

Impact of Organizational Learning Culture on Instructor Innovative Behavior of Private Higher Education Institutions in Sichuan Province, China

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Abstract

the research found that: 1) The distribution of demographic characteristics of respondents, the majority of respondent were female of 62 %, their ages between 31–40 years old of 35.6%, education level graduate master's degree, of 56.8%, teaching experience: < 5 of 28.5%, and academic title associate professor, 24.7%. 2) There are various factors such as organizational learning culture, knowledge sharing that have the impact on instructor innovative behavior. 3) In this regard, this study has been designed in order to find out the impact of organizational learning culture, on instructor innovative behavior, via knowledge sharing in the mediating role that have the significant impact. Furthermore, it was found out that the mediating impact of knowledge sharing factors is significant in the relationship of all the independent and dependent variables.

Keywords: Organizational Learning Culture; Knowledge Sharing; Instructor Innovative Behavior; Higer Education

Introduction

In knowledge intensive society, to cope with rapidly shifting environments, constant and visionary innovations are best solutions (Amabile, 1988), because innovations are paramount and beneficial for any organization to obtain and keep a competitive advantage (Ghardashi et al., 2019). Educational organizations are in desperate need of innovations to gain a competitive edge over others

(Hsiao et al., 2009). Higher education institutions have to innovate because of their varied student populations, expanding knowledge fields, increasing social responsibilities and higher social expectations. Instructor innovative behavior is crucial for achieving higher education innovation, for which there are three reasons: Instructor innovative behavior is important in order to keep up to date with rapidly changing society; forthcoming new technologies and new insights about teaching require instructor innovative behavior; educational institutions need to set good examples for more and better innovative behaviors of citizens so that society can stay competitive (Thurlings et al., 2014).

Educational organizations face increasing demands for innovation due to diverse student populations, expanding knowledge fields, and societal expectations. Instructor innovative behavior is pivotal for achieving these goals. However, in Chinese higher education, challenges like insufficient resources and high workloads hinder innovation (Pan, 2014). Addressing these gaps requires a thorough understanding of how organizational learning culture and knowledge sharing foster instructor innovation. This study aims to bridge this gap by identifying critical factors and their interrelations.

Research Objectives

The purpose of the study is three main objectives are as follows:

1. To study general information of respondent.
2. To analyze factors direct effect among organizational learning culture, knowledge sharing and instructor innovative behavior.
3. To analyze the knowledge sharing pay a mediating role between organizational learning culture and instructor innovative behavior.

Research Hypothesis

Based on literature review and theoretical deduction, this study proposes 18 research hypotheses in Table 1

Table 1 Research Hypotheses Summary

Code	Illustration	Hypothesis Content
H01	CL→KP	Continuous learning positively affects knowledge provider.
H02	TL→KP	Team learning positively affects knowledge provider.
H03	SV→KP	Shared vision positively affects knowledge provider.

Code	Illustration	Hypothesis Content
H04	SL→KP	Strategic leadership for learning and its environment positively affects knowledge provider.
H05	CL→KR	Continuous learning positively affects knowledge receiver.
H06	TL→KR	Team learning positively affects knowledge receiver.
H07	SV→KR	Shared vision positively affects knowledge receiver.
H08	SL→KR	Strategic leadership for learning and its environment positively affects knowledge receiver.
H09	KP→IIB	Knowledge provider positively affects instructor innovative behavior.
H10	KR→IIB	Knowledge receiver positively affects instructor innovative behavior.
H11	CL→KP→IIB	Knowledge provider mediates the relationship between continuous learning and instructor innovative behavior.
H12	TL→KP→IIB	Knowledge provider mediates the relationship between team learning and instructor innovative behavior.
H13	SV→KP→IIB	Knowledge provider mediates the relationship between shared vision and instructor innovative behavior.
H14	SL→KP→IIB	Knowledge provider mediates the relationship between strategic leadership for learning & its environment and instructor innovative behavior.
H15	CL→KR→IIB	Knowledge receiver mediates the relationship between continuous learning and instructor innovative behavior.
H16	TL→PR→IIB	Knowledge receiver mediates the relationship between team learning and instructor innovative behavior.
H17	SV→PR→IIB	Knowledge receiver mediates the relationship between shared vision and instructor innovative behavior.
H18	SL→KR→IIB	Knowledge receiver mediates the relationship between strategic leadership for learning & its environment and instructor innovative behavior.

Theories and Literature Reviews

1. Theories

Social information processing theory and knowledge management theory are used as theoretical foundations of this study.

The association between organizational learning culture and knowledge sharing relies on the following ideas of social information processing theory: (1) Individuals can understand their work environments more accurately by processing specific social information around them, and the whole process of information processing forms their subsequent attitudes and behaviors. (2) When individuals

face complex and uncertain social environments, they rely more on the feedback information of social environments, and then adjust their subsequent attitudes and behaviors (Salancik & Pfeffer, 1978).

The connection between knowledge sharing and instructor innovative behavior depends on the following thoughts of knowledge management theory: (1) cultivate individual's awareness of knowledge exchange and knowledge sharing through publicity; (2) create work environments to promote knowledge exchange and knowledge sharing; (3) create multiple conditions to develop and use organizational knowledge resources for innovation-based knowledge creation; (4) continuously accumulate and expand organizational knowledge resources; (5) ensure the creation and transfer of organizational knowledge (Chen, 2014).

2. Literature Review

2.1 Organizational Learning Culture and Knowledge Sharing

Organizational learning culture is a set of norms and values about the functioning of an organization that support systematic, in-depth approaches, aimed at achieving higher-level strategic or generative organizational learning (Skerlavaj et al., 2006), and organizational learning culture has four major elements, namely continuous learning, team learning, shared vision and strategic leadership for learning & its environment.

2.2 Knowledge Sharing and Individual Innovative Behavior

Knowledge sharing is a two-way process, in which both sides can increase their knowledge, ability and experience (Imamoglu, 2019). Individual innovative behavior is all individual's actions directed at generating, introducing and applying beneficial novelty at any level to enhance the performance of organizations and society (Hosseini & Shirazi, 2020). Previous research has shown the impact of knowledge provider and knowledge receiver on individual innovative behavior.

Conceptual Framework

In connection with literature review and research hypotheses, the conceptual framework of this study is illustrated as follows:

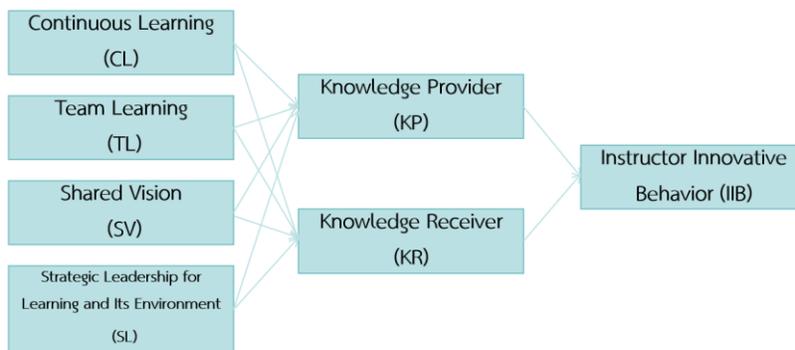


Figure 1 Conceptual Framework

Research Methodology

1) **Research Methods** This study used quantitative research, and followed the research route of literature review, theoretical deduction, proposing research hypotheses, constructing conceptual framework, data collection, statistical analysis and conclusion discussion.

2) **Instruments** To measure organizational learning culture, knowledge sharing and instructor innovative behavior, this study drew on three maturity scales.

3) **Population** The research objects of this study are private higher education instructors in Sichuan province, China, so the population of this study consists of all levels of instructors from 51 private higher education institutions in Sichuan province, China, totaling up to 35067.

4) Sample Size

The sample size is 421 respondents.

$$n_{adj} = \frac{384.16}{1 + \frac{384.16-1}{35,067}} = \frac{384.16}{1 + 0.01094} \approx 380.05$$

To ensure sufficient data, researchers often add 10%–15% to the adjusted sample size:

$$380.05 \times 1.10 \approx 418.05 \quad 380.05 \times 1.15 \approx 437.06$$

The final sample size is rounded to 421 respondents.

Research Result

1. Descriptive Statistics and Analysis

Research result of objective 1 to study general information of respondent.

To understand the concrete state of survey state, this study made an item-by-item descriptive

statistics and analysis of demographic information, which is detailed as follows: (1) gender: male, 38%, and female, 62%; (2) age: < 30, 20.7%, 31–40, 35.6%, 41–50, 25.9%, 51–60, 17.1%, and > 60, 0.7%; (3) teaching experience: < 5, 28.5%, 6–10, 24.7%, 11–15, 18.3%, 16–20, 14.7%, and > 20, 13.8%; (4) educational level: no degree, 0.7%, bachelor's degree, 13.3%, master's degree, 56.8%, and doctor's degree, 29.2%; (5) academic title: teaching assistant, 14%, lecturer, 38%, associate professor, 24.7%, and professor, 23.3%; (6) school type: undergraduate university, 40.1% and vocational college, 59.9%.

Research result of objective 2 to analyze factors direct effect among organizational learning culture, knowledge sharing and instructor innovative behavior. By Testing Path Hypothesis

1) Testing Path Hypotheses

This study used Amos 26 to conduct path analysis to test whether each path hypothesis is accepted. As shown in Table 7, the paths of CL→KP, SV→KP and CL→KR do not show significance ($p>0.05$), which means that Hypotheses 01, 03 and 05 are unaccepted. The paths of TL→KP, SL→KP, TL→KR, SV→KR, SL→KR, KP→IIB and KR→IIB presents a significance level ($p<0.01$ or $p<0.05$), which means that Hypotheses 02, 04, 06, 07, 08, 09, 10, 11, 12, 13, 14, 15, 16, 17, and 18 are accepted.

Table 2 Indicators Summary of Path Analysis

Hypothesis Relations	Standardized Path Coefficients	S.E.	z (C.R.)	p
CL→KP	.108	.054	1.820	.069
TL→KP	.217	.059	3.413	***
SV→KP	.123	.061	1.800	.072
SL→KP	.417	.059	6.646	***
CL→KR	.106	.054	1.918	.055
TL→KR	.231	.059	3.892	***
SV→KR	.164	.062	2.558	.011*
SL→KR	.393	.059	6.711	***
KP→IIB	.561	.054	9.296	***
KR→IIB	.305	.050	5.049	***

*** $P<0.001$, ** $P<0.01$, * $P<0.05$

2) Testing Mediating Effect

Research result of objective 3. To analyze the knowledge sharing pay a mediating role between organizational learning culture and instructor innovative behavior.

Table 3 Indicators Summary of Mediating Effect Testing

Test Items	Effect Size	S.E.	95% CI		p
			Lower Bound	Upper Bound	
CL→KP→IIB	.404	.051	.303	.503	.000
TL→KP→IIB	.423	.055	.315	.530	.000
SV→KP→IIB	.382	.057	.274	.499	.000
SL→KP→IIB	.388	.058	.264	.490	.000
CL→KR→IIB	.381	.049	.284	.473	.000
TL→PR→IIB	.399	.050	.297	.492	.000
SV→PR→IIB	.353	.052	.250	.456	.000
SL→KR→IIB	.341	.064	.200	.450	.000

This study used PROCESS 4.0 to test the mediating effect of knowledge provider and knowledge receiver. As shown in Table 8, in the mediating paths of CL→KP→IIB, TL→KP→IIB, SV→KP→IIB, SL→KP→IIB, CL→KR→IIB, TL→PR→IIB, SV→PR→IIB and SL→KR→IIB, the 95% upper and lower bound confidence intervals do not contain 0, indicating that the mediating effects of knowledge provider and knowledge receiver are verified. Therefore, Hypotheses 11–18 are accepted.

Discussion

The conclusions of this study have revealed: (1) Team learning and strategic leadership for learning & its environment positively affects knowledge provider and knowledge receiver, and shared vision positively affects knowledge receiver. (2) Continuous learning does not positively affect knowledge provider and knowledge receiver, and shared vision does not affect knowledge provider. (3) Knowledge provider and knowledge receiver positively affect instructor innovative behavior. (4) Knowledge provider and knowledge receiver mediate the impacts of continuous learning, team learning, shared vision and strategic leadership for learning & its environment on instructor innovative behavior.

The impacts of team learning and strategic leadership for learning & its environment on knowledge provider and knowledge receiver as well as shared vision on knowledge receiver are

accepted by this study, because team learning and strategic leadership for learning and its environment help to promote knowledge sharing, transfer, integration and application among team members, and shared vision facilitates cooperation and coordination among team members, which promotes knowledge collecting. These conclusions are the same as those of Jamil, et al. (2023), Yas et al. (2023), Zhu et al (2019), Bui et al. (2023) and Mohassel et al. (2023).

The impacts of continuous learning on knowledge provider and knowledge receiver as well as shared vision on knowledge provider are unaccepted by this study, because fierce market competition, insufficient financial support and excessive workload result in teachers' lack of time and energy for continuous learning, and low recognition of shared vision of their institutions. These conclusions are different from those of Tong (2019), Ramadhana et al. (2022) and Liu (2016).

The impacts of knowledge provider and knowledge receiver on instructor innovative behavior are accepted by this study, because knowledge provider and knowledge receiver can increase teacher's knowledge reserve, broaden teaching ideas, promote communication and cooperation, thus stimulating teacher's innovative spirit and improving teaching level and quality. These conclusions are the same as Natsir et al. (2023) and Huang et al. (2018).

The mediating effect of knowledge provider and knowledge receiver between four dimensions of organizational learning culture and instructor innovative behavior are accepted by this study, because knowledge provider and knowledge receiver can transform the ideas and values of continuous learning, team learning, shared vision and strategic leadership for learning & its environment in organizational learning culture into concrete actions and practices, thus promoting the occurrence and development of instructor innovative behavior.

Hypothesis test result

This study adopted path analysis and bootstrapping method to test the 18 hypotheses, among which 15 hypotheses are accepted and 3 hypotheses unaccepted.

Conclusion

The distribution of demographic characteristics of respondents, the majority of respondent were female of 62 %, their ages between 31–40 years old of 35.6%, education level graduate master's degree, of 56.8%, teaching experience: < 5, of 28.5%, and academic title associate professor, 24.7%.

There are various factors such as organizational learning culture, knowledge sharing that have the impact on instructor innovative behavior.

In this regard, this study has been designed in order to find out the impact of organizational learning culture, on instructor innovative behavior, via knowledge sharing in the mediating role that have the significant impact. Furthermore, it was found out that the mediating impact of knowledge sharing factors is significant in the relationship of all the independent and dependent variables.

Suggestion and Recommendation

There are many variables that affect individual innovative behavior, including individual, organizational and environmental factors. Therefore, this study provides two suggestions and recommendations for further research on instructor innovative behavior:

(1) Multi-dimensional Research on Instructor Innovative Behavior. Since there are many variables that can affect instructor innovative behavior, it is recommended to analyze instructor innovative behavior from multiple dimensions of individuals, organizations and environments.

(2) Multi-method Research on Instructor Innovative Behavior. Due to the complexity of instructor innovative behavior, it is suggested to adopt multi-method research to open the black box of instructor innovative behavior, including experimental research, case study, comparative study, psychological process research, cross discipline research and big data analysis.

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