RGC Reference	35000316	
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# The Research Grants Council of Hong Kong Prestigious Fellowship Scheme under the Humanities and Social Sciences Panel Completion Report

(for completed projects only)

# Part A: Project and Award Holder

## 1. Project Title

Comparative Study of the Inclusiveness of the Design of Open Space Facilities for Visually Impaired Persons in Densely Populated Cities

# 2. Award Holder and Academic Department/Unit Involved

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## Part B: The Report

## 5. Workplan

- 5.1 Workplan as per original application
  - (a) Six phases of the research (duration: 12 months)

The proposed research is qualitative in nature. Comparative study will be conducted on three select case-study cities: Hong Kong, Beijing and Taipei.

Six phases of the research are planned as follows (for the details, please refer to Section 3: Realisation of Workplan):

#### Phase 1:

Background study, connection to related parties, and preparation of the research.

#### Phase 2-4:

Case study in Hong Kong, Beijing and Taipei

#### Phase 5:

Data analysis, academic writing preparation and reporting preparation (1<sup>st</sup> stage)

#### Phase 6

- Preparation of the report, academic writings and exhibition
- (b) Proposed Duration of the Fellowship (up to 12 months) 12 months

## 5.2 Revised workplan

Date of approval from the RGC: 21 December 2017

Reasons for the change:

The major change of the workplan is the duration of the project that the duration was changed from 12 months to 15 months. The submitted justifications for the change (i.e., extension of 3 months) to the RGC are as follows;

"The project is a policy related project, and it is a comparative study among three cities. For the past about 11 months, I have worked very hard (nearly overloaded) to carry out the project as the original plan. I have finished the reviews of the policies (Beijing, Hong Kong and Taipei). As stated in the proposal, the project is exploratory in nature. After 6 months of exploration, I found out that the policies among three cities are very different that it increases the amount of my work as well as time to identify the interviewees (e.g., senior government officials). On the other hand, I have met and interviewed key stakeholders (about inclusive design policies). I have also met some key researchers knowing the key issues and

changes of the policies. Conducting field work is one of the key research elements of the project. One of the major difficulties of the project is to meet the policymakers in Beijing as well as those in Taipei. The representatives of NGOs working with the visually impaired persons are also important. However, many of them are busy, including quite a lot of key persons in China needed to have meetings (with senior officials) from August to November 2017. All these have caused difficulties for me to meet them to confirm/verify some of the findings. I anticipate that I need to spend three more months to compile the data and meet the interviewees in different places. I will also need to have some additional field work to verify some of the findings. I have submitted a journal paper and two conference papers/abstracts (waiting for decisions). I am now also preparing two papers for publication. The project's financial matters are healthy as I do not need to spend too much money as the original plan. I have got additional matching fund for the research since I successfully obtained HSSPFS.

Sometimes I was also free to stay in three cities based on the invitations of the officials and representatives when I visited there. Thus, I don't need to apply for any additional fund. In short, the project is same as the original plan though I need to spend three more months to carry out the data collection and analysis."

## 5.3 Realisation of the workplan

(maximum 2 pages; please state how and to what extent the work as stated in the workplan has been achieved; give reasons for under-achievements and outline attempts to overcome problems, if any)

The work and objectives proposed in the workplan were completely achieved, though some difficulties appeared during the process of the project. Finally, the difficulties were overcome.

As indicated in the project proposal, the research was qualitative in nature. Comparative study was conducted on three select case-study cities: Hong Kong, Beijing and Taipei.

In Phase 1, background study (i.e., review) of the inclusiveness of the design of open space facilities for visually impaired persons was conducted. The focus of the review was on densely populated cities. Existing research materials and references were reviewed. The PI faced some difficulties during this phase while some of the policy documents on the Chinese mainland were not easily to be sourced and extracted though the country has a quite complete planning and implementation documentation. Moreover, sometimes, detailed information was only be accessed through direct interviews. In addition, most informants could not provide exact quantitative data for the need. And, some provided information was not updated. The PI needed to spend quite a lot of time to validate the collected data.

Visits to different institutes and organisations related to or working on the area were conducted. In this phase of research, preparation work such as connections and invitations were carried out.

In Phase 2, case study was conducted in Hong Kong. The research work and elements included (a) background study, (b) in-depth interviews, (c) field visits and design analysis, and (d) data analysis. All of the research elements and activities were same as the original plan. For the details, please refer to section of "Detailed Research Methods" in the proposal.

Briefly, the background study of the design of open space environments and facilities were conducted. Three main issues were addressed in relation to open-space environments and facilities, i.e., Policy, Implementation and Management (PIM) in densely populated cities. In-depth interviews were conducted with relevant policymakers. specifically government officials. In-depth unstructured semi-structured interviews were conducted with professional designers and landscape architects, companies that provide services for public environments and facilities, etc. The five key questions listed in the proposal were covered. In addition, in-depth interviews were conducted with different parties, organisations and individuals involved in the promotion of inclusiveness, e.g., NGOs providing services for visually impaired persons (VIP). Regarding the field visits, open spaces in/with different types, scales, natures and designs were visited. In each city of study (say, Hong Kong), a district-scale open space and a community-scale open were selected. Visually impaired persons (VIP) were invited to participate in the visits, if necessary. VIP were also invited to have interviews for clarifying the data collected in the field work.

As anticipated and presented in the proposal, this phase of work (case study) in Hong Kong was critical and significant for the need since it gave the PI experience of the research and generate preliminary findings for use in other locations under study. The preliminary results could also aid the PI to communicate with the participants (and informants) in Beijing and Taipei.

Based on the findings and experience in Phase 2, Phases 3 and 4 were carried out. In fact, sometimes the research activities in different cities were conducted concurrently due to some practical needs and also constraints. One-year duration of the study (due to the grant requirement) was very short and research work was intensive. For example, it was not easy to invite government officials to have interviews. Some of them were not willing to have in interviews and disclose some internal matters. Some of them were busy, such as those on the Chinese mainland, that they were busy in meetings, in particular during the time of national meetings for officials in Beijing. On the other hand, the organisations working for the VIP on the Chinese mainland were very helpful to give information. Academic interviewees in Taipei were very familiar with the local policy, regulations, practices and needs. Sometimes, they could provide information more than the government officials since these interviewees worked closely with VIP. Furthermore, some of other interviewees (i.e., VIP) in all three cities were not easily to be contacted since many of them had to introduced by government bodies, organizations and/or NGOs working with/for them. Field visits in Beijing and Taipei also caused some difficulties to the PI at the beginning since it was not easy to make special arrangement to visit the places with VIP.

Phases 5 and 6 were rather straight forward, though there were some unforeseeable difficulties. Due to the delay of some interviews and interviews, the PI needed to apply

for a project extension for about 3 months. This approval of extension gave better flexibility and additional time to the PI to prepare academic writings and exhibition. The availability of the exhibition venue was another major difficulty appeared at the end of the project. Finally, all these difficulties and problems were solved. The exhibition entitled "Inclusive Open Space?" was conducted from 7 to 21 May 2018. Additional exhibition fund and support by PolyU were secured. A special arrangement for the exhibition time was also obtained since the venue was busy for the project exhibitions of design graduates. The venue was a good-quality exhibition place, Foyer Gallery, Jockey Club Innovation Tower, PolyU, that it allows for public access without and charge. It was also opened all days during the exhibition duration. The exhibition was successful not only due to its possibility for the dissemination of research findings and experience, but also its another function to collect further comments and views on the topic. To promote the inclusiveness, the exhibition was also available for the VIP. Accessible exhibits and facilities were provided. For the information of the exhibition, please refer to the attached exhibition poster.

## 6. Dissemination plan

- 6.1 Dissemination plan as per original application
  - 1. An academic manuscript or report
  - 2. Journal papers
  - 3. Presentations
  - 4. An exhibition
  - 5. Teaching materials for design programmes at PolyU
- 6.2 Revised dissemination plan

Date of approval from the RGC: NA	
Reasons for the change: NA	

## 6.3 Realisation of the dissemination plan

(maximum 2 pages; please state how and to what extent the output as stated in the dissemination plan has been achieved; give reasons for under-achievements and outline attempts to overcome problems, if any)

a. As commented and advised by one of the proposal reviewers, the first planned output is too aggressive. The reviewer advised the PI to focus on the research and fine-tune the planned outputs. The PI agrees to the reviewer's comments. During and after the project completion, the PI focused on the journal preparation, presentations and exhibitions. The PI completed the current report and is now submitted to the RGC (this report). He is still working on the drafting of the manuscript which is a collection of the published papers, presentations and the exhibition display. It is expected that the manuscript will be ready for the publication in the mid of 2020 (the PI is working in a design school and thus expects

- to have a better graphical presentation of the contents). The PolyU will be the potential publisher.
- b. A journal paper was accepted for publication. The journal is a good quality journal and with good reputation in public facility management and design (see the attached copy). Two other papers were submitted to journals in the areas of public health and sustainable city planning and design. The PI is the first and corresponding author of all papers. The support of the RGC HSSPFS has been acknowledged.
  - **Siu, K. W. M.\***, Xiao, J. Y., Wong, Y. L. (2018). Policy, implementation and management of the inclusive design of open space for visually impaired persons. *Facilities*, *37*(5/6), 330-351.
  - **Siu, K. W. M.\***, & Xiao, J. X., & Wong, Y. L. (reviewing). Towards a healthy public open space for visually impaired persons: A comparative study to inform policy and practice. *Public Health*. (submitted in 6/2018)
  - Siu, K. W. M.\*, Wong, Y. L., Xiao, J. Y. (reviewing). Visually impaired persons in open spaces: Implications for inclusiveness in high-density cities. *Sustainable Cities and Society*. (submitted in 10/2018)
  - \* Corresponding author
- c. Presentations were presented in international conferences. A keynote was invited by an NGO providing inclusive service. Proceedings of the presentations were published (please see the attached publications).
  - **Siu, K. W. M.** (2018). PIM model for inclusive public design: Policy, implementation, and management. Paper presented at the Inclusive NZ 2018 Conference: Our Space (Theme: Mauri Tū, Mauri Ora creating vibrant and inclusive communities. Mac's Function Centre, Wellington Waterfront, Wellington, New Zealand, October 30-31, 2018. (Keynote, no published proceedings)
  - Siu, K. W. M., Wong, Y. L., & Xiao, J. X. (2018). Inclusive open spaces for visually impaired persons in densely populated cities. Paper presented at the Great Asian Streets Symposium (GASS 2018), Pacific Rim Community Design Network: Emerging Civic Urbanisms /Designing for Social Impact. National University of Singapore, Singapore, December 14-16, 2018. (with proceedings published by the National University of Singapore)
  - **Siu, K. W. M.**, Wong, Y. L., & Xiao, J. X. (2018). Maintaining a balance in public space: The difficulties of designers and the visually impaired in designing and using inclusive facilities. Urban Transitions 2018: Integrating Urban and Planning, Environment and Health for Healthier Urban Living. Sitges, Barcelona, Spain, November 25-27, 2018. (Poster presentation; full paper will be published in proceedings by Procedia of Elsevier)

Siu, K. W. M., Wong, Y. L., & Xiao, J. X. (2018). Reliability and failure of policy implementation of inclusive design: Case studies of open space in Beijing, Taipei, and Hong Kong. Paper presented at the 6th International Conference: Integrity-Reliability-Failure (IRF2018). Sponsored by the University of Porto, APAET, and University of Toronto. Lisbon, Portugal, July 22-26, 2018. [with proceedings published by FEUP-INEGI, Lisbon, Portugal]

Siu, K. W. M., & Xiao, J. X. (2018). Inclusive design of open space for visually impaired persons: A comparative study of Beijing and Hong Kong. Paper presented at the 9th International Conference on Applied Human Factors and Ergonomics and the Affiliated Conferences (AHFE 2018). Florida, USA, July 21-25, 2018. [with proceedings published by Springer]

- d. An exhibition of the findings and experience was conducted as follows (please see the attached exhibition poster and exhibition image):
  - Foyer Gallery, Jockey Club Innovation Tower, PolyU, Hong Kong
  - 7-21 May 2018
- e. Teaching materials for design programmes at PolyU were generated. The materials have been incorporated in the subject SD3462 Public Facilities and Street Furniture of the School of Design. The subject has been offered to all design students in different disciplines as elective subject. In 2017/2018 and 2018/2019 academic years, visually impaired persons were the key elements for the students' study and design projects.
- 7. **Other impact** (e.g. award of patents or prizes, collaboration with other research institutions, knowledge transfer, etc.)

As indicated in the Education Plan of the project proposal, the project was of particular benefit to research postgraduate (RPg) students and postdoctoral fellows. Besides several research students shared and discuss data, findings and experience with the PI, the PI also obtained additional resource to appoint a postdoctoral fellow working on a particular area related to the project (i.e., public design for VIP).

A relief teacher was supported by this project. She also gained benefit by using the materials in her teaching of a subject related to public design.

Based on the project, the PI has got more contact with the Hong Kong government officials and had more communications with the government. His work has been more informed to the senior government management. He has been invited to participate in different high-level communities for the planning of inclusive design. He has been also invited to carry out an inclusive design project related to inclusive country park design, including the service to visually impaired persons.