RGC Ref. No.: UGC/FDS14/B08/19 (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)

Submission Deadlines:	1.	Auditor's report with unspent balance, if any: within <u>six</u> months of the approved project completion date.
	2.	Completion report: within $\underline{12}$ months of the approved project completion date.

# **Part A:** The Project and Investigator(s)

#### 1. Project Title

Chinese brand name processing: The role of visual-spatial properties in

brand memory and perceptions

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

Research Team	Name / Post	Unit / Department / Institution
Principal Investigator	Dr. CHAN Fong Yee/ Associate Professor	Department of Marketing/The Hang Seng University of Hong Kong
Co-Investigator(s)	N/A	
Others	N/A	

## 3. Project Duration

	Original	Revised	<b>Date of RGC /</b> <b>Institution Approval</b> (must be quoted)
Project Start Date	01/01/2020	N/A	N/A
Project Completion Date	31/12/2021	31/12/2022	Approved by RGC on
Duration (in month)	24	36	23/5/2022
Deadline for Submission of Completion Report	31/12/2022	31/12/2023	

4.4 Please attach photo(s) of acknowledgement of RGC-funded facilities / equipment. N/A

#### Part B: The Final Report

#### 5. Project Objectives

- 5.1 Objectives as per original application
  - 1. To enhance our understanding of the psychological mechanisms underlying consumer processing of Chinese brand names.
  - 2. To map the relative distribution of non-accidental visual-spatial properties in Chinese brand names across product categories.
  - 3. To generate new insights into the roles that non-accidental visual-spatial properties, delivery modality, and cognitive capacity play in consumer brand recognition and evaluation.
  - 4. To develop and validate a theoretical framework to explain and predict the processes involved in retrieving Chinese brand-name information and forming brand association.
  - 5. To provide practical guidance to marketers and brand strategists for creating and communicating new brand names in Chinese.
- 5.2 Revised objectives

Date of approval from the RGC: N/A Reasons for the change:

#### 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 the initial stages of the project, the data collection and sharing of research results were impacted by the pandemic situation, making it challenging to collect constructive feedback at international conferences. However, despite these challenges, the PI still managed to conduct a large-scale survey study, along with a series of pre-tests, pilot studies, and experimental studies. These investigations aimed to examine the role of non-accidental visual spatial properties and the boundary conditions on the processing of Chinese brand names. It is with confidence that we declare the successful completion of the project, with all five objectives outlined in the grant proposal being achieved. A detailed analysis of how

each objective was addressed can be found below. The findings and significant results related to this research project are presented in section 6.1.

**Objective 1** seeks to enhance our understanding of the psychological mechanism underlying consumer processing of Chinese brand names. A large-scale survey study and a series of experimental studies employing various manipulations were conducted. This project serves as the pioneering endeavour to systematically examine the underlying psychological mechanisms associated with consumer perception of Chinese brand names and their visual spatial properties.

**Objective 2** aims to map the relative distribution of non-accidental visual-spatial properties in Chinese brand names across product categories. A content analysis of 15,065 newly registered Chinese brands was conducted to reveal the pattern of visual spatial properties in Chinese brand names. It was found that Chinese brand names utilized a high proportion of symmetry but a low proportion of closure, with their distributions varying significantly across product categories. The results were published in the *Journal of Global Marketing*.

**Objective 3** aims to generate new insights into the roles that non-accidental visual-spatial properties, delivery modality, and cognitive capacity play in consumer brand recognition and evaluation. A total of nine experimental studies were conducted and the roles of visual-spatial properties, delivery modality and cognitive capacity on the processing and perceptions of Chinese brand names were empirically tested on both college students and the general public.

**Objective 4** aims to develop and validate a theoretical framework to explain and predict the processes involved in retrieving Chinese brand-name information and forming brand association. The findings from the content analysis study, survey study, and experimental studies were synthesized to validate the theoretical framework and directly address the stated objective.

**Objective 5** aims to provide practical guidance to marketers and brand strategists for creating and communicating new brand names in Chinese. The hypotheses and theoretical framework were validated through multiple studies, and the conference papers and journal manuscripts provided actionable insights for practitioners. In addition, the PI actively shared some of the key findings with marketers through informal meetings and conversations. The results are useful for global corporations interested in developing a Chinese brand name in order to penetrate into the Chinese-speaking markets.

In summary, all the proposed key research activities and tasks have been successfully completed, resulting in five conference papers and at least four journal manuscripts. One manuscript has already been published in the *Journal of Global Marketing*, an international peer-reviewed journal. Another paper has been accepted for presentation at an international conference, while a third paper is currently undergoing the review process at another prestigious international conference. These two manuscripts will be further developed and submitted to top-tier peer-reviewed journals in the field. In addition, there are plans to prepare one more research paper in the coming months. The newly acquired knowledge from this project has been effectively disseminated and has made significant contributions to teaching and learning across institutions. Consequently, we consider all five objectives to be successfully achieved.

5.4 Summary of objectives addressed to date

<b>Objectives</b> (as per 5.1/5.2 above)	Addressed (please tick)	<b>Percentage Achieved</b> (please estimate)
1. To enhance our understanding of the psychological mechanisms underlying consumer processing of Chinese brand names.	~	100%
2. To map the relative distribution of non-accidental visual-spatial properties in Chinese brand names across product categories.	~	100%
3. To generate new insights into the roles that non- accidental visual-spatial properties, delivery modality, and cognitive capacity play in consumer brand recognition and evaluation.	V	100%
4. To develop and validate a theoretical framework to explain and predict the processes involved in retrieving Chinese brand-name information and forming brand association.	~	100%
5. To provide practical guidance to marketers and brand strategists for creating and communicating new brand names in Chinese.	~	100%

#### 6. Research Outcome

# 6.1 Major findings and research outcome (*Maximum 1 page; please make reference to Part C where necessary*)

To investigate the role of non-accidental visual-spatial properties in Chinese brand names, a content analysis study was first conducted on all newly registered brands in Hong Kong between September 2017 and June 2019. After excluding English brand names and duplicates, a total of 15,065 Chinese brand names were analysed to determine the relative distribution of non-accidental visual-spatial properties. This is followed by a survey study of 760 non-Chinese speaking participants to gather their perceptions of the visual spatial properties of Chinese brand names. The analysis revealed that Chinese brand names exhibited a high proportion of symmetry but a low proportion of closure and the distribution of these properties varied significantly across different product categories. The survey results further indicated that Chinese brand names possessing these visual properties elicited specific aesthetic associations and were deemed more suitable for certain product categories. These findings were shared at international conferences and published in an international peer-reviewed journal.

Based on the preliminary study, several analysed brand names were identified as potential research stimuli for the experimental studies. In addition, non-Chinese characters and fictitious Chinese brand names were created and manipulated into different experimental conditions. A series of pretests, pilot studies, and experimental studies were conducted to further examine the roles of non-accidental visual-spatial properties, delivery modality, and cognitive capacity in consumer recognition and evaluation of Chinese brand names. These experimental studies involved college students as well as the general public to validate the theoretical framework. The results revealed that processing fluency mediated the effect of non-accidental visual-spatial properties of Chinese characters on participants' recognition

and perception of Chinese brand names. Furthermore, delivery modality played a significant moderating role in the relationship between visual-spatial properties and brand memory. Specifically, visual-spatial properties enhanced brand recognition when brand names were presented instead of brand logos. The effect was further influenced when a visual cognitive task was introduced. These empirical findings make significant theoretical contributions and enhance our understanding of the unique logographic writing system. The findings also have practical implications for brand strategists seeking to create recognizable Chinese brand names and for new brands looking to use visual-spatial cues to positively influence consumers' perceptual processing and judgments.

To further examine the subsequent effects of visual-spatial properties of Chinese brand names in marketing communications, two pretests and two additional experimental studies were conducted. It was found when the aesthetic associations triggered by the visual spatial properties of Chinese brand names and the attributes highlighted in advertising copy were aligned, there was a significant increase in processing fluency and brand recognition. These findings offer useful guidance to advertisers and communication practitioners on how to create more effective advertising copy. The paper is currently undergoing review at a prestigious international conference. In addition, the knowledge gained from this project has been shared at renowned international conferences. With the feedback received, the research papers will be developed and refined for submission to top-tier journals, further contributing to the advancement of teaching and learning in the field.

6.2 Potential for further development of the research and the proposed course of action (*Maximum half a page*)

As mentioned earlier, we are planning to further develop the conference paper and delve deeper into the topics of brand naming and marketing communications. This paper will be the first to explore the congruency and the potential interaction effect between the visual-spatial properties of Chinese brand names and the design of advertising copy. The feedback received during the conference will be instrumental in shaping the manuscript to target a high-ranking peer-reviewed journal in the field of advertising and marketing.

The branding literature often calls for more comprehensive analysis of Chinese brand names. While our project primarily focused on the visual-spatial properties of Chinese brand names, the implications are likely applicable to other visual brand elements, including brand logos, packaging, advertisements, webpage designs, and app interfaces. In addition, the research can be extended to other logographic languages such as Japanese and Korean. Therefore, an exciting extension of our project would be to apply the theoretical model to explore the role of visual-spatial properties in other languages and brand contexts. This extension could generate impactful interdisciplinary knowledge and contribute to the advancement of existing theories in the field.

#### 7. Layman's Summary

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

A well-crafted brand name facilitates recall and can have a significant impact on brand evaluations, which is especially valuable for new brands. Building on research in psycholinguistics and brand management, this project adopts an interdisciplinary approach to explore the extent to which visual-spatial aesthetics of Chinese brand names influence consumers' brand memory and perceptions. A large-scale survey study and a series of pre-tests, pilot studies and experimental studies on college students and the general public were conducted to examine the effects of brand names' visual-spatial properties on consumer brand recognition and evaluation. Specifically, we investigated the roles of non-accidental visual-spatial properties, delivery modality, and cognitive capacity in processing and recognizing Chinese brand names, while also unravelling the underlying psychological mechanisms involved. The empirical results make significant theoretical contributions to the psycholinguistic and marketing literature, and they also have practical implications for brand strategists aiming to create recognizable and favourable brand names.

# Part C: Research Output

8. Peer-Reviewed Journal Publication(s) Arising <u>Directly</u> 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 correspond- ing 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)	Acknowl- edged the Support of RGC (Yes or No)	Accessible from the Institutional Repository (Yes or No)	
Year of Publica tion	Year of Acceptance (For paper accepted but not yet published)	Under Review	<b>Under</b> <b>Preparation</b> (optional)						
2023				Dr Fanny Fong-yee CHAN	A systematic analysis of non- accidental visual- spatial properties in Chinese brand names and their esthetic associations./Jou rnal of Global Marketing, 36(5), 339-355.	Yes (2022)	Yes (see Attachme nt 5 and Appendix 1)	Yes	Yes https://resear chdb hsu.edu hk/view/pub lication/2023 00133
			Article 2 (Currently under preparation, details have been removed)	Dr Fanny Fong-yee CHAN		No	Yes (see Attachme nt 6)	Yes	
			Article 3 (Currently under preparation, details have been removed)	Dr Fanny Fong-yee CHAN		No	No	Yes	
			Article 4 (Currently under preparation, details have been removed)	Dr Fanny Fong-yee CHAN		No	No	Yes	

# 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 (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)
12/2021/ HK	The Role of Visual- Spatial Properties in Chinese Brand Names Processing	Academy of International Business Asia Pacific Regional Conference	Yes (2022)	Yes (see Attachment 1)	Yes	Yes https://research db.hsu.edu hk/v iew/publication /202100195
07/2022/ Switzerla nd	The role of visual- spatial properties in Chinese brand name recognition and perception	International Conference on Management, Economics and Finance	No	Yes (see Attachment 2)	Yes	Yes https://www.dp ublication.com/ abstract-of-5th- icmef/28-1333/
11/2022/ Korea	The mediating role of processing fluency on the recognition and perception of Chinese brand names	Korean Scholars of Marketing Science International Conference	No	Yes (see Attachment 3)	Yes	Yes https://research db.hsu.edu hk/v iew/publication /202200233
12/2022/ Japan	Investigating the effectiveness of visual-spatial properties on Chinese brand name recognition	International Conference on Economics, Business and Management	No	Yes (see Attachment 4)	Yes	Yes https://research db.hsu.edu hk/v iew/publication /202300271

# **10. Whether Research Experience And New Knowledge Has Been Transferred / Has Contributed To Teaching And Learning** (*Please elaborate*)

The research findings and outputs from this project have significantly enriched teaching and learning not only within the PI's institution but also in other institutions. The PI is currently teaching a module on integrated marketing communications, where she has actively shared her research experience and the latest findings with her students during class sessions. The research outputs have been incorporated as supplementary readings for the module, providing students with valuable additional resources. In addition, the PI plans to share the research outputs with her students in a master's degree course, further expanding the reach of the project's findings. Furthermore, the PI has also disseminated the research findings to her colleagues and former colleagues in other institutions, ensuring that the project's impact extends beyond her own teaching environment. In conclusion, this research project has made a significant contribution to teaching and learning by generating new knowledge that benefits both teachers and students in more than one institution.

#### 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.)

This project has made significant contributions to enhancing teaching and learning at the University. The PI is currently teaching a module on Advertising and Integrated Marketing Communications, which has been enriched with new elements such as brand naming and product packaging. The research findings have been shared with students during class sessions and have been provided as supplementary reading materials. In addition, the PI will be teaching a master's degree level course on Strategic Brand Management, where the research findings can be shared with students. The paper titled "A systematic analysis of non-accidental visual-spatial properties in Chinese brand names and their aesthetic associations" can serve as supplementary reading material for the course.

The project also plays a crucial role in fostering a rigorous research environment within the selffinancing higher education sector. Intensive research skills training was provided to a part-time research assistant (RA) and a group of research student helpers. The RA, who previously pursued a master's degree at the Chinese University of Hong Kong, received comprehensive training in literature search, research instrument design, data analysis, and preliminary results drafting. This training has equipped her with the necessary skills to pursue a PhD degree in Chinese and Bilingual Studies at the Hong Kong Polytechnic University now and a future career in research. In addition, several students from the HSUHK were trained as coders for the content analysis study. It is believed that this training will prepare them for future roles in the marketing research professions.

	Peer- reviewed Journal Publications	Conference Papers	Scholarly Books, Monographs and Chapters	Patents Awarded	Other Rese Output (please spe	s
No. of outputs arising directly from this research project	1 (published); 3 (under preparation)	4 (published); 1 (under review)	-	0	Туре	No.

# 13. Statistics on Research Outputs

# 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
At the time being, it is advised not to disclose any information regarding the papers that are currently under review or will undergo review by various journals and conferences.	The titles of the papers currently or soon to be undergoing the double-blind peer review process have been concealed. This measure is taken to ensure fairness and maintain complete anonymity during the review process. However, we will be happy to share this information once the papers are accepted for presentation at conferences or publication in peer-reviewed journals.