

RGC Ref. No.: UGC/FDS25/E02/16 <hr/> (please insert ref. above)

**RESEARCH GRANTS COUNCIL
COMPETITIVE RESEARCH FUNDING SCHEMES FOR
THE LOCAL SELF-FINANCING DEGREE SECTOR**

FACULTY DEVELOPMENT SCHEME (FDS)

Completion Report

(for completed projects only)

<p><u>Submission Deadlines:</u></p> <ol style="list-style-type: none"> 1. Auditor's report with unspent balance, if any: within <u>six</u> months of the approved project completion date. 2. Completion report: within <u>12</u> months of the approved project completion date.
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Part A: The Project and Investigator(s)

1. Project Title

How public are public spaces? The effect of management regime on public space quality

2. Investigator(s) and Academic Department(s) / Unit(s) Involved

Research Team	Name / Post	Unit / Department / Institution
Principal Investigator	Dr. Daniel C.W. Ho / Professor	Faculty of Design & Environment / THEi
Co-Investigator(s)	Dr. Lawrence W.C. Lai / Professor	Department of Real Estate & Construction / HKU
Others		

3. Project Duration

	Original	Revised	Date of RGC / Institution Approval <i>(must be quoted)</i>
Project Start Date	1-Jan-2017	-	-
Project Completion Date	31-Dec-2018	30-Jun-2019	5-Dec-2018 (by Institution)
Duration <i>(in month)</i>	24 months	30 months	5-Dec-2018 (by Institution)
Deadline for Submission of Completion Report	31-Dec-2019	30-Jun-2020	5-Dec-2018 (by Institution)

Part B: The Final Report

5. Project Objectives

5.1 Objectives as per original application

1. To establish the context within which the public and private management of public spaces operate, including the regulating and monitoring mechanisms, maintenance routines, governance structures and investment plans.
2. To develop an evaluation framework for public space quality in Hong Kong to address whether the current governance structure is adequate in delivering the qualities of urban public spaces that fulfill the needs of the public.

5.2 Revised objectives

Date of approval from the RGC: N.A.

Reasons for the change:

- 1.
- 2.
3.

5.3 Realisation of the objectives

(Maximum 1 page; please state how and to what extent the project objectives have been achieved; give reasons for under-achievements and outline attempts to overcome problems, if any)

In order to understand the context within which the public and private management of public spaces operate, related information was collected from government websites of several related departments. In addition, emails were sent to Leisure and Cultural Services Department (LCSD) and Lands Department (LandsD) to enquire about their

interactions with other departments and confirm details in their roles in providing government-owned open space (GOS) and privately-owned open space (POS), respectively. A flowchart of the provision of GOS and POS in H.K. was established to comprehensively understand public space governance in the lifecycle process of planning, design and construction, management, and maintenance.

To fulfill the second objective, a questionnaire survey was conducted onsite in selected public spaces in Central & Western District, including 6 GOSs of parks, gardens, and playgrounds, as well as 6 POSs in commercial area and residential estates. In total, 339 questionnaires were collected by field survey from February to March 2019, 155 of which were from GOSs and the rest from POSs. Statistical methods of analysis of the variance (ANOVA), correlation, and Structural Equation Modeling (SEM) were applied to figure out how the quality attributes of public spaces, through paths and weights, influence user satisfaction, in the four dimensions of facility, environment, amenity and safety. The key performance-based exploratory factors of user satisfaction were identified for assessing the perceived quality of public space.

Further, the connections between two modes of governance (namely by edict and by contract) and the quality of space were established and compared through the lifecycle process of governance (planning, design, management, etc.) of GOS and POS, based on data obtained from the questionnaire survey. It addresses whether the current governance structure is adequate in delivering the qualities of urban public spaces that fulfill the needs of the public. Issues in current governance mechanisms were identified and policy implications to improve the quality of public open space in H.K. were suggested.

5.4 Summary of objectives addressed to date

Objectives <i>(as per 5.1/5.2 above)</i>	Addressed <i>(please tick)</i>	Percentage Achieved <i>(please estimate)</i>
1. To establish the context within which the public and private management of public spaces operate, including the regulating and monitoring mechanisms, maintenance routines, governance structures and investment plans.	√	100%
2. To develop an evaluation framework for public space quality in Hong Kong to address whether the current governance structure is adequate in delivering the qualities of urban public spaces that fulfill the needs of the public.	√	100%

6. Research Outcome

6.1 Major findings and research outcome

(Maximum 1 page; please make reference to Part C where necessary)

Based on the questionnaire survey and statistical analyses, it was found that the overall satisfaction of users was related mostly to the perceived environment followed by amenity and facility. Air quality and landscaping were the most influential variables for the perceived environment with coefficients of 0.75. The perceived performance of amenity was affected by shaded areas ($E = 0.75$) and seats ($E = 0.65$). Overall, the effect of land ownership (GOS vs. POS) was significant, but marginally only. Satisfaction with POS was lower than that with GOS. Private land ownership negatively affected the ‘Activity facility’ and ‘Amenity’ of a place. The effect of “publicness” is not strong enough to overcome other attributes such as air quality, landscaping, provision of shaded area, etc. The quality of both GOS and POS are to be improved. A journal paper titled “The effects of ‘publicness’ and quality of publicly accessible open space upon user satisfaction” (ref. *Part C*) has been published in *Environment and Planning B: Urban Analytics and City Science* to demonstrate these findings.

In Hong Kong, GOS is planned by edict and governed through inter-departments cooperation, and POS is planned by contract and governed mainly by private sectors. The relationship between the governance mechanisms and perceived quality in several dimensions of two types of public spaces in H.K. was investigated. It was found that although departmental advantages in governance contributed to the best performed places of parks and gardens, GOSs are not always better performed than POSs. POS can also show good quality, particularly in attributes that may bring positive benefits (e.g. safety, cleanness, and physically attractiveness) but did not perform well regarding social inclusiveness and fulfilling or being vital and viable. The choice of alternative modes of governance is based on the comparison of institutional operation costs and market costs under certain market conditions. However, the issue of quality is related to the extent heterogeneous demands of the public were considered and the extent public-private interests were integrated in the lifecycle process of public space governance. A journal paper titled “*Lifecycle governance by edict versus by contract for multi-dimensional quality of public space*” (ref. *Part C*) has been drafted to demonstrate these findings.

In the perspective of users’ perception on the quality of public space, it is suggested to improve the urban space provision in terms of hierarchical function, the structured distribution to differentiated users, changing behaviours in space use, the rights of underprivileged groups, and the comprehensive integration of POS and GOS to meet the diverse public demands. Strategies are recommended to promote the typology of GOS and POS for more efficient and effective land allocation in city scale, to enhance facilities, amenities and functions of public space through design and construction, and to incorporate diversified voices in governance so that peoples’ heterogeneous demands could be considered actively in place shaping.

6.2 Potential for further development of the research and the proposed course of action

(Maximum half a page)

Although the research objectives were addressed and achieved a few outcomes, limitations were identified for further development. The representativeness of the survey data, though it was justified in terms of site selection and the investigative process, should be interpreted with caution. The selection of POSs for field survey was mainly based on the number of users. Those with not enough visitors during the preliminary

observations were excluded. This means the attractiveness of the selected POSs was inherently above average, while the overall POS accessibility in the city was problematic. A deeper understanding of the overall attractiveness of POSs in Hong Kong would be helpful for elaborating the differences in POS and GOS. To improve the performance of public open space, future studies and actions should be made to enable more efficient and effective allocation of land resources in a city scale; to update the guidelines for public space's planning, design, and construction; and to incorporate diversified voices in land use decision making and in public space governance.

7. Layman's Summary

(Describe in layman's language the nature, significance and value of the research project, in no more than 200 words)

The research project establishes the context of public space governance in Hong Kong and explains the way public and private governance mechanisms operate. In the perspective of users' perception on the quality of public space, an evaluation framework for public space quality was established to demonstrate the extent the current governance structure is adequate in delivering the qualities of urban public spaces, and in which phase of the governance of public interest were neglected. The findings of this research deepen the understanding of the utilization of both GOS and POS and of the issues in current performance from the user's perspective. It helps improve the quality of public space through the lifecycle process of planning, design, and management of both types of public spaces. Strategies are recommended to promote the typology of GOS and POS for more efficient and effective land allocation in a city scale, to enhance facilities, amenities and functions of public space with up-to-date planning and design guidelines, and to incorporate diversified voices in governance so that peoples' heterogeneous demands could be considered actively in place shaping for urban sustainability as well as social wellbeing.

Part C: Research Output**8. Peer-Reviewed Journal Publication(s) Arising Directly From This Research Project**

(Please attach a copy of the publication and/or the letter of acceptance if not yet submitted in the previous progress report(s). All listed publications must acknowledge RGC's funding support by quoting the specific grant reference.)

The Latest Status of Publications				Author(s) (denote the corresponding author with an asterisk*)	Title and Journal / Book (with the volume, pages and other necessary publishing details specified)	Submitted to RGC (indicate the year ending of the relevant progress report)	Attached to this Report (Yes or No)	Acknowledged the Support of RGC (Yes or No)	Accessible from the Institutional Repository (Yes or No)
Year of Publication	Year of Acceptance (For paper accepted but not yet published)	Under Review	Under Preparation (optional)						
2020				Daniel CW Ho, Lawrence WC Lai, and Anqi Wang*	Ho, Daniel C.W., Lai, Lawrence, W.C. & Wang, A. (2020) The effects of "publicness" and quality of publicly accessible open space upon user satisfaction. <i>Environment and Planning B: Urban Analytics and City Science</i> 0(0):1-19. http://dx.doi.org/10.1177/2399808320903733 (published online on 18 Feb. 2020)	No	Yes	Yes	Yes
			1	Anqi Wang*, Daniel CW Ho, Lawrence WC Lai, and K.W. Chau	"Lifecycle governance by edict versus by contract and multi-dimensional quality of public spaces" to be submitted to <i>Cities</i>	N.A.	No	Yes	N.A.

9. Recognized International Conference(s) In Which Paper(s) Related To This Research Project Was / Were Delivered

(Please attach a copy of each conference abstract)

Month / Year / Place	Title	Conference Name	Submitted to RGC <i>(indicate the year ending of the relevant progress report)</i>	Attached to this Report <i>(Yes or No)</i>	Acknowledged the Support of RGC <i>(Yes or No)</i>	Accessible from the Institutional Repository <i>(Yes or No)</i>
2019	How does ownership affect the use of public space in Hong Kong?	2019 Regional Studies Association (RSA) Annual Conference, 5-7 June 2019, University of Santiago de Compostela, Santiago de Compostela, Spain	No	Yes	No	Yes

10. Whether Research Experience And New Knowledge Has Been Transferred / Has Contributed To Teaching And Learning

(Please elaborate)

N.A.

11. Student(s) Trained

(Please attach a copy of the title page of the thesis)

Name	Degree Registered for	Date of Registration	Date of Thesis Submission / Graduation
N.A.			

12. Other Impact

(e.g. award of patents or prizes, collaboration with other research institutions, technology transfer, teaching enhancement, etc.)

N.A.

13. Statistics on Research Outputs

	Peer-reviewed Journal Publications	Conference Papers	Scholarly Books, Monographs and Chapters	Patents Awarded	Other Research Outputs (please specify)	
No. of outputs arising directly from this research project	1	0	0	0	Type	No.
					Abstract with PowerPoint for oral presentation	1

14. Public Access Of Completion Report

(Please specify the information, if any, that cannot be provided for public access and give the reasons.)

Information that Cannot Be Provided for Public Access	Reasons
N.A.	