FDS8 (Apr 2017)

RGC Ref. No.: UGC/FDS14/B04/14 (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
	2.	the approved project completion date. Completion report: within <u>12</u> months of the approved project completion date.

# Part A: The Project and Investigator(s)

#### 1. Project Title

Team cognitive diversity and creativity: The role of team learning and inclusion

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

Research Team   Name / Post		Unit / Department / Institution
Principal Investigator	Irene H S Chow/Professor	Management/ Hang Seng Management College
Co-Investigator(s)	Victor Lau/ Associate Professor	Management/ Hang Seng Management College
Others		

## 3. Project Duration

	Original	Revised	Date of RGC / Institution Approval (must be quoted)
Project Start Date	1 <sup>st</sup> Oct., 2014	1 <sup>st</sup> Oct., 2014	
Project Completion Date	30 <sup>th</sup> Sep., 2016	31 <sup>th</sup> March, 2017	22 <sup>nd</sup> July, 2016
Duration (in month)	24	30	22 <sup>nd</sup> July, 2016
Deadline for Submission of Completion Report	30 <sup>th</sup> Sep., 2016	31 <sup>st</sup> March, 2018	22 <sup>nd</sup> July, 2016

#### Part B: The Final Report

#### 5. Project Objectives

- 5.1 Objectives as per original application
  - 1. Investigate the relationship between cognitive team diversity and creative performance.
  - 2. Assess the mediating effect of team learning on the relationship between cognitive team diversity and creative performance
  - 3. Examine the boundary condition (moderating role) of inclusion on the relationship between cognitive team diversity and creative performance.
  - 4. Offer theoretical and practical contributions

## 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)

The objectives of this project are fully realised.

(1) cognitive team diversity and creative performance

When examining creative performance, team cognitive diversity seems to have fairly straightforward beneficial effects. It is generally expected that diverse group will result in better performance and creativity. The relationship between cognitive diversity and performance outcome is more complex than expected (Jiang and Zhang, 2014). This study aims to investigate the mechanisms affecting the team cognitive diversity-creativity link. Specifically, it addressed how and through what mechanisms team cognitive diversity is linked to creativity and performance

# (2) *the mediating effect of team learning on the relationship between cognitive team diversity and creative performance*

It examined the mediating roles of team learning. Members with diverse cognitive resource learn from each other through the interaction, information exchange and knowledge sharing, which in turn enhance performance and creativity. Diversity improves creativity and innovation by introducing a greater variety of perspectives among team members. The benefits of diversity are thus more likely to emerge through team learning.

# (3) *The role of inclusion on the relationship between cognitive team diversity and creative performance*

Cognitive diversity strengthens and reinforces the development of inclusion. Inclusion requires accepting the differences among people and recognising the value of those differences. In a diverse work group, individual differences are accepted and uniqueness is respected. As a result of inclusion in decision-making, members are more willing to contribute fully and effectively to better and higher quality decisions and innovation. Thus, the effect of team cognitive diversity on creativity is through inclusive decision making.

#### (4) Theoretical and practical contributions

The theoretical contributions include a theory-based analysis to explain the mechanism that links cognitive team diversity and creative performance. The uniqueness of this study is the simultaneous investigation of diversity and inclusion in decision making and how they lead to team performance and creativity. It extends the existing literature by providing a theoretical explanation and empirical investigation to enrich the understanding of the mechanisms through which cognitive team diversity is positively related to team creative performance. More explicitly, it theorises on the mechanism that underlies this link to explain how this occurs. The results from this study advance theory development by contributing to the better understanding of the mediating roles of team learning and inclusion on the relationship between cognitive team diversity and creative performance.

Practically, the results offer guidance in terms of diversity training to reduce the negative consequences associated with team diversity and practical insights that could enhance the effectiveness of diversity management in organizations by creating a diverse and inclusive workplace. Human resources professionals should be better able to identify appropriate HR strategies that stimulate an inclusive environment and help to leverage the benefits associated with higher levels of diversity.

#### 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.Investigate the relationship between cognitive team diversity and creative performance.	$\checkmark$	100%
2.Assess the mediating effect of team learning on the relationship between cognitive team diversity and creative performance	$\checkmark$	100%
3.Examine the boundary condition (moderating role) of inclusion on the relationship between cognitive team diversity and creative performance.	$\checkmark$	100%
4.Offer theoretical and practical contributions	$\checkmark$	100%

#### 6. Research Outcome

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

Results from the present study unravel that team cognitive diversity is not directly related to team creativity and performance. Team cognitive diversity is indirectly impact on team creativity and performance through team learning and inclusion in decision making. The results from this study provide an answer to the mechanism underlying the effects of cognitive diversity on creativity and performance. The empirical results supported the medicating effect of team learning and inclusion on cognitive diversity and creativity link. The results enrich our understanding of the influence of two mediating mechanisms on team effectiveness.

More importantly, team members share a belief that insights and thoughts from others are available and exchangeable to achieving better outcomes. Thus, it supports the mediating role of team learning. That is, cognitive diversity facilitates team learning which in turn leads to creativity and performance.

At the same time, inclusion in decision making activates the underlying mechanism of cognitive diversity and performance outcomes. Cognitive diversity strengthens and reinforces the development of inclusion, which in turn enhance creativity and performance.

In another multiple level study (2-1-1 model), we investigated the indirect effect of team participative decision making on employee creativity through individual perception of cognitive team diversity (cognitive) and psychological safety (affective). Results show that team participative decision making is positively associated with cognitive team diversity and psychological safety. For the mediating effecting effects, team participative decision making climate is positively related to creatively via psychological safety but not via team diversity. The results offer practical implication for managers and HR professional. They should take precaution to avoid dysfunctional impacts of team cognitive diversity from weakening the exchange, discussion, and integration of ideas and perspectives.

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

Team creativity is a more complex phenomenon than simply aggregated individual creativity. It needs to integrate the individual creativity together well through a series of team interaction. Jiang and Zhang's (2014) study of complex systems theory of team creativity suggested a hierarchy of team creativity involving status, roles, structures, and the interaction of its subsystems. This will definitely be an area for future research.

Diversity in teams offers both opportunities and threats (Dadfar and Gustavasson, 1992). Cognitive team diversity can produce positive outcomes such as novel and diverse ideas, greater creativity, and better problem solving. However, research has also indicated that workforce diversity can lead to undesirable outcomes. Diverse views can hinder coordination within teams and can also lead to open conflict and chaos if there is mistrust or a lack of respect among group members (Ancona and Caldwell, 1992; Pelled, 1996). Discomfort and detrimental conflict may lower social integration and team performance (Chua, 2013). According to previous studies of group dynamics, heterogeneity in teams can produce negative consequences and disrupt group functioning by reducing cohesiveness and increasing conflicts and misunderstanding,

which in turn lowers member satisfaction and decreases cooperation (Dougherty, 1992). Future study should also examine the dysfunctional aspect of diversity like conflict.

#### 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)

The present study examines job-related cognitive team diversity and inclusion in decision making among group members in a work organisation. The study shows that wide exposure to variety of perspectives and sharing different views may stimulate team members to generate more innovative ideas. Creativity is enhanced in diverse groups that engage in collaboration and in groups in which heterogeneous views are learned and shared. Further, creativity is facilitated in an inclusive workplace in which individual differences and belongingness are valued and respected. Empirical results from this study reveal that cognitive team diversity is not directly related to creativity. It enriched our understanding that cognitive diversity affects creativity indirectly through team learning and inclusive decision making. Diversity alone is not enough. Organization should promote inclusive environments to facilitate creativity and performance. They should fully utilize the opportunity to influence employee experience of inclusion by creating a diverse and inclusive workplace such as treating team members as unique and different as well as involving them in decision making. Organizations should also facilitate team learning by removing barriers that block employees from using the full range of their skills and competencies and fully use the variety of talents in their heterogeneous work teams.

# 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	e Latest Stat	us of Publica	itions		Title and Journal /	Submitted				
Year of Publication	Year of Acceptance (For paper accepted but not yet published)	Under Review	Under Preparation (optional)	Author(s) (denote the correspond- ing author with an asterisk*)	(denote the correspond- ing author with an	Book (with the volume, pages and other necessary publishing details specified)	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)	
2018	2017	-	-	Wong, Y. Y. Chow, I. H. S.* Lau, V. P. Gong, Y. Y.	Benefits of team participative decision making and its potential to affect individual creativity Journal of Applied Social Psychology		Yes	Yes	Yes	
2018	2018	Published online	-	Irene Hau Siu Chow*	Cognitive diversity and creativity in teams: The mediating roles of team learning and inclusion <i>Chinese</i> <i>Management</i> <i>Studies (2018)</i> <i>http://doi.org/1</i> 0.1108/CMS-0 9-2017-0262		Yes	Yes	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 July 2015 Japan	<b>Title</b> How diversity and inclusiveness affect work performance?	<b>Conference Name</b> The 4 <sup>th</sup> International Symposium on Business and Social Science	Submitted to RGC (indicate the year ending of the relevant progress report) 2015	Attached to this Report (Yes or No) Yes	Acknowledged the Support of RGC (Yes or No) Yes	Accessible from the institutional repository (Yes or No) Yes
August 2016 Perth Australia	Team cognitive diversity and creativity: The role of team learning and inclusion	Asia Academy of Management Regional Symposium	2016	Yes, conference abstract	Yes	Yes
23-24 Feb 2017 Melbourne Australia	Team cognitive diversity and creativity: The mediating roles of team learning and inclusion	Global Business and Social Science Research Conference	2018	Yes, conference abstract	Yes	Yes

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

Develop teaching materials, exercises for diversity and inclusion in organization

## 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
Miss Wong Jody Yin-yee	PhD in Management University of New South	March 2015	Sep. 2018

# 12. Other Impact

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

Conduct executive education session on "Leadership in Differences - Leverage Diversity to Drive Leadership Success" to disseminate the research findings.

# **13. 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
NA	

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

# FACULTY DEVELOPMENT SCHEME (FDS)

#### **Completion Report - Attachment**

(for completed projects only)

RGC Ref. No.:	UGC/FDS14/B04/14
Principal Investigator:	Irene Hau Siu Chow
Project Title:	Team cognitive diversity and creativity: The role of team learning and inclusion

# **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 [or conference]	Two accepted for publication	3 conference presentation	0	0	0