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What drives tacit and explicit knowledge sharing? An empirical investigation in the Hong Kong higher education sector

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SPEED 

Introduction



- Hong Kong is moving steadily towards a **knowledge-based economy**
- University is a place for academics and students to **share and learn knowledge** freely
- Higher education institutions, like other organizations, create, share, apply and manage knowledge systemically to achieve **better quality education** objectives

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Research Problem

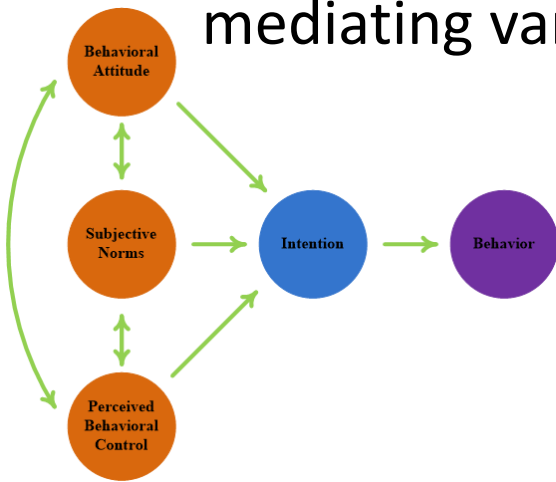
- The **willingness to share knowledge** among academics is becoming a critical management problem
- It is necessary for higher education institutions to encourage academics' willingness to share knowledge and **foster their knowledge-sharing behaviour**
- To research this, an intention-based approach is adopted to **examine the key factors** influencing academics' behaviour **to share** tacit and explicit **knowledge**

Research Questions

- What are the **factors influencing knowledge sharing behaviour** among academics in higher education institutions in Hong Kong?
- What are the **suggestions** that encourage and **foster knowledge sharing** behaviour among academics?

Theory of Planned Behaviour (TPB)

- TPB explains individuals' behaviour as behaviour which is performed when he/she intends to behave in a certain way (Fishbein and Ajzen, 1975)
- The conceptual model (Figure 1) suggest that **knowledge sharing behaviour** will be **influenced by** the role of **attitude**, subjective **norms**, perceived behavioural **control**, where **innovative climate** is taken as a moderating role and knowledge sharing behavioural intention is taken as a mediating variable



What are explicit knowledge and tacit knowledge?

- Explicit knowledge
 - explicit knowledge is technical or academic **data** or **information** that is described in formal language, like **books**, **manuals**, mathematical expressions, copyright and patents (Smith 2001)
 - explicit knowledge is knowledge that that is **transmittable in formal, systematic language**
- Tacit knowledge
 - tacit knowledge is **personal**, context specific, and therefore **hard to formalize** and communicate (Lee, 2001)
 - Polanyi (1996) also said that the only way to **learn tacit knowledge** was **through apprenticeship and experience**

The Conceptual Framework based on TPB

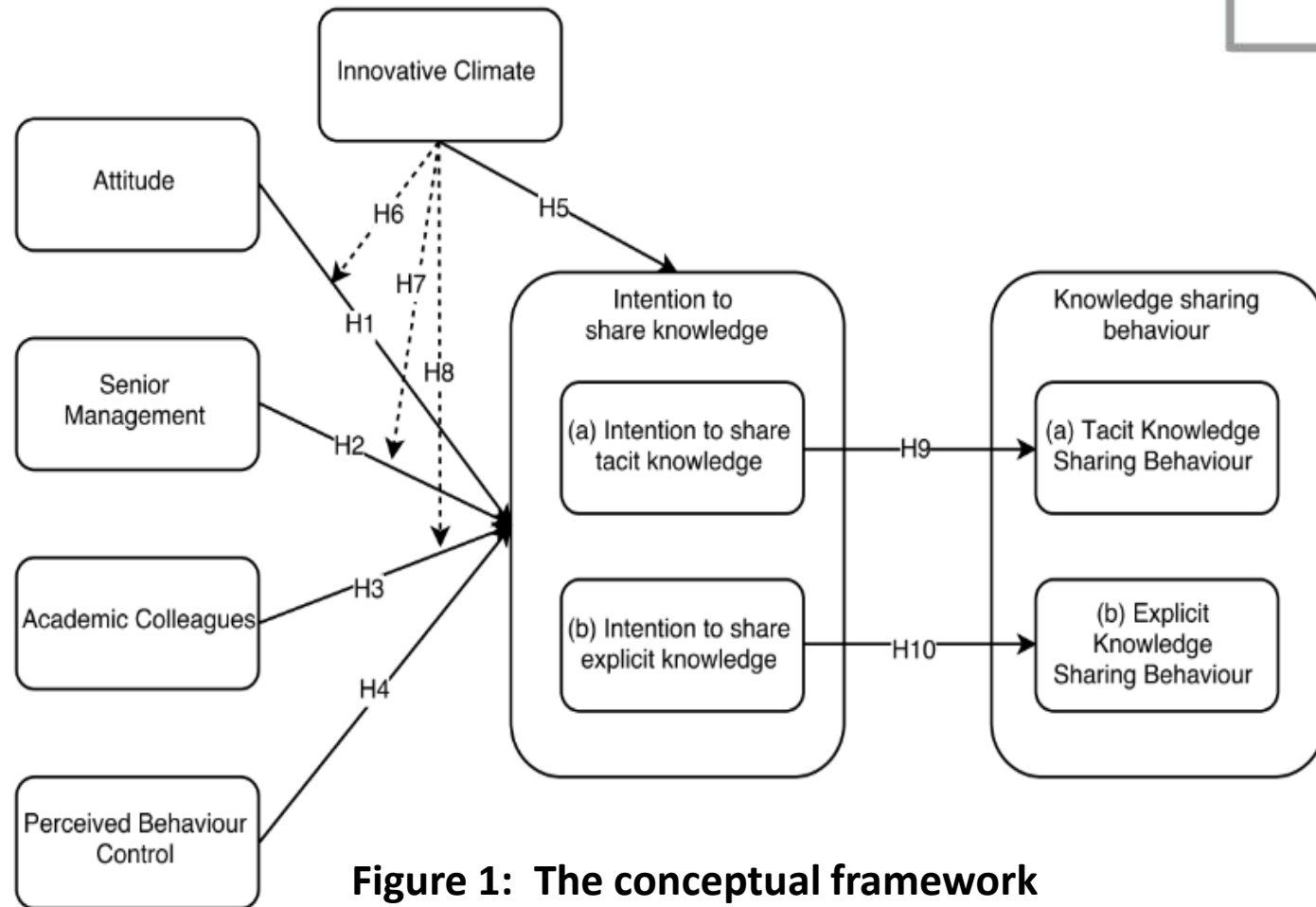
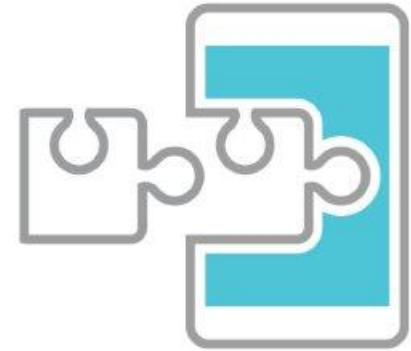


Figure 1: The conceptual framework

Source: Developed for this study

Definitions of Constructs

Constructs	Definitions	Key References
Knowledge Sharing Attitude	The degree to which academics favourably or unfavourably evaluate the encouragement of knowledge-sharing behaviour.	Ajzen, 1991; Ryu et al., 2003
Senior Management	Academics' perceived social pressure created by senior management to encourage or not encourage knowledge sharing	Ajzen, 1991; Bock et al., 2005
Peers (Academic staff)	Academics' perceived social pressure created by academic staff to encourage or not encourage knowledge sharing	Ajzen, 1991; Cheng and Vogel, 2013
Perceived Behavioural Control	Academics' perception of the ease or difficulty to encourage knowledge sharing behaviour.	Ajzen, 1991; Ryu et al., 2003
Innovate Climate	The shared perceptions of organizational members concerning the practices, procedures, and behaviours that promote the generation of new knowledge and practices	Moolenaar et al., 2010
Intention to share tacit knowledge	The degree to which one believes that one will engage in an explicit knowledge sharing act	Ajzen, 1985; Bock et al., 2005; Hau et al., 2013
Intention to share explicit knowledge	The degree to which one believes that one will engage in a tacit knowledge sharing act	Ajzen, 1985; Bock et al., 2005; Hau et al., 2013
Tacit knowledge sharing behaviour	The degree to which an academic actually shares tacit knowledge with other members.	Ajzen, 1991; Lin and Lee, 2004
Explicit knowledge sharing behaviour	The degree to which an academic actually shares explicit knowledge with other members.	Ajzen, 1991; Lin and Lee, 2014

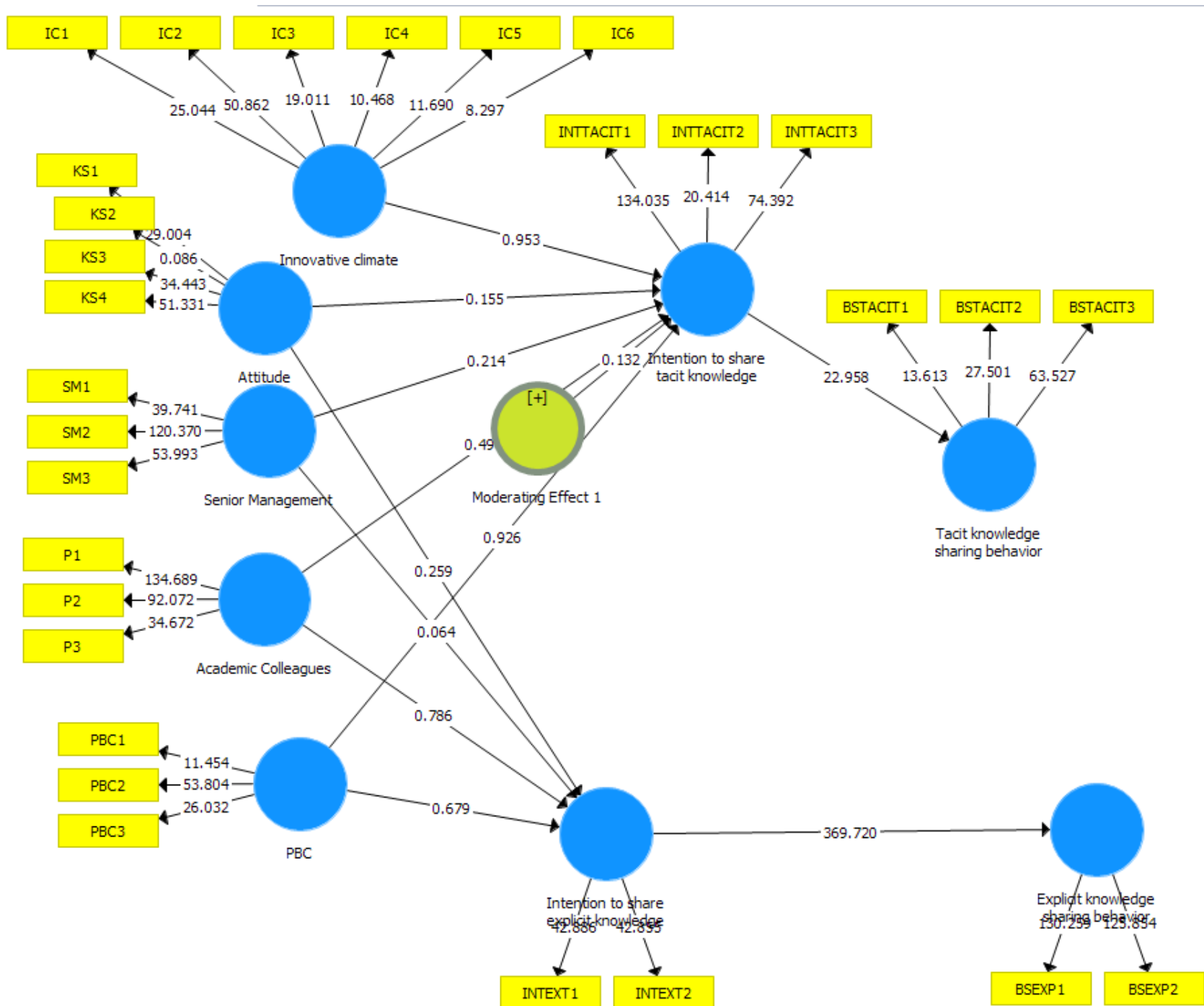
Table 1: Definitions of the Constructs

Methodology

- The population consists of full time **academic staff** at UGC-funded and self-financing institutions
- Keith (2014) argues that the minimum **sample size** for research using **Structural Equation Modeling** (SEM) should be at least **100**
- A **pilot study** was conducted between 10 April and 17 April, 2018 with **20 academics** selected from two different higher education institutions in Hong Kong

Statistical Analysis - Measurement Model

- **Structural Equation Modeling (SEM)** is used to measure latent variables and test for construct validity (Chin, 1998)
- The **measurement model** will be assessed in
- terms of **reliability**'s evaluations, convergent validity and discriminant validity of the construct measures. Reliability will be examined using Cronbach's alpha and composite reliability.
- To ensure the internal consistency, **composite reliability should be > 0.7**
- To address the convergent validity, **average variance extracted (AVE)** of each construct should be **> 0.5**



Measurement Model Analysis

Construct Reliability and Validity

Matrix	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
Academic Collea...	0.976	0.982	0.984	0.954
Attitude	0.755	0.971	0.877	0.709
Explicit knowled...	0.969	0.969	0.985	0.970
Innovative climate	0.960	0.965	0.968	0.836
Intention to sha...	0.933	0.933	0.968	0.937
Intention to sha...	0.963	0.968	0.976	0.932
Moderating Effe...	1.000	1.000	1.000	1.000
PBC	0.934	0.944	0.958	0.884
Senior Managem...	0.981	0.982	0.987	0.963
Tacit knowledge ...	0.962	0.967	0.975	0.929

Statistical Analysis - Structural Model

- The proposed hypotheses will be tested using a **bootstrap significance test** for inter-variable path using PLS.
- Followed this the collinearity assessment, structural path, **path coefficients (β)**, **t-statistics** and variance explained will be assessed (Hair et al., 2013). **R²** value for endogenous construct and goodness of fit (GoF) will be computed to assess the predictive power and validity of the structural model (Hair et al., 2013).

Research ahead

- Will **collect** about **80-100 academic staff** regarding their knowledge sharing behaviour
- Will conduct structural modelling to **test** the **hypotheses**

Hypotheses

Constructs	
Attitude	→ intention to share tacit/explicit knowledge
Senior management	→ intention to share tacit/explicit knowledge
Academic colleagues	→ intention to share tacit/explicit knowledge
Perceived behavioural control	→ intention to share tacit/explicit knowledge
Innovative climate	→ intention to share tacit/explicit knowledge → moderates the relationship between attitude and intention → moderates the relationship between senior management and intention → moderates the relationship between academic colleagues and intention
Intention to share tacit/explicit knowledge	→ Knowledge sharing behaviour

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