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The Green Touch: Unveiling the Ecological and Emotional Worth of Indoor Domestic Urban Plants

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ABSTRACT: Houseplants have long been appreciated for their beauty and utility, from purifying the air to contributing to the beautification of urban spaces. Compared to other uses of houseplants, however, relatively little attention has been directed to how humans experience, interact with, and appreciate houseplants in the domestic environment. The present research is a sophisticated analysis of houseplant enthusiasts in Melbourne's inner-city suburbs, inquiring into the meaning of the plants at emotional, ecological, and social levels. Using qualitative approaches, there appears to be little doubt that houseplants are more than static decorations; they are in a close relationship with personal practice, with the members enjoying emotional satisfaction and attachment with nature. Members encompass a variety of reasons for keeping plants, ranging from soothing rituals of gardening to more abstract, socially aware motivation for working with the sustainability of nature. These actions represent an active participation in nature that transcends the boundaries of the home and inform how individuals think about ecology, social responsibility, and green urban planning. The research indicates that houseplants are not only appreciated for their functional purposes but for their capacity to create a sense of place and ecological consciousness. Highlighting the close human-plant connection in the context of city life, this research continues the body of work on the value plants bring to everyday life. It also invites further research to extend the dialogue between human geography and greening cities in new ways that it is possible to research the contribution of plants to More sustainable, emotionally enriched urban environments

KEYWORDS: Houseplants, Emotional attachment, Ecological consciousness, Urban greening, Sustainability, Human-plant interaction, Green urban planning, Domestic environment.

I. INTRODUCTION

Solitary confinement brought about by the COVID-19 lockdown has made it possible for urban settings to have great changes. City life, specifically, becomes highly affected when it comes to indoor space that is little. It demanded a greater need for "dose de nature" than ever before (Jiang et al., 2014). Henceforth, many urban citizens turned towards home gardening, be it in little gardens, balconies, or containers (Sunga & Advincula, 2021). Some started home food production (Mullins et al., 2021), while some pampered ornamental plants or flowers in their homes. They were perceived as a means of reconciling with nature and improving psychological well-being during confined periods (Sunga & Advincula, 2021).

The scratch emphasized the importance of nature. To many residents in those cities, who constantly undergo hearing, seeing, and techno bombardment from their habitats, several studies have reported reduced stress by natural sounds (Alvarsson et al., 2010; Chalmin-Pui et al., 2021) and gardening as an agent of healthy aging (Hawkins et al., 2013; Soga et al., 2017). Similarly, organized social innovations such as garden collectives and urban agriculture (Aubry et al., 2014) came up. Such activities show how the mushrooming propensity to integrate nature with urban life has been.



So far, the discourse mainly limited richness resilience in cities to environmental externalities of home gardening, which enhances the promotion of sustainable practices (Coisnon et al., 2019). Truly, even private gardens can play roles in ecological transitions and reducing greenhouse gas emissions (Cleveland et al., 2017). Urban residents generally lack an exposure to biodiversity and are less sensitized to sustainability practices than those in the rural scene (Coisnon et al., 2019). The paradox comes clear in the widely reported rising interest in organic food and permaculture in cities contrasted with a generally limited practice regarding sustainable gardening.

By developing environmentally friendly products and sustainability labels (Yue et al., 2016), the horticulture industry has responded. Unfortunately, these urban consumers are less likely to buy organic plants, or biodegradable containers than organic food. This study indicates how impeding the food-plant-aspect differences can be narrowed among young, urban citizens who are held to understand sustainable food but not so much gardening. Using a national survey of 1,000 young urban residents in France, plant care perceptions, food behaviours, and social interactions perceived around plants are studied.

II. METHODOLOGY

Data Collection and Sample

A quantitative methodology was adopted in the national online survey which was conducted in France. The questionnaire was prepared using Qualtrics XM survey software and was administered in March, 2020, just prior to the first lockdown due to the COVID-19. The survey was conducted by Bilendi, a web-based survey institute, and supported by UMT STRATège that deals with horticulture.

The young urban audience of 25 to 40 years is the focus of this survey as they have a very high commitment to sustainable food with very little engagement in their landscapes. Respondents were primarily selected from urban agglomerations having more than 100,000 inhabitants (with an exception for including the Paris conurbation). A control question ensured that only respondents from urban places were part of the sample and not those living in rural areas.

In total, 1,000 respondents were used with quotas for age, gender, and occupation, ensuring representativeness. Important characteristics of the sample in demographic terms are these:

Age distribution: 33.3% ages 25-30, 33.3% ages 31-35, and 33.4% ages 36-40.

Gender: 49.6% male, 50.4% female.

Housing type: 59.9% in apartments; 38.0% in houses.

Location: 53.7% in city centres, 46.3% on the periphery of large towns.

III. DATA ANALYSIS

The questionnaire included both open-ended and closed questions. Open-ended questions were meant to capture spontaneous associations with plant care. For some of these attitudes towards environmental concern and sustainable food, social network activities with plants were assessed using closed upper-above question types incorporated with Likert scales and multiple-choice items.

Analysis of open-ended response was to be undertaken using Iramuteq, textual analysis software. This tool performs descending hierarchical classification (DHC) which forms lexical classes based on word co-occurrence. This procedure works to uncover mental representations and cultural frameworks at play in the young urban citizens' minds with respect to taking care for plant-related objects.

Closed response questions were analysed using Multiple Correspondence Analysis (MCA) in the software package XLSTAT Statistics. The analysis provided a two-dimensional map for visualizing the relationships among categorical variables. The analysis was carried out on environmental concern, sustainable food practices, and attitudes toward plant care.



The following variables were included into the MCA:

Demographics: Age, gender, type of occupation, location.

1. Plant-related behaviour: Actual number of plants and the desired number of plants, gardening activities.
2. Environmental behaviours: interest in permaculture, concern for species loss, willingness to change lifestyle.
3. Profiles regarding food: "Commitment to sustainable food (e.g., flexitarian diet, organic food consumption)."
4. Sociability around plants such as social interactions, feelings of belongingness, and sharing of plants or cuttings.
5. Perception about taking care of plants in terms of task such as potting, watering, and cutting, as efforts or enjoyment.

IV. RESULTS

Lexical Analysis of Cultural Representations of Benefits/Constraints Associated with Plants. Open questions revealed spontaneous associations with the topic of plant care in urban housing. The lexical analysis of positive words yielded the following four main themes:

Psychological Impact: Words denoting "well-being", calmness, relaxation, and zen referred to the mental-health benefits of having plants at home (38.7%).

Symbolic Dimension: Describing a plant as "living", "natural", "essential", "vital", they deny or negate their importance for the human living.

Aesthetic and Hedonistic Relationship: Associative words regarding Plants: "color", "smell", "fragrance", and "beauty", where the respondents pointed out the role plants play in creating urban homes' visual and sensory appeal.

Physiological and Ecological Aspects: Pure, Fresh, and good for Breathing: The air quality in houses was excelled by Plants because it was associated with being purer, fresher, and good for breathing.

Of the negative words, three were considered:

Maintenance Barriers (43.1%): Tasks such as watering, repotting, and pruning could be seen as limitations. There was some mention of safety concerns about children and pets.

Nuisances (31.3%): Myths associated with plants that could be "home" were insects, soil, dirt, humidity, and carbon dioxide.

Space and Time Constraints: Limited space, which also goes hand in hand with a lack of time, and a "green thumb" were considered barriers to plant care.

Multiple Correspondence Analysis (MCA) of Relationships Between Environmental, Food, and Home Plant Issues. The MCA highlighted some significant relationships among environmental concern, sustainable food practices, and plant care attitudes. The most important conclusions are:

High Environmental Concern and Commitment to Sustainable Food: Respondents high in both environmental concern and sustainable food commitment (e.g., flexitarian diets, organic food intake) were much more likely to be interested in plant care activities and social interactions surrounding plants. Valuation of Plant Care: Tasks like potting, watering, and cutting form parts of the pleasures of environmentally conscious people rather than constraints.

Social Interactions: Feelings of belongingness and conviviality around plant care were very closely related to environmental awareness and sustainable food practices. Higher environmental concern and sustainable food habits of respondents translated into higher ownership of plants and desire for more.

Besides, this MCA elucidated the following to a divide of two groups:

Ecologically Motivated Gardeners: They consider plant care more as an environmental and social service aspect.

Utilitarian Gardeners: These individuals are interested in taking gardening from the viewpoint of convenience and aesthetics and show less interest in the ecology or social aspects of gardening.

V. DISCUSSION

1. Emotion in Plant Care Practices at Home

This type of study pinned down the apparent gap between environmental concern and actual ecological behaviour among urban young citizens. They recognized the psychological and aesthetic benefits of plants, but quite often, taking



care of them is perceived as a burden owing to the maintenance challenges and limited spaces. This proves that emotional and experiential connections towards nature and not mere knowledge could be key points in improving nature-relatedness.

The concept of "land senses ecology" (Zheng et al., 2020) bridged this gap by designing urban green spaces in ways that appeal to our sensory experiences (sight, sound, touch, etc.). These would help urban dwellers realize a deeper connection with nature, even within private housing courts.

2. Caring for Plants and A Social Ties

Sharing cuttings or talking about plants brought about social ties around plant care. The study noticed two types of urban gardeners:

Ecologically Motivated Gardeners: These are those whose interests in plant-care stem from its environmental and social benefits and/or concern.

Utilitarian Gardeners: These are those who are interested in convenience and aesthetics and do not care too much about the ecological or social implications of gardening activities. Community gardening initiatives or urban agriculture could leverage much social triggers for sustainable gardening practices in cities or even the greening identity of urban residents.

3. Sustainable Food Choices and Greening of Individual Urban Housing

The study affirmed that sustainability and eco-friendly habits of food consumption significantly correlate with positive attitudes towards plant care inside homes. The study found that more young urban citizens with characteristics of sustainable food consumption (such as flexitarian diet or purely organic food consumption) were likely to value caring for plants and social interactions around them. This thus implies that edible cities should promote the incorporation of food production within cities since they are likely to intensify interest in the convergence between sustainable food habits and greening private housing.

Such interventions would create local food systems and community-supported agriculture that would spur ecological identity while pushing urban dwellers to green their homes with more plants. This synergy between the behaviours surrounding food and this related to plants could lead to better urban resilience and sustainability.

V. CONCLUSION

The study offers phenomenal input connecting the custodial lives of young urban citizens with plant care in private housing. Its major summaries include:

Psychological and Aesthetic Benefits: Urban dwellers, apart from the psychological and aesthetic benefits they derive from plants, regard care of plants as cumbersome due to maintenance constraints.

Environmental Concern and Sustainable Food: People who are both environmentally concerned and practice sustainable food habits were generally found to appreciate more plant care and social interactions around plants.

Social Triggers: This includes community gardening initiatives and urban agriculture as project examples that promote this.

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