

Article

Hong Kong Citizens' Socio-Demographic Dynamics of Urban Yard Waste Facilities Siting and Legislation Preferences

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Abstract: The public opinions on yard waste (YW) facility siting and legislation reflect public needs and anticipations on the ways they perceive and deal with such urban yard waste, which aid to ascertain why and how people participate in YW treatment activities and support future urban yard waste policy development. However, such relevant and specific social survey on above issues remains limited, thereby scant attention has been given to the related socio-demographic explorations. This study focuses on the YW facility siting and legislation public opinions, and relevant associations across socio-demographic groups in Hong Kong, China. Data were obtained from 202 mostly cultured respondents randomly gleaned by online questionnaire survey. More than half of respondents did not reject to having the YW treatment facilities in their neighborhood. The statistical association between the opposing opinion toward having YW treatment facility near home and education level was rather strong. The majority of the tertiary-educated group expressed the strongest counter-opposition view towards YW facility within the community, while those with secondary education background had no comment. Nearly 62% of respondents supported the outlawing of direct dumping of YW to landfill, and the majority of them were cultured citizens. Decision makers should prudently consider the expressed needs and hopes of the socio-demographically differentiated subpopulations, and factor in their public opinions into the decision-making process for progressing local urban yard waste governance and overall environmental sustainability.

Keywords: urban yard waste; facility siting; public opinion; socio-demographic factors



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1. Introduction

1.1. Research Background

Plants connect city dwellers to naturalistic green space or urban nature around the world. Trees and vegetation also make people directly feel the improvement in their living environment. While humans enjoy the ecosystem services of having trees and green spaces, the waxes and wanes of plants indispensably and regularly produce the urban greening waste [1] or commonly called yard waste (YW), in the processes of growth and horticultural maintenance.

Yard waste (YW), also known as garden waste or green waste, typically refers to all kinds of vegetative wastes that are recoverable or bio-degradable in nature, from non-woody material or combustible for woody and lignocellulose materials, including such examples as soil-bound roots, leaves, weeds, bushes, shrubs, grass cuttings, cut flowers, hedge clippings, festive/potted plants, pruning and tree trunks commonly found in residential, commercial and institutional sources such as parks, gardens, and roadside greenery [2–6].

The global urbanization and human population expansion demand more urban green spaces and call for better landscape design with an essential mix of trees, shrubs, flowers

and grasses. As such, urban landscape maintenance unavoidably becomes a constant source of YW, including branch cutting, fallen leaves and grass clipping [1,3,7–10]. Meanwhile, trees and other forms of vegetation are commonly-recognized as the effective agents to convert carbon dioxide into oxygen through photosynthesis that can alleviate climate change. It is anticipated that there will be more urban greening and extensive tree planting in cities worldwide, thereby more YW is awaiting for global citizens to handle. YW can be ecologically converted into stable humus-like products such as mulching materials to protect soil layers, organic fertilizers and soil conditioners for replenishing soil nutrients. Existing studies reported and further envisioned that the YW biomass can offer a huge potential as a future biofuel for green and renewable energy generation [9,11]. Hence, YW research is closely intertwined with waste management policy and environmental sustainability in global and local contexts.

1.2. Public Opinion on Yard Waste Management

Public opinion, as another contextually-relevant conceptual underpinning, refers to the cumulative preferences expressed by many individual citizens and to be discovered by pollsters or researchers [12,13]. Considerable evidence supports that public opinion is an effective determinant to shape public policy and calls for policy change [14,15]. More importantly, the ordinary public are those who must pay for the cost of developing the YW policy and related measures, and will be affected by such policy and measures in the future. Hence, it relates two underpinning concepts, and justifies the gleaning of public opinion for informing YW public policy and measures in the future. In this light, the possible mobilization of public support and participation from below and relevant YW policy development from above should squarely build upon the social-scientific public opinion evidence which focuses on both citizens' need and policy effectiveness. Wang and others [16] investigated the key socio-economic factors influencing the public awareness of household solid waste recycling in urban China. Societal dimensions of household waste are fundamentally different from that of YW, as the main producers of YW varies considerably depending on the degree of urban compactness and the ownership of private and public green spaces, and so does the public opinion on the issue. Another recent study focused on the public perception on chemical recycling [17] in two countries before and after viewing a short informative video. Thus, no prior research had singled out the YW issue and investigated public opinion on its management policy.

1.3. Prior Research on Yard Waste Management

YW research carries very strong scientific and laboratory-oriented traditions in articulating waste management solutions in both developing and developed cities worldwide, but limited attention has been given specially to the YW-related social-scientific explorations. Reyes-Torres and his research team systematically traced the major lines of research inquiries and found that recent literature has been dominated by the physicochemical manipulation of feedstock quality and the identification of optimization strategies for hastening process and improving quality while composting YW [8]. Some other literatures focused on the optimal utilization of YW recycled products or by-products, such as compost as soil amendments [18,19]. Most of these scientific investigations focused on the YW treatment technology downstream, but very limited studies dedicated to the policy intervention of YW minimization upstream. Apart from composting [8,20,21], different city governments are leaving no stones unturned in the exploration of new and other feasible strategies to divert YW burdens away from environmentally unfriendly landfilling options. These alternative strategies offer strategies to turn YW to energy or resources such as wood-craft or furniture, wood chipping, bio-drying for solid recovered fuel, gasification-derived biochar, incinerations, natural degradation, mulching and anaerobic digestions for biogas, among others [1,22–28].

1.4. Current Status of Yard Waste Management in Hong Kong

Due to the unique sub-tropical monsoon climate and coastal location of Hong Kong, the arrivals of typhoons in summer unavoidably felled trees and damaged other vegetation, generating sudden and voluminous YW. In September 2018, the Super Typhoon Mangkhut uprooted over 55,000 trees and created around 8000 truckloads of YW, and almost all of them eventually became landfill input as the Hong Kong has limited waste recycling or reuse channels [29,30]. The total amount of YW being dumped into landfill in 2018 was 44,600 tonnes; the Typhoon Mangkhut-induced fallen trees and city government's collected yard waste from municipal waste collection services accounted for 20,480 tonnes (46%) and 24,120 tonnes (54%), respectively [29].

Hong Kong has long been adopting an outdated and unsustainable urban YW management approach. The city government directly dumps vegetative waste resembling "green gold" into landfills without giving recoverable waste a new lease of life. Local academics and green groups also criticized the limitations of current environmental policy to revitalize YW such as lacking YW policy and public support, ineffective YW management guideline and limited recycling channels [30,31]. The city government admitted its failure to focus on and deal effectively with YW until recently [24]. The existing YW management practice is invariably to collect and then dump YW into the landfills, with merely 1% of YW recycled locally in 2019 and 2020 [32,33]. Throughout the years 2014 to 2017, almost all (over 96%) of the YW collected by various government departments was transported to the landfills [5], while the figures for the private sector undocumented. Starting from June 2021, recycling has been conducted by one remotely located Yard Waste Recycling Centre (Y. Park) operated by the government. The recycling rate of YW is hoped to increase; however, recent figures are not available. Such unsustainable urban yard waste management practice not only occupies the limited landfill space, but also produces a greenhouse gas methane in the absence of oxygen condition that has 25 times more of the global warming potential than carbon dioxide [34]. Moreover, the inappropriate disposal of YW can result in various adverse local environmental impacts such as air, solid waste, water and soil pollutions [3,10,35–37]. These factors echo the observation that it is a wrongful waste management mindset to perceive YW as municipal solid waste, and dumped it into landfills [26]. While its recoverability trait is very often neglected by ordinary public and policy makers, YW shows a promising and huge potential to be recycled, reused and reduced through suitable waste-to-resources policy and practice if Hong Kong committed to advance into a sustainable city.

1.5. Research Objectives and Research Questions

This paper mainly utilizes the data about public opinions of existing YW treatment facilities siting and legislation preferences and respondents' socio-demographic information for subsequent analyses. Frequency statistics and average scores described the public opinion patterns on the aforesaid YW management policy aspects in Hong Kong. Then, the SPSS 25.0 computer package (IBM) was used to perform the chi-square tests for examining associations of the socio-demographic attributes with the constituent elements of YW policy. The paper then continues on to the result-discussion sections, and ends with the conclusions on the policy implications and future developable directions of Hong Kong's YW policy and practices that have enormous referential value to other cities. All questions used in this online questionnaire survey complied with relevant laws and institutional guidelines.

There is no prior research specifically pinpointing the YW policy and management measures. Moreover, public opinion on the YW policy has never been explored by researchers and governments around the world. The scientific novelty of this research is the contribution of an item-specific study for Hong Kong's environment policy and global comparative sustainability research by deliberately singling out YW from the municipal solid waste category and treating it as a focal research entity. This research also fills the gap between scientific findings and institutional policy capacity of managing YW. To these

ends, it requires an understanding of the cultural and socio-economic variables of people who will participate in and benefit from effective waste management strategies [38].

The following research questions were devised to guide the analyses:

- (1) How do Hong Kong citizens perceive on factors affecting YW facility network planning?
- (2) What is their legislative preference on YW management?
- (3) Will different subpopulation(s) perceive the issue differently? If yes, then how?

2. Methods and Data

2.1. Design of Questionnaire and Sampling Frame

An online questionnaire survey, based on existing environment and solid waste management literature, the official YW plan and the researchers' observations, as shown in Appendix A, was designed to investigate respondents' YW knowledge and their public opinions toward YW facilities siting and current performance of Hong Kong's YW policy. Governments worldwide commonly adopt YW policy which encompasses both legislative means and administrative measures to change citizens' behaviors and encourage public participations. This questionnaire follows these prevailing public policy and administration logics to set the questions. The respondents were asked to give their opinions on multiple components of YW policy such as views and considerations of YW treatment facility siting, YW legislation, and six common dimensions of administrative shortcomings in waste management policy. Three socio-demographic variables, namely gender, occupation and education level were incorporated.

Hong Kong adult residents are generally lethargic and disinterested in accepting on-street, mail and telephone surveys as they may consider such commercial or marketing surveys as irritating disturbances and social nuisance. They live in high-rise buildings with tight security restrictions by security gates and guards that make face-to-face questionnaire survey administration difficult to achieve [39,40]. To overcome these research administration constraints, this study made an online survey available to allow interested people to take part in the questionnaire survey. Subject to the limited resources and manpower, survey participation invitation to adult population were electronically disseminated via social media (Facebook and Twitter), instant messaging application (Whatsapp) and mass email list maintained by the research team. The subscribers of the Facebook page and recipients in the email list included the general public and practitioners from the arboricultural and landscape management industry. The sampling method was non-probability sampling with a mixed mode of cluster sampling and volunteer opt-in. This data collection approach facilitates respondents to complete the survey at their own pace and time, and allows the research team to effectively reach voluntary and anonymous targets for reliable data. Those who were uninterested in this research topic can leave the online survey platform at length. Hence, it may be worth applying a cautious interpretation to the dataset as the survey participants were likely to be more educated or interested in the research topic, and therefore they joined this study.

2.2. Key Demographics of Respondents

In total, 213 respondents initially took part in this online survey from March to May 2018. After removing 11 incomplete responses, 202 valid responses formed the dataset for further statistical analysis. The sample included a higher number of males (47%) than females (40.1%) (the rest unwilling to disclose their gender). A total of 80.7% of research participants obtained a university or higher degree, and only 15.4% received secondary education; this socio-demographic feature highlighted this survey captured data from more-educated subpopulation with notably high education attainments. For occupation trait, all of the following job categories were slightly over-represented. The professional, associate professionals, managers and administrators group accounted for the majority of the respondents at 19.8%, followed by the clerical support workers/service and sale workers group (19.3%), the craft and related workers/plant and machine operators and assemblers or elementary occupations (18.8%), and then students (18.3%).

Table 2. Cont.

Socio-Demographic Variable	View on Opposing the Neighborhood Yard Waste Facilities (Percent of Respondents)			Chi-Square Cramer's V
	Yes	No	No Comment	
Primary Education or Below	10.5	1.9	0	
Occupation				
Professionals, associated professionals, managers, administrators	8.8	23.4	26.3	0.266 *
Clerical support workers, service and sales workers	29.8	15.9	13.2	
Craft and related workers, plant and machine operators and assemblers, elementary occupations	15.8	21.5	15.8	
Students	19.3	20.6	10.5	
Refuse to answer	12.3	3.7	26.3	
Retired	5.3	5.6	5.3	
Skilled agricultural and fishery workers, and unclassifiable occupations	3.5	3.7	2.6	
Unemployed	3.5	2.8	0	
Housewives	1.8	2.8	0	

* $p < 0.05$.

3.3. Preference for Neighborhood-Level Yard Waste Facilities

The cultured sample in this study, meanwhile, did not possess notable psychological resistance to the YW treatment facilities near home, while it had been initially anticipated that the surveyed participants may not welcome having YW treatment facilities such as the composting bins, chippers, wood shredders or grinders adjacent to their doorsteps, because of the associated negative and direct concerns such as noise, odor and other air pollution [28,45]. The result suggests that the sampled respondents, probably considering the naturalistic and bio-degradable natures of YW, did not have strong risk perception over YW recycling. Such emissions and impacts could be administratively minimized by careful selection of YW treatment machines and installations [28]. It also indicated that the members of the public appreciated the new idea and possibility of treating YW as a resource or renewable feedstock at a convenient location. In addition, they may well recognize the urgent municipal waste challenge to alleviate the landfill pressure through establishing a multi-nodal and decentralized YW processing network in different communities. For example, in Aarhus, Denmark, the municipality not only centralized YW to a composting facility in remote location, but also has a parallel promotion of home composting in private gardens to enable locals to utilize compost and for reducing waste-transfer transport cost and increasing the municipal YW management capacity [22]. Similarly, the city government in Ghana, West Africa, developed district-based management units and benefited people with the successful recycling of YW through the waste-based urban cultivation; these benefits included the landfill burden reduction, reducing disposal cost, and minimization of waste collection resources [46].

3.4. Socio-Demographic Relationships of Neighborhood-Based Yard Waste Treatment Facilities

Among the three socio-demographic attributes, two factors, namely education and occupation, excluding gender, had statistical associations with the neighborhood location of YW treatment facilities (Table 2). The statistical association between the opposing opinion toward having YW treatment facility near home and education level was rather strong ($p = 0.036$). Indeed, 84.1% of tertiary-educated group expressed the strongest counter-opposition view towards YW facility within the community, while 21.1% of those with secondary education background had no comment. Only 1.9% of the primary-educated or below group said "no" to oppose the YW treatment facility near home. It was found that the more literate or educated population see the need of these facilities as a public good or

“perceived need”, and shaped their perception, and tend to accept a YW facility near home. This contrast was particularly evident when the primary education or below group was compared with the other two higher education groups. Statistically significant dependency was found between occupation and the opposing view towards a neighborhood-based YW processing facility with a mixed effect. In addition, the objection to develop a YW facility within the community tended to be gender neutral.

3.5. Preference for Neighborhood-Level Yard Waste Facilities by Socio-Demographic Variables

Education and occupation are associated with the choice of de-centralizing YW treatment facilities to various communities (Table 2). Similar findings can be obtained in cognate studies [47–49]. Generally, formal education can foster social responsibility, improve waste classification awareness and enhance the willingness of public to participate in domestic waste management [44]. In particular, high-educated respondents are more likely to hold themselves accountable to proper waste management than the low-educated counterparts [49,50]. Having convenient and accessible bio-degradable waste treatment installations in the community can encourage yard waste producers, such as housing estates, schools, etc., to undertake municipal waste separation. Education is an enabling catalyst for creating facilitative condition to practice YW recycling and reuse in everyday life. To foster a YW recycling atmosphere and pro-environment culture, city government should utilize the mass media to increase the public awareness about the siting of waste infrastructure [41], followed by deploying additional public education resources to specifically target those lower education subpopulation groups to motivate them to practice neighborhood-based YW recycling and reuse.

3.6. Legislative Preferences of Yard Waste Treatment

Generally, most Hong Kong citizens preferred adopting legal means to outlaw direct dumping of YW to landfill (Table 3). Most of the respondents supported the legislation for treating YW (61.9%), followed by another 22.8% of them having an indecisive comment. Only the smallest percentage of respondents (15.3%) were against the YW legislation.

Table 3. Respondents’ view on the support of legislation for treating yard waste in Hong Kong by socio-demographic attributes.

Socio-Demographic Variable	View on the Support of Yard Waste Treatment Legislation (Percent of Respondents)			
	Yes	No	No Comment	Chi-Square Cramer’s V
All respondents	61.9	15.3	22.8	
Gender				
M	42.4	51.6	56.5	0.144
F	48	29	28.3	
Undisclosed	9.6	19.4	15.2	
Education				
Tertiary Education or Above	81.6	71	84.8	0.103
Secondary Education	13.6	22.6	15.2	
Primary Education or Below	4.8	6.5	0	
Occupation				
Professionals, associated professionals, managers, administrators	24.8	16.1	8.7	0.291 **
Clerical support workers, service and sale workers craft and related workers, plant and machine operators and assemblers, elementary occupations	21.6	16.1	15.2	
Students	16	12.9	28.3	
Refuse to answer	4.8	12.9	23.9	
Retired	7.2	3.2	2.2	

Table 3. Cont.

Socio-Demographic Variable	View on the Support of Yard Waste Treatment Legislation (Percent of Respondents)			Chi-Square Cramer's V
	Yes	No	No Comment	
		%		
Skilled agricultural and fishery workers, and unclassifiable occupations	3.2	0	6.5	
Unemployed	2.4	6.5	0	
Housewives	3.2	0	0	

** $p < 0.01$.

Legislation is considered as an effective way to give YW a new lease of life through the sustainable recycling and reuse approach, thereby diverting away the disposal pressure of landfill. It requires a popular mandate to turn legislative ideas into effective enforcement of law to trigger pro-environment behaviors. The expressed educated wish reflects their constructive intention to try for a new and timely formulation of statutory YW management provisions for building a sustainable future. Hong Kong's YW policy has been lagging behind the global waste governance paces. In Europe, the legislative measures have been adopted by all countries in the European Union to turn YW into resources by mainly composting for alleviating the landfill pressure and improving sustainable waste management strategy [21]. As another example, in California, among other states with similar legislation in the United States, it has been an effective mandatory requirement for people to recycle YW since 1990, and has already reduced at least 25% of the solid waste stream being dumped on landfill [20]. Enlightened city governments ought to ride on the clear public support signal and make reference to overseas experience to mold relevant YW legislations that can ultimately deal with the ever-increasing waste management challenge.

3.7. Socio-Demographic Associations with the Legislative Support of Yard Waste Treatment

Only occupation had a rather strong statistical association with the support of YW treatment legislation ($p < 0.01$), the other two socio-demographic factors had no statistical dependency at all (Table 3). The blue-collar respondents, encompassing the craft and related workers, and the plant and machine operators group (32.3%), and the unemployed group (6.5%), showed the strongest disagreement to legislate for the YW treatment. However, two white collar groups, namely the professionals, managers, and administrators group (24.8%), and the clerical support and service workers group (21.6%), together with those dependent population such as retirees (7.2%) and housewives (3.2%), formed the major backbone in supporting the YW treatment legislation. Most students commonly adopted a neutral view on such YW treatment legislation (28.3%).

This outcome echoed a cognate study which reported that the white collar workers in the workforce shared a stronger sense of pro-environmentalism than those inactive and low-income laborers [49]. One plausible explanation is that people with more income would have higher civic awareness and pro-environmentalism to support the institutional waste management policy than those inactive or lower wage earners, given that income relates to differential job categories. It is necessary for law and policy makers to consider YW characteristics and then factor in the climatic, cultural and socio-demographic attributes in the formulation of effective waste legislations and policies.

4. Conclusions

The current research examined the public opinions of the siting and legislation preferences for managing YW in a teeming and lush Chinese city of Hong Kong, and then analyzed the relevant socio-demographic associations. Several pilot projects on small-scale onsite yard waste composting in Hong Kong have proved that almost no odor and pest nuisance is brought to the neighborhood [51], thus the city government can consider the

encouragement and sponsor of all private and public green spaces managers to implement onsite composting of leaves, clippings, and small branches at the source in a decentralized manner; thicker branches and tree trucks could be collected and sorted at district level, then treated or recycled as other products and by-products in several centralized locations. The public health- and environment-related concerns over the siting preferences will justify the city government to promote the clean and odorless nature of respective kinds of provision of city's YW treatment facilities network.

Regarding the opposition to having community-based YW treatment facilities, the mainstream opinion did not mind having such facilities near home. The significant associations in the opposing concerns of neighborhood-level waste treatment facilities were related to the socio-demographic factors. The more educated respondents showed weaker opposition to the emergence of YW treatment facilities within communities. Despite the mixed effect of occupation trait, this crucial socio-demographic association offers indicative evidence that ought to be taken into the decision-making considerations for strategic and effective provisions of city's waste infrastructure. Meanwhile, it aids the public environmental managers in deploying more targeted promotional and educational resources on the less educated subpopulations to proactively engage them in supporting pro-environmental facilities and recycling behaviors.

For public opinion of YW legislation, our findings reported that the YW-related legislation gained notable support from the educated and cultured people in general, and highlighted the possible and developable YW regulatory option in the near future. The statistically significant relationship for the YW legislative support was associated with one of the socio-demographic attributes. The economically active, skilled and higher wage earners held a stronger support view towards the formulation of YW laws and regulations than those less active and low-income workers. This socio-demographic linkage should be integrated into the public consultation process of YW legislation in the future, rallying for as diverse public support as possible for public policy and law makers. Public policy and law makers should regularly glean the public opinions and seriously consider the siting and legislative needs and aspirations of different groups of the population, and harness the right timing to design and roll out relevant waste management projects and laws so that the laws and administrative measures can be more socially-relevant and effectively developed.

This research could have been improved in terms of sampling frame and coverage if resources were available. This is a common limitation for internet-based and electronically disseminated questionnaire surveys, in which these users cannot be generalized as the general public. Future research should attempt to collect views from the un- or less-concerned ordinary public about future development of YW policy and management practices to obtain a full understanding of public opinions. On-street or household survey could be a useful way to reach and solicit the public input from un- or less-concerned members of the society if manpower and resources allow. Future investigations ought to incorporate the societal and technology elements to bridge the technology-policy nexus in YW management, in order to produce products meeting market needs. Future studies should also add in more socio-economic and demographic variables and adopt consistent data analysis methods for distilling comparable findings and deepening analyses for wider generalizations.

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Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Within-Faculty Mini Ethics Committee of Technological and Higher Education Institute of Hong Kong (No Approval Code available; Approval Date: 14 Feb 2018).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data can be provided on request.

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Conflicts of Interest: The authors declare no conflict of interest.

Appendix A

Table A1. The online social survey questionnaire.

Aspect	No.	Question	Answers	Related References for Setting the Question
Personal traits	A1	What is your gender?	Male; Female; Undisclosed	[41,52,53]
	A2	What is your education level?	Primary or below; Secondary; Tertiary or above	[41,52,53]
	A3	What is your present occupation?	Professionals/Associate Professionals/Managers/Administrators; Clerical support workers/Service and sales workers; Craft and related workers/Plant and machine operators and assemblers; Elementary occupations; Students; Retired; Skilled agricultural and fishery workers and occupations not classifiable, Unemployed; Family career; Refuse to answer	[41,52,53]
Knowledge	B1	Have you ever heard of the term “yard waste”?	Yes; No	[24]
	B2	What is/are the example(s) of yard waste? (Multiple selections allowed)	Grass clippings; Leaves; Branches; Tree trunks; Paper product; Cut flowers; Bushes and shrubs; Furniture; Vegetable; I don’t know	[1,2,4,6,24]
	B3	Which option is the most common yard waste treatment method in Hong Kong?	Landfill; Recycle; Reuse; Composting; Natural degradation; I don’t know	[24]
	B4	Do you know whether yard waste could be recycled?	Yes; No	[24]
	B5	Which is/are possible recyclable usage of yard waste? (Multiple selections allowed)	Compost as soil conditioner; Timber as furniture; Chipped for mulching; Training (Handcraft, chain saw, etc.); Wood material for decoration/tools; Fuel; Other (please specify)	[5,24,29,30]
Public opinion	C1	How you rate the importance of factors below for considering to accept the yard waste treatment facilities? (Individually rate each factor from 1—Least important to 5—Most important)	6 factors: Clean/odorless; Environmentally friendly; Cost effective; Quiet; Away from residential area; Convenient	[41–43,54]
	C2	Will you oppose to have the yard waste treatment facilities located in your neighborhood?	Yes; No; No comment	[55,56]

Table A1. Cont.

Aspect	No.	Question	Answers	Related References for Setting the Question
	C3	What is/are the inadequacy/inadequacies of existing Hong Kong's yard waste policy? (Multiple selections allowed)	Not enough promotion; Lack of public participation; Not enough education; Complicated administration; Lack of government support; Lack of trained professionals and frontline workers; Others (please specify)	[6,24,43,48,57–71]
	C4	Do you support the legislation for handling city's yard waste?	Yes; No; No comment	[24]

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