

RGC Ref. No.: UGC/FDS16/B12/21 <p>(please insert ref. above)</p>
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**RESEARCH GRANTS COUNCIL  
COMPETITIVE RESEARCH FUNDING SCHEMES FOR  
THE LOCAL SELF-FINANCING DEGREE SECTOR**

**FACULTY DEVELOPMENT SCHEME (FDS)**

**Concluding Report**  
(for terminated projects only)

Report for the period ending 12 May 2023

(Date of Termination)

**Submission Deadline:** *The concluding report, auditor's report together with any unspent balance, if any, should be submitted within six months of the approved project termination date.*

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

**1. Project Title**

Examining the impact of moving meditation (Tai Chi) on relieving emotional exhaustion and physical fatigue for emotional labour in shift work

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

Research Team	Name / Post	Unit / Department / Institution
Principal Investigator	WOO Ka-shing / Associate Professor	Lee Shau Kee School of Business and Administration, Hong Kong Metropolitan University
Co-investigator(s)	BADU-BAIDEN Frank / Senior Lecturer	Lee Shau Kee School of Business and Administration, Hong Kong Metropolitan University
	LEE Wing-han Helen / Senior Lecturer	Lee Shau Kee School of Business and Administration, Hong Kong Metropolitan University
Others		

### 3. Project Duration

	<b>Original</b>	<b>Revised</b>	<b>Date of RGC / Institution Approval</b> <i>(must be quoted)</i>
Project Start Date	1 January 2022		
Original Project Completion Date	31 December 2023		
Project Termination Date	12 May 2023		
Deadline for Submission of Concluding Report	11 November 2023		

## **Part B: Report on Project Progress**

### 5. Project Objectives

#### 5.1 Objectives as per original application

1. Explore through a diary study (Study 1) possible influence of circadian preference, ambient light exposure, and social jetlag effect on the relationship of surface acting by frontline service employees, emotional exhaustion (mental) at end of shift work, fatigue (physical), and perception of work withdrawal when they are in shift work
2. Based on the results in Study 1, select those vulnerable (or at-risk) frontline service employees as participants for a controlled experiment (Study 2) to test the relative efficacy between the well-established mindfulness training and the proposed Tai Chi training for buffering against emotional exhaustion and physical fatigue of frontline service employees in shift work
3. Provide theoretical implications for future research and managerial implications to practitioners on how to buffer their frontline service employees against emotional exhaustion and physical fatigue when they are in shift work

#### 5.2 Revised objectives

Date of approval from the RGC:

Reasons for the change:

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- 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 relation to the first research objective, literature review work was completed and preliminary progress was made in identifying appropriate hardware (i.e., smartwatch) and software (i.e., for keeping diary records by research participants). Data collection plan was therefore made in January 2023. However, following the resignation of the principal investigator in February 2023, research work came to a standstill.

### 5.4 Summary of objectives addressed to date

<b>Objectives</b> <i>(as per 5.1/5.2 above)</i>	<b>Addressed</b> <i>(please tick)</i>	<b>Percentage Achieved</b> <i>(please estimate)</i>
1. Explore through a diary study (Study 1) possible influence of circadian preference, ambient light exposure, and social jetlag effect on the relationship of surface acting by frontline service employees, emotional exhaustion (mental) at end of shift work, fatigue (physical), and perception of work withdrawal when they are in shift work	√	20%
2. Based on the results in Study 1, select those vulnerable (or at-risk) frontline service employees as participants for a controlled experiment (Study 2) to test the relative efficacy between the well-established mindfulness training and the proposed Tai Chi training for buffering against emotional exhaustion and physical fatigue of frontline service employees in shift work		
3. Provide theoretical implications for future research and managerial implications to practitioners on how to buffer their frontline service employees against emotional exhaustion and physical fatigue when they are in shift work		

## 6. Research Activities

*(Please state the scope of investigation undertaken; results achieved; problems encountered; deviations from the original plan and the reasons for doing so etc.)*

### 6.1 Research activities in relation to the project objectives that were carried out up to the last Progress Report

It was the original plan (i.e., the Gantt chart showing the research activities in the project proposal) that (1) recruitment of participants and (2) data collection, analysis, and discussion for Study 1 would have been completed respectively by the third and fourth quarters of 2022. However, the tightening of COVID-19 rules and regulations during the first half of 2022 had significantly and negatively affected these research activities.

Data collection plan for Study 1 was therefore planned in January 2023.

### 6.2 Areas addressed and results expected during this reporting period *(As stated at 6.5 of the last Progress Report)*

As mentioned in Section 6.1, data collection plan for Study 1 was planned in January 2023 and would be completed in March 2023. However, following the resignation of the principal investigator in February 2023, research work came to a standstill.

### 6.3 Research activities in relation to the project objectives that were carried out during this reporting period

As mentioned in Section 4.3, research activities during this reporting period in achieving the first research objectives (stated in Section 5.4) were significantly behind the original plan, leading to a significant underspending of project funding. Underspending of project funding is evident as data collection for Study 1 was not conducted because of lackluster responses from hospitality operators and their frontline service employees following the increasing number of COVID-19 cases and stricter COVID-19 rules and regulations during the past nine months.

Given the gradual relaxation of COVID-19 rules and regulations in September 2022, we predicted that reasonable amount of project funding would be spent on (1) recruiting part-time and full-time research staff members and (2) purchasing smart devices for data collection in coming months. Liaison with hospitality operators and their frontline service employees was underway. Data collection for Studies 1 and 2 would be planned in January and April 2023 in order to achieve research objectives (1) and (2) respectively.

However, following the resignation of the principal investigator in February 2023, research work came to a standstill.

**Part C: Research Output****7. 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)
Year of Publication	Year of Acceptance (For paper accepted but not yet published)	Under Review	Under Preparation (optional)					
N/A								

**8. 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)
N/A					

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

*(Please elaborate)*

N/A

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**10. 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			

**11. Other Impact**

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

N/A

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**12. 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	N/A				Type	No.