



# HOME GARDENING AMIDST PANDEMIC (HGAP): AN APPROACH IN ADDRESSING STUDENT'S PERSONAL WELFARE

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## ABSTRACT

*Despite many kinds of research, literature, and journals presenting the benefits of gardening as a strategy to enhance household food security and nutrition, the problem brought by the present scenario especially to the students resulted in the conduct of this study. Using the descriptive method of research, the researcher investigated the relationship of home gardening amidst pandemic as an approach in addressing student's personal welfare as to physical, emotional, and social attributes.*

*Utilizing a questionnaire were analyzed using Mean, SD, and Pearson correlation coefficient. It was found that student's engagement in home gardening is very high in terms of student's interest, parent's initiative, and teacher's motivation. Moving on to sustainability of home gardening practices in terms of family's support, school's support, and LGU's support, give a very high remarks and was recorded for family's support, and school's support and high remarks for LGU's support. Furthermore, a very high remark was noted for the status of student's personal welfare as to physical, emotional, and social attributes.*

*The study concluded the established relationship between home gardening engagement and sustainability of home gardening practices in addressing student's personal welfare as to physical, emotional, and social was statistically significant. Thus, the hypothesis which states that there is no significant relationship between home gardening engagement and sustainability of home gardening practices in addressing student's personal welfare as to physical, emotional, and social attributes should be rejected. Based on the findings it is recommended that in order to maintain student engagement in home gardening, parents and teachers should provide continuous motivation by giving rewards and recognition for their effort. Home gardening should be widened and strengthened by the school, community, and family. Local government units (LGU) must support home gardening in their community to help families in their food production especially in this time of the pandemic.*

**KEYWORDS:** *home gardening, personal welfare, student engagement, sustainability, practices, school, parents, teacher, Local government unit (LGU)*

## I. INTRODUCTION

Almost every country in all corners of the world was greatly alarmed by one type of pandemic that had changed the lives of many individuals. People

have been forced to live within the four walls of their homes around the world, a situation they have never been used to. Thinking about their plight and the length of time being in quarantine had a negative impact on a



person's well-being. The youth in particular, as one being affected greatly by this pandemic, should be given special attention.

The Department of Education (DepEd), through DepEd Order No.12 s.2020 (Adoption of the Basic Education Learning Continuity Plan for School Year 2020-2021 in light of the COVID-19 Public Health Emergency), recognizes as a priority the promotion and protection of the mental health and general welfare of learners in the time of COVID-19 Pandemic.

The Department of Education motivates parents and students to engage in "gulayan sa tahanan" as an extension project of "Gulayan sa Paaralan" one of the beneficial activities during this time. Gardening has always been promoted as a relaxing recreational activity that can provide great personal rewards whether it is an ornamental garden or a food garden.

As explained by Foodtank (2020), Home vegetable gardening can not only increase produce consumption and physical activity—but it is also associated with improved emotional wellbeing. According to a recent study from Princeton University (2020) home gardening had a similar effect on emotional well-being as biking, walking, or dining out. It was the only activity out of the 15 studied for which people with low incomes reported the highest emotional well-being. Similarly, Hillside Atlanta (2019) explains that gardening lowers depression, anxiety, obesity, and heart disease as well as promotes personal happiness, quality of life, and a sense of community.

A study made by Eng et.al (2019) the most significant benefit that can arise from gardening is increased social capital and connections. As children work together to plant and create something meaningful, the result is an improved bond between them. Lehman (2013) emphasizes when it is fun and stress-free, gardening with children can be a connecting relationship. On the other hand, Better Health (2013) stated that by gardening as a family, adults can share their skills and knowledge with children and family members can learn together.

For this reason, the researchers sought to investigate the effect of Home Gardening Amidst Pandemic (HGAP) as an approach in addressing student's personal welfare of Grade 9 and 10 TLE Agricultural Crop students of San Francisco Integrated National High School in Victoria, Laguna.

## II. OBJECTIVES

The goal of this study was to look into the status of home gardening engagement, sustainability of

home gardening practices in addressing student's personal welfare of Grade 9 and 10 TLE agricultural crop students of San Francisco Integrated National High School in Victoria District.

Specifically, the study sought answers to the following questions:

1. What is the status of home gardening engagement in terms of:
  - 1.1 student's interest;
  - 1.2 parent's initiative; and
  - 1.3 teacher's motivation?
2. What is the level of sustainability home gardening practices in terms of:
  - 2.1 family's support;
  - 2.2 school's support; and
  - 2.3 LGU's support?
3. What is the status of student's welfare as to:
  - 3.1 physical;
  - 3.2 emotional; and
  - 3.3 social attributes?
4. Is there a significant relationship between home gardening engagement and sustainability of home gardening practices in addressing student's welfare as to:
  - 4.1 physical;
  - 4.2 emotional; and
  - 4.3 social attributes?

## III. METHODOLOGY

The respondents of the study were composed of 76 Grade 9 and 10 TLE Agricultural crop production students of San Francisco Integrated National High School in the district of Victoria, Laguna.

A descriptive type of research design through a validated survey questionnaire shall be used in gathering information from the sample respondents.

In answering each specific research question, an appropriate statistical tool shall employ using Mean, Standard deviation, and Pearson correlation coefficient. The mean and standard deviation was used to determine the status of home gardening engagement in terms of student's interest, parent's initiative, and teacher's motivation as well as the level of sustainable home gardening practices in terms of family's support, school support and LGU's support and the status of student's personal welfare as to physical, emotional and social attributes; Pearson Correlation Coefficient suits the study to find the relationship between home gardening engagement and sustainability of home gardening practices in addressing student's welfare as to physical, emotional and social attributes.

After the survey questionnaire was



administered, all the information was accumulated, analyzed, investigated, tabulated, and interpreted.

gardening practices in addressing student's welfare as to physical, emotional and social attributes.

#### IV. RESULT AND DISCUSSION

The presentation of the significant findings followed the order as per the assertion of the problem specifically: to determine the status of home gardening engagement in terms of student's interest, parent's initiative, and teacher's motivation; level of sustainability of home gardening practices in terms of family's support, school support and LGU's support; status of student's personal welfare as to physical, emotional and social attributes; and to determine if there is significant relationship between home gardening engagement and sustainability of home

#### Status of Home Gardening Engagement

The first specific research question which this study sought to answer focuses on the status of home gardening amidst pandemic as refer to student's interest, parent's initiative, and teacher's motivation. It was dealt with measurably utilizing mean, standard deviation joined by a 5 point-Likert scale made by the researcher. The table shows the indicative statement, mean, remark and interpretation.

Table 1 presents the status of home gardening in terms of student's interest.

**Table 1. Status of Home Gardening Engagement in terms of Student's Interest**

Indicative Statement	Mean	SD	Remarks
<i>I enjoy doing gardening because it...</i>			
1. Is a fun and interesting activity for me	4.45	0.60	Strongly Agree
2. Feels me happy when I take care of my plants.	4.41	0.57	Strongly Agree
3. Makes me feel accomplished when I grow plants and seeds.	4.50	0.50	Strongly Agree
4. Is fun to harvest the fruits of the vegetables I planted	4.62	0.56	Strongly Agree
5. Helps me learn different techniques in taking care of plants.	4.61	0.54	Strongly Agree
<b>Overall Mean</b>	<b>4.52</b>		<b>Very High</b>

#### Legend:

Points	Range	Remarks	Interpretation
5	4.20-5.00	Strongly Agree	Very High
4	3.40-4.19	Agree	High
3	2.60-3.39	Not sure	Moderately High
2	1.80-2.59	Disagree	Low
1	1.0- 1.79	Strongly Disagree	Very Low

The data in the table present that students strongly agree that home gardening is a fun and interesting activity (M=4.45, SD=0.60), makes them happy taking care of plants (M=4.41, SD=0.57), makes them feel accomplished growing plants and seeds (M=4.50, SD=0.50), makes them feel fun harvesting fruits and vegetables they planted (M=4.62, SD=0.56), and helps them learn different techniques in taking care of plants (M=4.61, SD=0.54).

The overall mean of 4.52 indicates that students' interest in home gardening is very high.

According to McMane (2013) students who showed interest in participating in gardening activities develop an ability to communicate and work collaboratively. Furthermore, Block et.al, (2012) found that children engaged in a garden and kitchen program were able to self-direct and complete tasks without repeated redirection or close supervision.

Table 2 presents the status of Home Gardening Engagement in terms of parent's initiative.

**Table 2. Status of Home Gardening Engagement in terms of Parent's Initiative**

Indicative Statement	Mean	SD	Remark
<i>My parents/guardians...</i>			
1. Encourage me to build my little garden.	4.41	0.52	Strongly Agree
2. Join me in planting and taking care of the plants.	4.39	0.49	Strongly Agree
3. Would reward me if I would be able to grow plants.	4.32	0.70	Strongly Agree
4. Praise me for taking good care of plants.	4.43	0.52	Strongly Agree
5. Always check on my garden.	4.41	0.55	Strongly Agree
<b>Overall Mean</b>	<b>4.39</b>		<b>Very High</b>

Table 2 recorded a very high level for all statements from the means calculated from the responses of the students. The mean are particularly highest for the two statements, my parents encourage me to build my own little garden (M=4.41, SD=0.52), my parents always check on my garden (M=4.41, SD=0.55). The majority of the students seem to be in unison in their responses to this statement, although they have the same computed mean a little bit difference in the result of standard deviation was recorded. On the other hand, the lowest mean was calculated for the statement, *My parents would reward me if I would be able to grow plants*. This statement also recorded a relatively high standard deviation of 0.70 which is the highest among the statements. This

means that compared to the other four, this statement garnered more varied responses from the students. Though all interpreted as very high level, the values are more spread out compared to the other four statements with lower standard deviations.

The overall mean of 4.39 indicates that the status of home gardening engagement in terms of parent's initiative is very high. In accordance with Dansal and Aguanta (2014), the effectiveness of vegetable gardening is significantly linked to the interest of the student in the program, parental support, and the extent of hands-on learning through the direct and meaningful learning experience with cooperation from home or parental support.

**Table 3. Status of Home Gardening Engagement in terms of Teacher's Motivation**

Indicative Statement	Mean	SD	Remark
<i>My teacher...</i>			
1. Encourages me to build my little garden.	4.34	0.48	Strongly Agree
2. Share his/her knowledge in taking care of plants.	4.37	0.49	Strongly Agree
3. Would reward me if I would be able to grow plants.	4.26	0.53	Strongly Agree
4. Praises me for taking good care of plants.	4.37	0.51	Strongly Agree
5. Always checks on my garden.	4.20	0.71	Strongly Agree
<b>Overall Mean</b>	<b>4.31</b>		<b>Very High</b>

As shown in table 4 students indicated a very high level of home gardening engagement in terms of teacher's motivation with an overall mean of 4.31. Based on the presented data the statement in number 2 which is my teacher shares his/her knowledge in taking care of plants with a mean of (M=4.37, SD=0.49) has the same computed mean in statement number 4 my teacher praises me for taking good care of plants (M=4.37, SD=0.51). Both of the statement has the same mean with a small difference in standard deviation was also recorded. On the other hand statement for the teacher would reward me if I would be able to grow

plants with a mean of (M=4.26, SD=0.53) to continue an (M=4.20, SD=0.71) for statement my teacher always checks on my garden, the standard deviation here is a bit higher than other statements that show very short distances in students responses. According to Filgona (2020), highly motivated learners are likely to learn easily and make any activities fun doing, while unmotivated learners can probably learn very little and make tasks painful and frustrating in general. Similarly, DiClaudio, Hughes, and Savoca (2013) claim the important role of a teacher in motivating students to engage in worthwhile activities like gardening.



Teachers believe that implementing new learning styles and motivation can help students to engage more.

### Sustainability of Home Gardening Practices

The second research question which this study sought to answer focuses on the sustainability of home gardening practices in terms of family support, school support, and LGU's support.

Table 4 presents the sustainability of home gardening practices in terms of family support.

This section answers the second specific research question which focuses on the sustainability of home gardening practices in terms of family support.

**Table 4. Level of Sustainability of Home Gardening Practices in terms of Family's Support**

Indicative Statement	Mean	SD	Remark
<i>My family...</i>			
1. Is involved in the garden plans from the very beginning.	4.28	0.60	Strongly Agree
2. Joins me in planting and taking care of the plants.	4.32	0.55	Strongly Agree
3. Helps me build a children/students-theme garden.	4.29	0.58	Strongly Agree
4. Let me harvest home-grown produce.	4.32	0.52	Strongly Agree
5. Share their knowledge and skills in gardening.	4.53	0.53	Strongly Agree
<b>Overall Mean</b>	<b>4.34</b>		<b>Very High</b>

The result also presented the highest (M=4.53, SD=0.53) with remarks of strongly agree and verbal interpretation of very high for the statements my family share their knowledge and skills in gardening. Data reveals a lowest (M=4.28, SD=0.60) for the statement my family is involved in the garden plans from the very beginning. A similar mean of 4.32 is also recorded in the number two and four statements with a little bit

different in standard deviation.

According to Camey et. Al., (2013) Family and social relationships can also be strengthened through community gardening. As mentioned by Borbon (2019) another benefit of having a family garden is that it improves family well-being. As a result, the family bond is strengthened and further developed.

**Table 5. Level of Sustainability of Home Gardening Practices in terms of School's Support**

Indicative Statement	Mean	SD	Remark
<i>Our school...</i>			
1. Has a clear policy on home gardening.	4.42	0.55	Strongly Agree
2. Helps provide seedlings and other gardening needs.	4.25	0.57	Strongly Agree
3. Has a merit system for home gardening.	4.31	0.64	Strongly Agree
4. Features our home garden on its publications.	4.34	0.66	Strongly Agree
5. (Its teachers) Visit us to check on our gardens.	4.25	0.68	Strongly Agree
<b>Overall Mean</b>	<b>4.31</b>		<b>Very High</b>

Table 5 shows the mean level of sustainability of home gardening practices in terms of school's support, in the statement, our school has a clear policy on home gardening with an (M=4.42, SD=0.55) with remarks of strongly agree and verbal interpretation of Very High. It also shows the highest mean level.

On the other hand, students remark strongly agree with the statements about our school helps provide seedlings and other gardening needs with an (M=4.25, SD=0.57), has a merit system for home gardening (M=4.31, SD=0.64), features our home garden in its publications (M=4.34, SD=0.66) and its

teachers visit us to check on our gardens (M=4.25, SD=0.68). Furthermore, the data in the table also shows the total mean level of sustainability of home gardening practices in terms of school support with a total (M=4.31, SD= ) interpreted as Very High. The need for school's support in the sustainability of home gardening practices is important as mentioned by Mc Cully (2012) provision of practical, up-to-date, basic information on home gardening for vocational agriculture students with limited knowledge of vegetable gardening is important.

**Table 6. Level of Sustainability of Home Gardening Practices in terms of LGU's Support**

Indicative Statement	Mean	SD	Remark
<i>Our barangay...</i>			
1. Has a clear policy on home gardening.	4.04	0.72	Agree
2. Helps provide seedlings and other gardening needs.	4.08	0.63	Agree
3. Has a merit system for home gardening.	4.04	0.70	Agree
4. Promote home gardening in our community.	4.12	0.65	Agree
5. (its officials) Visits us to check on our gardens.	3.75	0.83	Agree
<b>Overall Mean</b>	<b>4.01</b>		<b>High</b>

Presented in table 6 is the result of the level of sustainability of home gardening in terms of LGU's support with a total of (M=4.01, SD=) with a verbal interpretation of High. Also observed in the table the highest mean level (M=4.12, SD=0.65) with remarks of agree and verbal interpretation of Very high for statement our barangay promote home gardening in our community.

The lowest mean, on the other hand, has been calculated for the statement our barangay officials visit us to check our gardens (M=3.75). This statement, however, recorded the most varied responses with SD=0.83. Data indicates the same mean of M=4.04 for the statement our barangay has a clear policy on home gardening and our barangay has a merit system for home gardening and a minimal difference in standard deviation. The recognition of the respondents in the importance of LGU's support in the sustainability of home gardening practices is evident. As mentioned by Mc Intosh (2011) the local government plays important

role in sustaining community gardening by offering the assistance of free seeds and gardening programs.

#### Status of Student's Personal Welfare

This section presents the answers to the third specific research question on the status of student's personal welfare as to physical, emotional, and social attributes.

Table 7 shows the status of student's personal welfare as to physical attributes.

Results show that students strongly agree that doing home gardening helps them gain strength through regular exposure to fresh air and sunlight (M=4.58, SD=0.50) helps them exercise their entire body through walking, reaching, bending, and digging (M=4.61, SD=0.49), helps them feel more active and alive (M=4.63, SD=0.49), helps them improve their endurance, strength, mobility, and flexibility (M=4.47, SD=0.50) and makes them physically fit through regular eating of fresh vegetables (M=4.51, SD=0.50).

**Table 7. Status of Student's Personal Welfare as to Physical Attributes**

Indicative Statement	Mean	SD	Remark
<i>Doing gardening...</i>			
1. Help me gain strength through regular exposure to fresh air and sunlight.	4.58	0.50	Strongly Agree
2. Exercise my entire body through walking, reaching, bending, and digging.	4.61	0.49	Strongly Agree
3. Feels me more active and alive.	4.63	0.49	Strongly Agree
4. Improves my endurance, strength, mobility, and flexibility.	4.47	0.50	Strongly Agree
5. Makes me physically fit through regular eating of fresh vegetables.	4.51	0.50	Strongly Agree
<b>Overall Mean</b>	<b>4.56</b>		<b>Very High</b>



Data shows that the standard deviation implies closely similar responses obtained from the students. The overall mean of 4.56 indicates that the status of student's personal welfare as physical attributes is very high.

According to Ohly et.al, (2016) gardening programs are increasingly popular, with suggested

benefits including healthier eating and increased physical activity. Similarly, Eng et.al, (2019) Gardening is quite beneficial to children's physical, cognitive, and motor development. Moving tools, digging in the soil, and feeling the dirt in their palms are all experiences that add to the physical development of children.

**Table 8. Status of Student's Personal Welfare as to Emotional Attributes**

<b>Indicative Statement</b> <i>Doing gardening...</i>	<b>Mean</b>	<b>SD</b>	<b>Remark</b>
1. Helps me relieve my stress from stressful activities.	4.59	0.52	Strongly Agree
2. Makes me feel satisfied and happy.	4.61	0.49	Strongly Agree
3. Releases my boredom and negative vibes.	4.59	0.49	Strongly Agree
4. Feels more relax and calm.	4.53	0.53	Strongly Agree
5. Helps me become less sensitive and irritable and teaches me to become patient.	4.62	0.49	Strongly Agree
<b>Overall Mean</b>	<b>4.59</b>		<b>Very High</b>

As shown in table 8 students strongly agree that doing home gardening helps them relieve stress from stressful activities (M=4.59, SD=0.52), makes them feel satisfied and happy (M=4.61, SD=0.49), releases their boredom and negative vibes (M=4.59, SD=0.49), feels them more relax and calm (M=4.53, SD=0.53) and helps them become less sensitive, irritable and teaches them to become patient (M=4.62, SD=0.49).

It can be further observed close and similar results on mean and standard deviation which signify relatively close responses from the students. The overall mean of 4.59 indicates that the status of

student's personal welfare as to emotional attributes is very high. As shown in the study conducted by Lier, Utter, and Denny (2016) students involved in gardening report slightly lower levels of depressive symptoms and improved emotional well-being and are more connected to their families than students who are not involved in gardening. Similarly Dorcheus (2016) stated in his research study found that both at the beginning and end of youth gardening experiences, participants reported feeling more positive than negative emotions.

Table 9 presents the status of student's personal welfare as to social attributes.

**Table 9. Status of Student's Personal Welfare as to Social attributes**

<b>Indicative Statement</b> <i>Doing gardening...</i>	<b>Mean</b>	<b>SD</b>	<b>Remark</b>
1. Brings enjoyment to me and my family.	4.74	0.47	Strongly Agree
2. Gives me a sense of belonging.	4.75	0.44	Strongly Agree
3. Serves as a bonding time with my family.	4.67	0.50	Strongly Agree
4. Promotes closeness to my family.	4.59	0.55	Strongly Agree
5. Teaches me to be responsible and cooperative.	4.66	0.50	Strongly Agree
<b>Overall Mean</b>	<b>4.68</b>		<b>Very High</b>

Similar to the student's responses presented in Tables 7 and 8, Table 9 recorded a very high level for all statements from the means calculated from the responses of the students. As observed in the table student's strongly agree that doing home gardening

brings enjoyment to them and their family (M=4.74, SD=0.47), gives them a sense of belonging (M=4.75, SD=0.44), serves as a bonding time for their family (M=4.67, SD=0.50), promotes closeness to their family



( $M=4.59$ ,  $SD=0.55$ ), and teaches them to be responsible and cooperative. ( $M=4.66$ ,  $SD=0.50$ ).

Data reveals closely similar responses obtained from the students as shown in the result of standard deviation. The overall mean of 4.68 indicates that the status of student's personal welfare as to social attributes is very high. Mcfarland and Waliczek (2018) highlighted the importance of interactions in the garden with families. According to them home gardening can be used as a location for social interactions sharing of experiences and bounty with others as well as developing stories and memories. Eng et.al, (2019). The most significant benefit that can arise from gardening is increased social capital and connections. As children work together to plant and create something meaningful, the result is an improved bond between them.

#### **Relationship of Home Gardening Engagement and Sustainability of Home Gardening Practices in Addressing Student's Personal welfare.**

This section aims to address the fourth research question which concerns the relationship of home gardening engagement and sustainability of home gardening practices in addressing student's personal

welfare.

Table 11 presents the significant relationship of home gardening engagement and sustainability of home gardening practices in addressing student's personal welfare as to physical attributes.

Results show that home gardening engagement as to student's interest ( $r=0.482$ ,  $p=0.000$ ), parent's initiative ( $r=0.415$ ,  $p=0.000$ ), and teacher's motivation ( $r=0.473$ ,  $p=0.000$ ) were found moderately related to student's welfare in terms of physical attributes. With regards to home gardening sustainability, there is a moderate relationship between LGU's support ( $r=0.516$ ,  $p=0.000$ ), school's support ( $r=0.472$ ,  $p=0.000$ ), and student's personal welfare as to physical attributes. Family's support ( $r=0.393$ ,  $p=0.000$ ) however, shows a weak relationship with student's personal welfare as to physical attributes.

Furthermore, it shows that the established relationship was statistically significant at a 0.01 level of significance. Thus, the hypothesis that states that there is no significant relationship of home gardening engagement and sustainability of home gardening practices in addressing student's personal welfare as to physical attributes should be rejected.

**Table 10. Relationship of Home gardening Engagement and Sustainability of Home Gardening Practices in Addressing Student's Personal welfare as to Physical Attributes**

Predictive Indicator	r	Interpretation	p	Analysis
Home Gardening Engagement				
• <i>Student's Interest</i>	0.482**	Moderate	0.000	Significant
• <i>Parent's Initiative</i>	0.415**	Moderate	0.000	Significant
• <i>Teacher's Motivation</i>	0.473**	Moderate	0.000	Significant
Home Gardening Sustainability				
• <i>Family's Support</i>	0.393**	Weak	0.000	Significant
• <i>School's Support</i>	0.472**	Moderate	0.000	Significant
• <i>LGU's Support</i>	0.516**	Moderate	0.000	Significant

\*\* Significant at 0.01 level (2 – tailed test)

\*Significant at 0.05 level (2-tailed test)

According to Schmutz et., al. (2014) regular involvement in gardening increases overall levels of physical activity and fitness burn more calories and hence contribute to healthy weight management and reducing the risk of obesity. This is somehow related to the findings of Wallace (2020) plants, both indoor and outdoor, are natural air purifiers, taking air pollution and carbon dioxide in and releasing oxygen in return. This can aid in improving overall health and well-being while reducing exposure to harsh and

dangerous toxins. Similarly, Thompson (2018) explains that working in the garden restores dexterity and strength, and the aerobic exercise that is involved can easily use the same number of calories as might be expended in a gym.

Table 11 presents the significant relationship of home gardening engagement and sustainability of home gardening practices in addressing student's personal welfare as to emotional attributes.

**Table 11. Relationship of Home Gardening Engagement and Sustainability of Home Gardening Practices in Addressing Student's Personal welfare as to Emotional Attributes**

Predictive Indicator	r	Interpretation	p	Analysis
Home Gardening Engagement				
• <i>Student's Interest</i>	0.370**	Weak	0.001	Significant
• <i>Parent's Initiative</i>	0.331**	Weak	0.004	Significant
• <i>Teacher's Motivation</i>	0.376**	Weak	0.001	Significant
Home Gardening Sustainability				
• <i>Family's Support</i>	0.376**	Weak	0.001	Significant
• <i>School's Support</i>	0.268*	Weak	0.020	Significant
• <i>LGU's Support</i>	0.397**	Weak	0.000	Significant

Results show that home gardening engagement as to student's interest ( $r=0.370$ ,  $p=0.001$ ), parent's initiative ( $r=0.331$ ,  $p=0.004$ ), and teacher's motivation ( $r=0.376$ ,  $p=0.001$ ) were found weak (relationship) with student's welfare in terms of emotional attributes. With regard to home gardening sustainability, there is a weak relationship between family's support ( $r=0.376$ ,  $p=0.001$ ), school's support ( $r=0.268$ ,  $p=0.020$ ), LGU's support ( $r=0.397$ ,  $p=0.000$ ), and student's personal welfare as to emotional.

Further, it shows that the established relationship was statistically significant at a 0.01 level of significance. Thus, the hypothesis that states that there is no significant relationship of home gardening engagement and sustainability of home gardening

practices in addressing student's personal welfare as to emotional welfare should be rejected.

These findings are the same as Sunga and Advincula (2021) in this time of pandemic engagement in gardening brings psychological experience and interest that result in stress relief and improved mood. Eng et al., (2019) claims that gardening also increases creativity and inspiration; positively improves participants' mental well-being.

Table 12 presents the significant relationship of home gardening engagement and sustainability of home gardening practices in addressing student's personal welfare as to social attributes.

**Table 12. Relationship of Home Gardening Engagement and Sustainability of Home Gardening Practices in Addressing Student's Personal welfare as to Social Attributes**

Predictive Indicator	r	Interpretation	p	Analysis
Home Gardening Engagement				
• <i>Student's Interest</i>	0.484**	Moderate	0.000	Significant
• <i>Parent's Initiative</i>	0.451**	Moderate	0.000	Significant
• <i>Teacher's Motivation</i>	0.375**	Weak	0.001	Significant
Home Gardening Sustainability				
• <i>Family's Support</i>	0.412**	Moderate	0.000	Significant
• <i>School's Support</i>	0.368**	Weak	0.001	Significant
• <i>LGU's Support</i>	0.401**	Moderate	0.000	Significant

Results show that home gardening engagement as to student's interest ( $r=0.484$ ,  $p=0.000$ ),

and parent's initiative ( $r=0.451$ ,  $p=0.000$ ) were found moderately related to student's welfare in terms of



social attributes. On the other hand teacher's motivation ( $r=0.375$ ,  $p=0.001$ ) shows a weak relationship to student's welfare in terms of social attribute. With regard to home gardening sustainability, there is a moderate relationship between family support ( $r=0.412$ ,  $p=0.000$ ), LGU's support ( $r=0.401$ ,  $p=0.000$ ), and student's personal welfare as to social attributes. School's support ( $r=0.368$ ,  $p=0.001$ ) however, shows a weak relationship to student's personal welfare as to social attributes.

Further, it shows that the established relationship was statistically significant at 0.01 level of significance. Thus, the hypothesis that states that there is no significant relationship of home gardening engagement and sustainability of home gardening practices in addressing student's personal welfare as to social should be rejected.

The results of the current support the claim of Enroth (2019) that gardening can transcend social problems. No matter what a person's race or social status may be, a love for plants can bring people together. Several researchers and projects have shown gardening to promote positive social interaction.

## V. CONCLUSION

After thorough analyses of the gathered and treated data, the researcher arrived at the following conclusions.

Results shows that home gardening engagement and sustainability of home gardening practices in addressing student's personal welfare as to physical, emotional, and social attributes was statistically significant at 0.01 level of significance therefore the hypothesis that there is no significant relationship of home gardening engagement and sustainability of home gardening practices in addressing student's personal welfare as to physical, emotional and social attributes should be rejected.

## VI. RECOMMENDATION

Considering the findings and conclusions of this investigation, the researcher made the following recommendations.

1. In order to maintain student engagement in home gardening parents and teachers should provide continuous motivation by giving rewards and recognition for their effort.

2. Since home gardening amidst pandemic has a positive effect on student's personal welfare, the researcher suggests that it should be widened and strengthened by a school, community, and family.

3. Local Government Unit must support home

gardening in their community to help families with their food production especially during this time of the pandemic.

4. It is further recommended that the Department of Education to conduct teacher's training for home gardening to help the students in providing important information regarding home gardening.

5. It is recommended for future researchers to check and improve the reliability of the research instrument for a larger sample size.

6. More research and empirical data are also needed to evaluate the role of home gardens in a crisis like pandemic and post-crisis situations, as well as their economic value and impacts on food security, nutrition, and family's well-being.

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