

Urban Agriculture in Philadelphia: effects on gardeners' mental and physical health disparities and community relationships



Joyee Au-Yeung; Advisor: Michael Kulik

ABSTRACT

Urban gardening is a nationally recognized agriculture practice that is often integrated into state or local policies. However, few scholars have investigated its intrinsic value for gardeners beyond alleviating food insecurity. This thesis aims to analyze how urban gardeners in Philadelphia experience gardening's effects under the categories of mental health, physical wellbeing, and community formation. Results of over 100 survey responses demonstrate gardeners' common experiences and statistically significant relationships between different effects of gardening. The results show that gardening brings significant mental benefits, and to a lesser degree, exhibits weaker linkages with gardeners' physical wellbeing and community health. The overall positive results of this thesis may support the development of more urban agricultural policies or non-profits in the future by indicating the pro-social nature and preventative healthcare possibilities for urban gardening.

BACKGROUND

- **Food insecurity** is defined as one's lack of access, at times, to enough food for an active, healthy life for household members or uncertain availability of nutritionally adequate food (Feeding America, 2018).
- Urban gardening is instrumentally valuable for its ability to address food insecurity. The study investigates its intrinsic value in cultivating the mind, body, and relations.

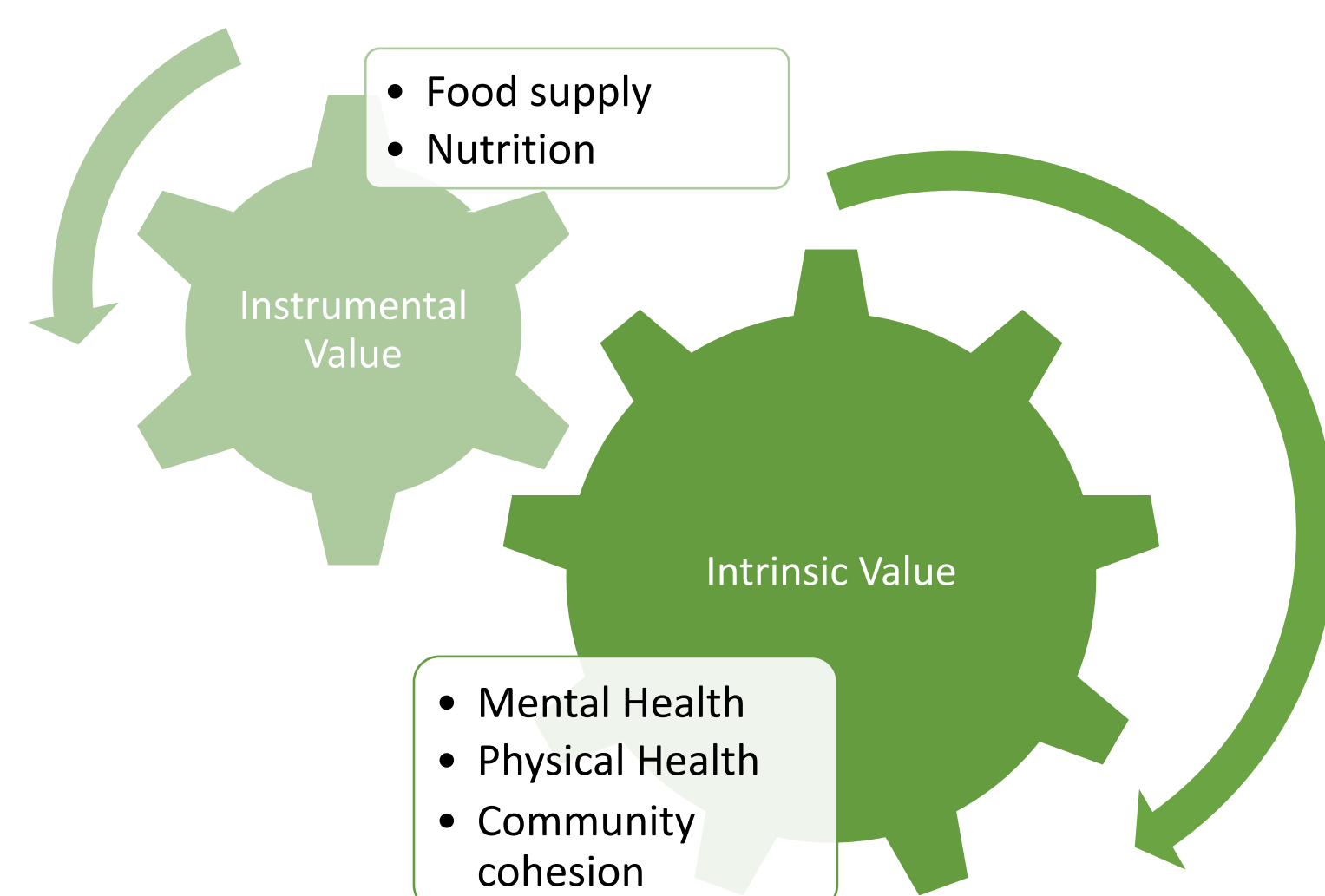
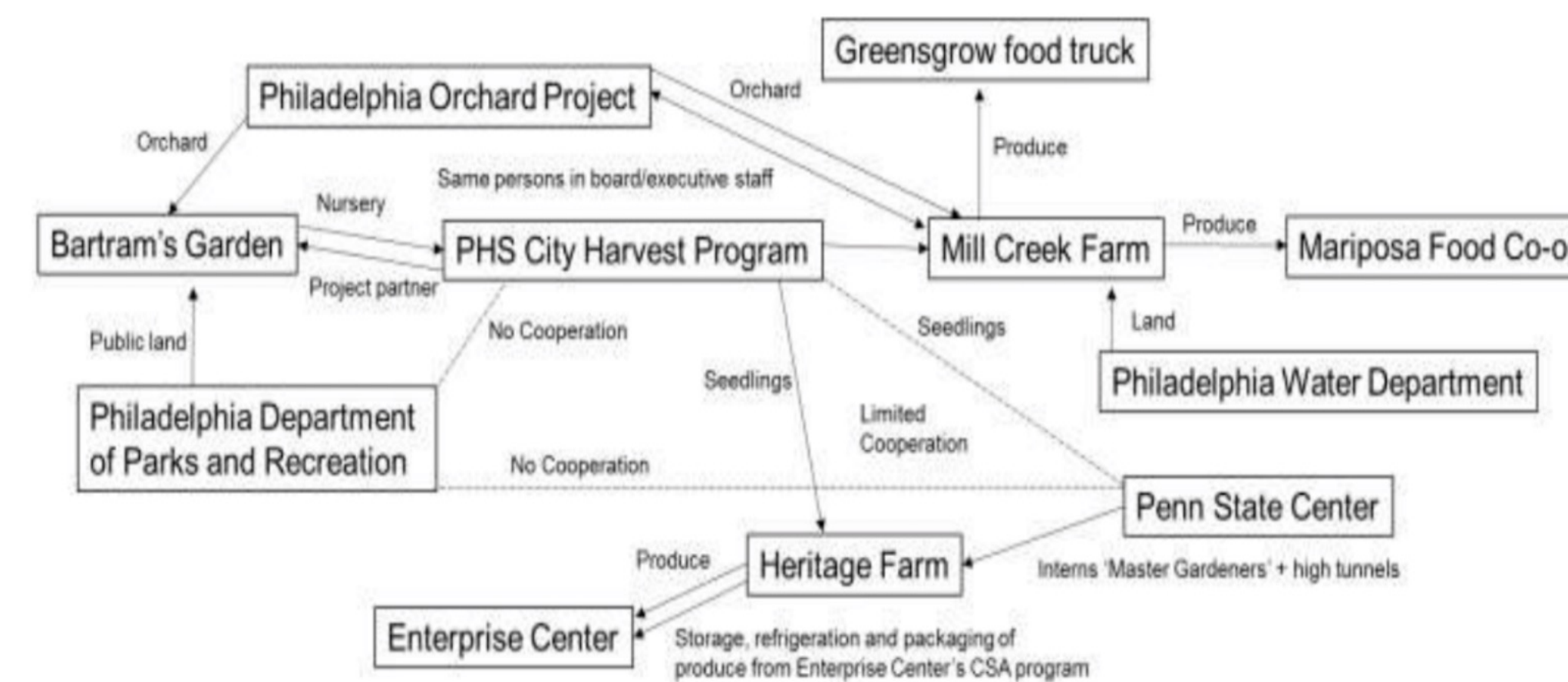


Figure 1. Urban Gardening's value

BACKGROUND, CONT.

- **Communities of practice** for urban gardening are "well-connected, small, open, inclusive, growing and dynamic" networks including local government departments and non-profits (Prové, 2015).
- The study evaluates how gardeners build relationships with the people they garden for or with and their communities.



Example of the collaborations between urban agriculture activities. Arrow meaning '...provides...to...' and dotted line pointing at the missing collaboration between supporting organizations

Figure 2. Network of urban agriculture activities in Philadelphia (Prové, 2015)

METHODS

This thesis collected qualitative data through Qualtrics surveys. Key responses were organized by theme: mental health, green spaces and nature, relationship-building, and physical health.

Research Question: What is the intrinsic value of urban gardening? In what ways does the intrinsic value manifest for gardeners?

Hypotheses: urban gardening has intrinsic value for gardeners. This is based on scholarly consensus on its positive mental and physical health effects on gardeners as well as community testimonies.

REFERENCES

Map the meal gap. (n.d.). Feeding America. Retrieved Apr 05, 2021, from <https://map.feedingamerica.org/county/2016/overall/pennsylvania/county/philadelphia>
 Prové, C. (2015) The role of urban agriculture in Philadelphia: A sociological analysis from a city perspective. *The Public Internet Law Center*.

RESULTS

Strong statistically significant relationships between mental and physical health and community relations. Gardeners largely agree that gardening brings positive effects in all three areas.

SUCCESSSES: Spending time in green spaces and exercising provides both mental and physical benefits; mental energy and mood improved for gardeners; physical activity levels increased as a result of gardening.

BARRIERS: No direct demographic information collected; no testimonials or long-term work; difficult to conduct case studies; limited diversity in communities reached.

Table 1. Thematic Trends in Interview Responses

	Indicator	Lessons
1	Mental Energy	Mental Health (MH)
2	Mood	MH
3	Time in nature	MH, Physical Health (PH)
4	Relations with others	Relations
5	More physical active	PH
6	More active now than pre-gardening	PH
7	Feel closer to community	Relations
8	Closer to other gardeners/household members	Relations
9	Garden as asset	Relations

DISCUSSION & CONCLUSION

- **Major Takeaways:** urban gardening is an intrinsically valuable act that brings individual benefits as well as wider pro-social and preventive healthcare possibilities beyond food insecurity mitigation.
- **Further Research Potential:** including more personal testimonies and long-term case studies in methods to evaluate if gardening has any long-lasting impacts on gardeners