of common interest to them (Kirkby-Geddes & Macaskill, 2016). Cooperation between

the members of the community also provides for enabling milieu for driving gardening practices for the environment (Uren et al., 2015). The vertical gardening engagement in keeping, organizing, accessorizing and promoting vertical gardening in and even in the neighboring community, allows them to be physically and socially active. These findings were also observed in a study conducted by Chaudhury, Campo, Michael, & Mahmood (2016), where social aspects of gardening showed an increased level of physical activity in older adults. The study further emphasized that activities' proximity in the neighborhood supports group activity engagement.

Recently, this neighborhood was awarded by the Makati Social Welfare Development (MSWD) as one of the "Outstanding Communities" in Makati City and was given a grant to foster their greening engagements. This group was also endorsed by MSWD to a private sector for possible partnership under their Corporate Social Responsibility (CSR) program to support other communities in their environmental advocacies.

Examining the relevance of these studies and opportunities it provides, gardening could be an avenue for which the elderly could be empowered in a community. Empowerment is about people taking control over their lives through support processes in the pursuit of their goals, personal development and self-reliance (UNESCO, 2003). Promoting empowerment is capacity-building. Individual strengths and competencies in each diverse setting should be the basis for contextualized social programs and policies. The neighborhoods of a community or of a city are the best sources of vital information needed to develop social structures because they can determine how their individual competencies and capabilities can be pulled together to address their immediate social needs (Rappaport, 1981). The neighborhood or the grassroots should be the mediating structures for the bottom-up collaborations for a successful implementation of programs and policies.

## **CONCLUSION**

From this ethnographic-exploratory study, a cultural portrait of empowered senior citizens in vertical gardening engagements was drawn. The empowering attributes were germinated and cultivated from 15 empowered Filipino senior citizen engaged in vertical gardening. These empowerment attributes are grounded from the beliefs, language and values they uphold and is deeply rooted from their desire to create a space and a sense of place. The values upheld by each vertical gardener is empowering not only for themselves but also for the entire neighborhood. The need to improve their craft in vertical gardening was sown from the knowledge and skills they grasp toward sustainable vertical gardening practices. The cultural portrait that crystallizes the characters, beliefs, language, vertical gardening engagement elucidates understanding on the value of contextualization and inclusion for empowering the elderly in community greening through vertical gardening.

## **RECOMMENDATIONS**

In the past decades, a brief review on empowerment constructs recommends dissemination of qualitative, contextual and culture specific research focus on empowerment processes and outcomes for social policy (Rappaport, 1981; Perkins & Zimmerman, 1995). Though this ethnographic-exploratory study drew the culture-sharing group of empowered Filipino senior citizens in a neighborhood-initiated vertical gardening engagement, further research could be undertaken to explore replicability of this research in other communities.

Despite studies showing a myriad of benefits that can be derived from gardening, few Filipino elderly in the urban setting showed lack of interest in gardening due to either lack of space for keeping plants or awareness of alternative leisure activities or both. The vertical gardening engagements will serve as a model for sustainable greening activities. These findings will provide policy makers alternative perspective on how they can provide enabling environment and capacity-building that fosters community greening that can empower senior citizens as productive members of the society. It is suggested that vertical gardening be considered as an alternative leisure activity for the elderly in the urban areas where there are spatial limitations. Further research could be undertaken to identify empowering attributes that could enhance the propensity of the senior citizens to engage in vertical greening.

#### STATEMENT OF AUTHORSHIP

The first author conceptualized the research study, gathered and analyzed the data and made the draft of the article. The second author provided substantive and valuable insights on the study design and critically reviewed the data analysis. Together with the second author, both approved the article for publication.

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