

# SECTION II ENGLISH PROCEEDING

**ISTITUTE OF MANAGEMENT** 

### A STUDY ON EFFECTS OF EXECUTIVES' POLITICAL CONNECTION, EXECUTIVES' REPUTATION ON THE BLOCKHOLDERS RENT APPROPRIATION IN PRIVATE ENTERPRISES

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#### Abstract

From the perspective of executives' motivation of private enterprises, this paper studied the relationship between executives' political connection, reputation and blockholders rent appropriation of private enterprises in China. Through the empirical research of A-share private listed companies in Shanghai and Shenzhen from 2010 to 2015 we found that: as an informal institution, the political connection of executives in China's private enterprises can form an institutional pressure to curb the "grabbing hand" of blockholders. The reputation of executives has symbolic utility and can attract more supervises from the government, media and the public, thus conduct the corresponding inhibiting effect of political connection on the blockholders rent appropriation. This study provides empirical evidence for private enterprises by seeking that how the informal institution reduced agency costs in the transition period of China.

Keywords: Political connection, Reputation, Blockholders rent appropriation, Private enterprise

#### Introduction

After more than 60 years of development, private enterprises in China have overcome numerous institutional obstacles and become an important part of the national economy. They have shown advantages over state-owned enterprises in terms of tax proportion and profit income. In the economic transition period of China, private enterprises are deeply influenced by the institution from the very beginning, since the market mechanism and legal can not protect them very well, how to solve the institutional problems the private enterprises faced in the development period has become the focus of the theoretical research.

Allen (2005) show that, with the imperfect institution, China's private economy has supported the rapid progress of the whole country's economy, the main reason is private enterprises have found a substitute informal institution which based on the relationships. According to the resource dependence

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theory, most of the scarce financial and policy resources that enterprises depended on for survival are controlled by the government (Hillman, 2005). The private enterprises which don't have natural relationships with the government, have greater willing to obtain political capitals for avoiding environmental uncertainty and protecting enterprises security.

The establishment of political connections will bring a series of changes and influences. Whether these influences are mostly negative or positive becomes a major focus in the study of private enterprises from the perspective of informal institution. At present, the researches on the political connection of private enterprises in the literature mainly focus on its relationship with performance, which is rarely studied from the perspective of reputation. Political connection plays an important role in the establishment, dissemination and influence of the executives' reputation, and reputation mechanism has significant constraint and incentive effect on the behavior of executives. The executives 's damaged reputation may lead to his dismissal, while the high reputation will bring him more employment leverage in the manager's work for the market (Holmström, 2010), which may achieve the purpose of reducing agency costs and restraining the rent appropriation of blockholders.

This article examined the relationship between the executives' political connection, executives' reputation and blockholders rent appropriation of private enterprises on the base of resource dependence theory, incentive theory and reputation theory, analysised how did the executives' political connection of private enterprise influence blockholders rent appropriation, explored its mechanism of action and provided theoretical and empirical support for the development of private enterprises in China.

The main contribution of this article is to research the relationship between political connection, reputation and blockholders rent appropriation from the perspective of political strategy of China's private enterprises, and to answer the question of whether the informal institution can replace the formal institution and what the alternative mechanism is.

The remainder of this paper is structures as follows. Section 2 develops detailed hypotheses. Section 3 describes the data and outlines the research methods. Section 4 reports the empirical results. Section 5 presents our examination of our hypotheses and concluding the paper. Section 6 is limitation and future research.

#### Literature Review and Hypothesis Development

Many researches have shown that political connection is a valuable resource. When resources are strictly controlled by government, the cost of obtaining them through market competition is high. In this case, enterprises will actively establish relations with the government to acquire these scarce resources (Tonoyan, Strohmeyer, Habib & Perlitz, 2010). Private executives with political identity or political connection can not only have competitive advantages, enjoy preferential policies under government control and even influence government decisions, but also send a strong signal in the market, making it easier to get financial support and bank loans (Wu, Wu, Zhou & Wu, 2012; Xu, Xu, & Yuan, 2013). On the base of these advantages, private enterprises have a strong dependence on these

series of important resources provided by the government, and political connection is the collection of these important resources (Johnson & Mitton, 2003). For this reason, the private enterprises invested a huge cost to build links with the government (Faccio, 2006). Compared to the long process to establish a link with the government, the lose of it is more easy, related studies have shown that the executive will be replaced in time once his violations were uncovered, Private enterprises will make punitive decisions quickly based on the considerations of prestige, these decisions will not be affected by the political connection. Therefore, once enterprises obtain political connection, it will have a strong economic drive to maintain it, and the executives, blockholders and actual controllers will consciously restrain themselves from the rent appropriation, so it will guarantee the interests of small shareholders and creditors. Therefore, we propose the following hypothesis:

# H1: the executives' political connection of private enterprises can effectively restrain the blockholders rent appropriation

In addition to political connection, the executives' reputation with social capital attributes also have the ability of acquiring scarce resources, providing multiple convenient conditions for enterprises in the field of investment, getting information and having impact on the market (Dowling, 2006). The executives' reputation which embedded in the social network can help enterprises to obtain "credit rent" and get better credit endorsement, it's beneficial to get higher share price in the stock market and attract investment for the development of private enterprises (Murphy, Shleifer, & Vishny, 1993). The signal transmission function of reputation can also promote executives with good reputation to establish industrial relations, form corporate networks and achieve multi-faceted cooperation (Liu, 2009). For these reasons, executives tend to restrain their behavior to maintain high reputation. The high reputation can further improve the enterprise's profitability, while the successful operating record will further improve the reputation (Matsubara, Ueda, Takamido, Kawato, & Kobayashi, 2010), thus achieving a virtuous cycle of reputation and business operation. On the other hand, in the social network, the reputation will affect the executive's attitude towards risk. Executives with widely social network will pay more attention to maintain their good reputation, because the negative news will affect their career far more than those without so widely social network. Relevant researches document that if executives of private enterprises break the law and have been punished for illegal information disclosure, secret trading and so on, their reputation embedded in social network will be suffered more serious damage. Therefore, executives will avoid illegal activities based on reputation considerations. For these reasons, we propose the following hypothesis:

## H2: The executives' reputation of private enterprises can effectively restrain the blockholders rent appropriation

According to the theory of resource dependence, private enterprises that do not have a natural "blood relationship" with the government, so they need to establish the political connections at a higher cost, such as actively participating in the election of deputies to the National People's Congress or CPPCC members. The establishment of political connections is actually a process of embedding a

network of political relations. Once a private enterprise successfully established a political connection, it also means that the company is successfully embedded in the political relationship network. At this time, executives are more likely to be concerned by stakeholders such as the government, consumers, and the mass media, their information dissemination speed is faster (Yu & Lester, 2008). Therefore, the executives' political relationship network is an important factor in the formation of his reputation. On the other hand, according to the motivation theory, motivation is one's direction to behavior. Needs are arranged in order of importance to human life, from the basic to the complex. The person advances to the next level of needs only after the lower level need is at least minimally satisfied (Alderfer, 1972). The need of status and reputation is more valuable than a lower level needs such as money, and it will never be fully satisfied. Therefore, higher level need is an important incentive reason that inspires a person to move forward. Executives with political experience have higher social status and influence. Their needs are no longer just about pursuing money. In theory, they will pay more attention to self-realization and reputation. Therefore, we propose the following hypothesis:

H3: The political connection of executives in private enterprises can promote the improvement of executives' reputation

At present, the mechanism of the relationship between the executives' political connection of private enterprises and the blockholders rent appropriation is still in the black box. From the above inference, the executives in the social network of political connections are supervised by stakeholders such as government, customers and medias. The pursuit of self-value realization will enhance or maintain their reputation, and executives with high reputation will receive more attention and supervision, which will make them work harder and avoid illegal activities. If they are punished by regulators for violations of the law, their reputation will be devalued and may result in damaging to their social resources. Therefore, we propose the following hypothesis:

*H4: The reputation of executives plays a mediating role between the political connection and the blockholders rent appropriation in the private enterprises.* 

#### **Statistical Approach**

#### **1. Variable Definition**

#### **1.1 Executives' Political Connection**

Fisman (2001) used event research which studying the stock price changes of companies with different close relationships of government during the deterioration of the President of Indonesia to measure political connections at the beginning. Roberts (1990) focused on the political impact of the death of US Senator Henry Jackson which impact on the companies that provide him and his successors with campaign funding. Since China's political connections which without election donations are different from those of Western countries, referring to Chen, Li & Su (2005), this paper defined executives' political connection (PC) as a dummy variable that is equal to one if an enterprise is classified as politically connected (defined below), and is zero otherwise. An enterprise is classified as

politically connected if its chairman or general manager holds/held positions in the government, party representative, deputy to the National People's Congress or CPPCC.

#### **1.2 Blockholders Rent Appropriation**

Since the blockholders rent appropriation is relatively hidden, it cannot be measured directly, scholars usually measure it in other way. Jiang, Lee, and Yue (2010) documented that other receivables are liabilities of other companies (mainly blockholders) to the company, so other receivables are considered to be a good indicator for measuring the blockholders rent appropriation.

This paper using the parent company of a listed company, and other companies controlled by the same parent company as listed companies to take up the proportion of other receivables of the listed company in the total assets of the listed company at the end of the period (ORECTA) to measure the block-holder rent appropriation, it has been proved to be a proxy variable that can effectively measure the capital occupation of major shareholders in many studies (Jiang et al., 2010; Sun, Hu & Hillman, 2016).

#### **1.3 Reputation**

Paul & John (1993) considered that the executives' reputation is an overall perception of the stakeholders on their historical behavior and performance, it's an external signal of the perceived executives' internal quality. The individual reputation of executives is always a comprehensive evaluation of individual characteristics and historical performance, which has both subjectivity and objectivity. In this paper, Albert (1997) and Siegel (2004) method were used to measure reputation:

① From the perspective of shareholders, the profitability of a company is the key to attracting investment. The return on net assets and total assets are the important indexes for shareholders to evaluate the enterprise. Shareholders invest in the future value of the enterprise, so the sustainable growth rate is also an investor concern indicator. ② From the perspective of creditors, a good debt-paying ability is not only a reflection of the company's good assets profitability, but also a contribution to the long-term development of debt financing in the future. So the level of debt ratio, current ratio and long-term debt index is the key evaluation factors. ③ From the perspective of board of directors, the standard and perfect internal governance system is the basis of enterprise operation and development. ④ The size of the board of directors and the proportion of independent directors can reflect the internal supervision of managers' power. From the perspective of customers, more popularity of enterprise. ⑤ From the perspective of intermediary agencies or analysts, the more analysts predict corporate growth, the higher the reputation of the company. At the same time, if an enterprise chooses a well-known accounting firm for annual audit, it means that the enterprise is confident in its own financial accounting quality. ⑥ From the perspective of social responsibility, donations to society are respected

by consumers and investors. So donation is also a key factor.

This paper established the comprehensive evaluation index of the executives' reputation by the method of the principal component analysis.

#### 2. Sample construction and data collection process

This paper selected the sample data of non-financial insurance companies of a-share private listed companies in Shanghai and Shenzhen from 2010 to 2015, and obtained 6,478 samples for five years. Meanwhile, the samples were processed as follows:

① The listed company whose special treatment of ST and \*ST is removed;

2 A company whose political background is difficult to determine with incomplete disclosure is removed;

③ Companies with missing data are removed.

The information of political connections of private listed companies in China is mainly obtained through the enterprise annual report collected in the CSMAR database. In the company annual report, the "directors, supervisors, senior managers and employees" column details the resumes of the company's chairman and general manager, from which the political connection of the enterprise can be determined. Financial data is mainly downloaded from the WIND database. The data processing is mainly completed by stata14.0.

#### 3. Model Design

For H1: the executives' political connection of private enterprises can effectively restrain the blockholders rent appropriation. In the construction of this model, we considered that the blockholders rent appropriation and political connection may have endogenous problems, so we lagged all independent, moderating, and control variables by one year to further mitigate potential endogeneity. The following model is established:

ORECTA<sub>t+1</sub>= $\beta_0+\beta_1$ \* PC<sub>t</sub>+ $\beta_2$ \* Top1<sub>t</sub>+ $\beta_3$ \* HHI<sub>t</sub>+ $\beta_4$ \* Grow<sub>t</sub>+ $\beta_5$ \* Lev<sub>t</sub>+ $\beta_6$ \* ROA<sub>t</sub>+ $\beta_6$ \* Duality<sub>t</sub>+ $\beta_7$ \* Top10<sub>t</sub>+ $\beta_8$ \* Board Acc/Fin Ratio<sub>t</sub>+ $\beta_9$ \* Year<sub>t</sub> Model (1)

In this model we control the following variables:

In order to control the influence of ownership, firstly, we take the ownership of major shareholders (Top1) as the control variable and measure the shareholding of the top one shareholder. Secondly, because the listed company must disclose the top ten shareholders (Top10) with the largest number of shareholding in the annual report, the Herfindahl-Hirschman Index (HHI) is selected as the control variable, which is equal to the sum of the square of shareholding of the second to the tenth

largest shareholder, reflecting the balances of other major shareholders on the first largest shareholder.

At the corporate governance level, we first control the variable of "duality". When the CEO or the general manager and the chairman of the board are the same person, take "1", otherwise take "0". Second, set the control variable for the accounting/financial experience proportional of the board of directors (Acc/Fin Ratio) which is measured by the number of directors with accounting/financial background / total number of directors of the company.

Some control variables on the company's characteristic level should be considered, including: financial leverage (Lev) which is measured by the ratio of total liabilities to total assets; growth opportunities (Grow) which is measured by total asset growth rate; in addition, it also includes ROA and year.

For H2: The executives' reputation of private listed enterprises can effectively restrain the blockholders rent appropriation. We Establish the following model, in which the control variables and method for eliminating endogeneity problems are the same as the Model (1):

ORECTA<sub>t+1</sub>= $\beta_0+\beta_1$ \* Reputation<sub>t</sub>+ $\beta_2$ \* Top1<sub>t</sub>+ $\beta_3$ \* HHI<sub>t</sub>+ $\beta_4$ \* Grow<sub>t</sub>+ $\beta_5$ \* Lev<sub>t</sub>+ $\beta_6$ \* ROA<sub>t</sub>+ $\beta_6$ \* Duality<sub>t</sub>+ $\beta_7$ \*Top10<sub>t</sub>+ $\beta_8$ \* Board Acc/Fin Ratio<sub>t</sub>+ $\beta_9$ \* Year<sub>t</sub>

#### Model (2)

For H3: The political connection of executives in private enterprises can promote the improvement of executives' reputation, we establish the following model. Referring to the previous literatures, we select the growth opportunities, financial leverage, and ROA as control variables. To control the impact of time, add dummy variables for the year.

Reputation<sub>t</sub>= $\beta_0+\beta_1$ \* PC<sub>t</sub>+ $\beta_2$ \* Grow<sub>t</sub>+ $\beta_3$ \* Lev<sub>t</sub>+ $\beta_4$ \*ROA<sub>t</sub>+ $\beta_5$ \* Year<sub>t</sub>

#### Model (3)

For H4: The reputation of executives plays a mediating role between the political connection and the blockholders rent appropriation in the private listed enterprises. According to Baron and Kenny's (1986) step-by-step method, we first tested whether the influence of political connections on reputation in regression model (3) is Significantly, the second step is to test whether the influence of reputation on blockholders rent appropriation is significant in the regression model (2). Finally, in the regression model (4), the political connections and reputation are both entered the regression equation. If the significantly reduced, reputation exerts a partial intermediary effect. If the influence of political connections on the block-holder rent appropriation is not significant, reputation plays a full intermediary role. We established the following model, which the control variables are the same as the model (1):

ORECTA<sub>t+1</sub>= $\beta_0+\beta_1$ \* PC<sub>t</sub>+ $\beta_2$ \* Reputation<sub>t</sub>+ $\beta_3$ \* HHI<sub>t</sub>+ $\beta_4$ \* Grow<sub>t</sub>+ $\beta_5$ \* Lev<sub>t</sub>+ $\beta_6$ \* ROA<sub>t</sub>+ $\beta_6$ \*

#### Duality<sub>t</sub>+ $\beta_7$ \* Top10<sub>t</sub>+ $\beta_8$ \* Board Acc/Fin Ratio<sub>t</sub>+ $\beta_9$ \* Top1<sub>t</sub> + $\beta_{10}$ \* Year<sub>t</sub>

#### Model (4)

Before the regression analysis, the Hausman test is used to determine whether to use the random effect model or the fixed effect model. It can be seen from the Hausman test results that the p values of the four regression models are all less than 0.05, and the null hypothesis should be rejected, so that the fixed effect model is selected.

#### Results

Panel A of table 1 shows the summary for the blockholders rent appropriation variables (ORECTA). The average number of ORECTA is 0.0610909, the difference between the minimum and maximum values is large, so there is a big difference in the severity of blockholders rent appropriation variables. Panel B of table 1 shows about 45% of the sample firm-years have political connections. This proportion is higher than the 31% number reported by Goldman, Rocholl & So (2009). From the perspective of reputation indicators, the gap between enterprises is large, the minimum value is 0, and the maximum value is 9.5187. Table 2 shows that the variance inflation factors for all the variables are less than 0.7, suggesting that multicollinearity is not a concern.

Variable	Obs	Mean	Std. Dev.	Min	Max
Panel A: Depender	nt Variables	FAN I.	AIT I WA		
ORECTA	6421	0.0610909	0.5979961	8.06E-07	29.42604
Panel B: Independ	ent Variables				
PC	6478	0.4345477	0.4957357	0	1
Reputation	6478	6.393173	1.468273	0	9.5187
Panel C: Control V	/ariables				
Top1	6212	32.91263	14.2808	2.2	89.99
Top10	6212	57.80177	15.56887	4.4	95.99
HHI	6212	0.1287424	0.1104243	0.000483	0.809744
Grow	6212	0.5277058	9.806014	-0.917137	709.6703
Lev	6212	1.947558	12.74796	-6.91054	856.6073
Roa	6212	0.0570196	0.3602008	-8.462556	22.00512
Duality	6478	0.3607595	0.4802579	0	1
Acc/Fin Ratio	6212	0.0684788	0.080589	0	0.57

#### Table 1 Descriptive statistics

	ORECTA	PC	Reputation	Top1	Top10	ННІ	Grow	Lev	Roa	duality	Acc/Fin
											Ratio
ORECTA	1										
PC	-0.067***	1									
Reputation	-0.291***	0.142***	1								
Top1	-0.074***	0.029**	0.155***	1							
Top10	-0.108***	0.038***	0.236***	0.643***	1						
HHI	-0.055***	0.032**	0.138***	0.470***	0.595***	1					
Grow	0.006	0.006	-0.026*	0.034**	0.042***	0.041***	1				
Lev	-0.004	0.017	-0.009	0.003	-0.02	0.002	-0.002	1			
Roa	-0.022	-0.009	0.008	-0.003	0.012	-0.001	0.013	-0.008	1		
Duality	0.01	-0.064***	0.027*	0.047***	0.078***	0.037**	0.001	-0.016	0.002	1	
Acc/Fin Ratio	0.027*	-0.033**	-0.071***	-0.011	-0.082***	-0.004	-0.001	0.012	0.008	-0.028**	1

#### Table 2 Correlation Coefficients

We performed fixes-effects hierarchical regressions to test our hypotheses, with the results shown in Table 3.

Hypothesis 1 predicted a negative relationship between executives' political connections (PC) and blockholders rent appropriation (ORECTA). Model 1 in Table 3 demonstrates that ORECTA is negatively and significantly associated with PC (b=-0.0389, p<0.01), hence the support for Hypothesis 1.

Hypothesis 2 predicted that the negative association between Reputation and the Blockholder Rent Appropriation (ORECTA). Model 2 in Table 3 demonstrates that Reputation is negatively and significantly associated with Blockholder Rent Appropriation (ORECTA) (b=-0.0202, p<0.01), hence the support for Hypothesis 2.

Hypothesis 3 predicted that the positive association between executives' political connections (PC) and the reputation. Model 3 in Table 3 demonstrates that reputation is positively and significantly associated with executives' political connections (PC) (b=0.246, p<0.01), hence the support for Hypothesis 3.

Hypothesis 4 predicted that the reputation of executives plays a mediating role between the political connections (PC) and the blockholders rent appropriation (ORECTA) in the private listed enterprises. Model 4 in Table 3 demonstrates that the Executives' Political Connection (PC) and reputation are simultaneously substituted into the regress of the Blockholders Rent Appropriation (ORECTA). At this time, the influence of Executives' Political Connection (PC) on the ORECTA is still

significant, indicating that the reputation plays a partial intermediary role in the relationship between the political connections affecting and the blockholders rent appropriation.

	Model1	Model2	Model3	Model4
	ORECTA	ORECTA	Reputation	ORECTA
	-0.0389**		0.246***	-0.0341**
PC	(-2.15)		(-3.96)	(-1.88)
		-0.0202***		-0.0197***
Reputation		(-4.05)		(-3.92)
	-0.00155	-0.00165		-0.00156
Top1	(-0.64)	(-0.68)		(-0.64)
	-0.00127*	-0.00112**		-0.00107
Top10	(-2.29)	(-2.01)		(-1.93)
ННІ	0.148	0.185		0.172
	(-0.51)	(-0.63)		(-0.59)
	-0.000108	-0.000116	0.000325	-0.000102
Grow	(-0.41)	(-0.44) NA	GEN (-0.36)	(-0.38)
	0.0000131	0.000011	-0.000000149	0.0000131
Lev	(-0.06)	(-0.05)	(-0.00)	(-0.06)
	0.105***	0.102***	-0.175***	0.102***
ROA	(-9.45)	(-9.17)	(-4.59)	(-9.13)
	-0.0029	-0.000329		-0.00168
Duality				
	(-0.25)	(-0.03)		(-0.14)
A an/Ein Datio	0.108	0.105		0.105
Acc/Fin Ratio	(-1.62)	(-1.59)		(-1.58)
year	control	control	control	control
	0.124**	0.0991**	-0.605***	0.112**
_cons	(-2.6)	(-2.11)	(-3.70)	(-2.35)
Ν	4660	4660	4662	4660
R2 within	0.37	0.37	0.21	0.40

 Table 3 Regressions Examining the Effects of Executives' Political Connection, Reputation and Blockholders Rent Appropriation

t statistics in parentheses \*p<0.1, \*\*p<0.05, \*\*\*p<0.01

#### **Discussions and Conclusions**

#### 1. Conclusions

This paper uses the panel data of A-share private listed companies in China's Shanghai and Shenzhen stock markets to study the impact of executives' political connection on the blockholders rent appropriation through the reputation of executives. The regression results of the fixed effect model in this study showed that: ① The executives' political connection can significantly reduce the blockholders rent appropriation. ②Reputation incentives can significantly reduce the blockholders rent appropriation. ③The political relationship network has a significant role in promoting the reputation of executives. ④ Executives' reputation plays a significant intermediary role in the relationship between political connection and blockholders rent appropriation.

#### 2. Theoretical contributions

Resource dependence theory, incentive theory and reputation theory are three important perspectives to understand corporate' executives. However, in previous studies, these three perspectives are often separated, which cannot reflect the entire mechanism of how executives influence the economic consequences of a company. This article comprehensively applies the resource dependence theory, incentive theory and reputation theory, and integrates the political connect of private enterprises' executives, reputation and blockholders rent appropriation into the same theoretical model, advancing the research width of the above theories, and further validates the mechanism of these theories, making them more explanatory.

This article also for the first time studies the mechanism of the political connection of private enterprises' executives influencing blockholders rent appropriation. Incentive theory points out that political connection is an important factor influencing the blockholders rent appropriation. This article introduces reputation variables into the relationship between them, and holds that reputation plays an intermediary role between the political connection and blockholders rent appropriation, thus can better understand a certain enterprises' political connection may come about.

#### **3. Practical and Policy implications**

The aim of the managers' incentive is to solve the principal-principal agency conflicts. The scientific and effective incentive mechanism can significantly reduce the agency cost and coordinate the profits of managers and shareholders. On the base of the above conclusions, this paper draws the following policy implications:

① We need to improve the professional manager market and establish a diversified reputation evaluation system. Reputation incentives, as a hidden incentive mechanism, enable companies to significantly optimize the risk structure without additional costs. Further improve the development of

the manager's labor market and accelerate the establishment of a manager's reputation evaluation system, which will effectively reduce the cost of corporate supervision.

<sup>(2)</sup> We need to improve the market environment with a perfect external supervision. The development of market environment and high level of economic development means the company's external governance compliance with specification, and the perfect external supervision guarantees the good operation of the enterprise. These are the foundations of reputational incentive which embedded in the political network. Improving the legal system and the social credit system is necessary for reducing the agency cost of enterprises and creating a fair and objective external environment.

#### **Limitation and Future Research**

This paper measured the reputation of executives directly, and used the comprehensive valuation which consider indicators such as the individual characteristics of executives and the opinions on the management from stakeholders. Although these indicators included different reputational characteristics of executives, they still cannot fully cover the influence factors of reputation. Reputation is a comprehensive judgment of stakeholders on executives, and its quantitative indicators theoretically should cover the influence factors from all stakeholders which including other managers, corporate employees, boards of directors, shareholders, customers, suppliers, governments, social groups and industry competitors. But we can hardly make it in practice because of the inaccessibility of data. In the future research, it is necessary to summarize the important factors affecting the reputation of managers both from the theory and experience to build reliable and comprehensive quantitative indicators.

#### References

- Allen, F. (2005). Corporate Governance in Emerging Economies. *Oxford Review of Economic Policy*, 21(2), 164-177.
- Dowling, G. (2006). How Good Corporate Reputations Create Corporate Value.
- Faccio, M. (2006). Politically Connected Firms. The American Economic Review, 96(1), 369-386.
- Fisman, R. J. (2001). Estimating the Value of Political Connections. *The American Economic Review*, *91*(4), 1095-1102.
- Goldman, E., Rocholl, J. & So, J. (2009). Do Politically Connected Boards Affect Firm Value? *The Review of Financial Studies*, 22(6), 2331-2360.
- Hillman, A. J. (2005). Politicians on the Board of Directors: Do Connections Affect the Bottom Line? *Journal of Management*, 31(3), 464-481.
- Holmström, B. (2010). Managerial Incentive Problems: A Dynamic Perspective. *Review of Economic Studies*, 66(1), 169-182.
- Jiang, G., Lee, C. M. C. & Yue, H. (2010). Tunneling through intercorporate loans: The China

experience. Journal of Financial Economics, 98(1), 1-20.

- Johnson, S. & Mitton, T. (2003). Cronyism and capital controls: evidence from Malaysia. *Journal of Financial Economics*, 67(2), 351-382.
- Liu, Q. (2009). A game analysis on reputation governance mechanism of trade behaviors in industrial cluster. Paper presented at the International Conference on Management Science and Engineering.
- Matsubara, S., Ueda, T., Takamido, T., Kawato, S. & Kobayashi, T. (2010). Does Brand Management of Corporate Reputation Translate into Higher Market Value? *Journal of Strategic Marketing*, *18*(3), 201-221.
- Murphy, K. M., Shleifer, A. & Vishny, R. W. (1993). Why Is Rent-Seeking So Costly to Growth? *American Economic Review*, 83(2), 409-414.
- P. Existence Alderfer, C. (1972). Human Needs in Organizational Settings.
- Paul, H. & John, M. (1993). The relationship of reputation and credibility to brand success. *Journal of Consumer Marketing*, 10(3), 18-24.
- Roberts, B. E. (1990). A Dead Senator Tells No Lies: Seniority and the Distribution of Federal Benefits. *American Journal of Political Science*, *34*(1), 31.
- Sun, P., Hu, H. W. & Hillman, A. J. (2016). The dark side of board political capital: Enabling blockholder rent appropriation. *Academy of Management Journal*, 59(5), 1801-1822.
- Tonoyan, V., Strohmeyer, R., Habib, M. & Perlitz, M. (2010). Corruption and Entrepreneurship: How Formal and Informal Institutions Shape Small Firm Behavior in Transition and Mature Market Economies. Entrepreneurship Theory and Practice, 34(5), 803-831.
- Wu, W., Wu, C., Zhou, C. & Wu, J. (2012). Political connections, tax benefits and firm performance: Evidence from China. *Journal of Accounting and Public Policy*, *31*(3).
- Xu, N., Xu, X. & Yuan, Q. (2013). Political Connections, Financing Friction, and Corporate Investment: Evidence from Chinese Listed Family Firms. *European Financial Management*, 19(4), 675-702.
- Yu, T. & Lester, R. H. (2008). Moving Beyond Firm Boundaries: A Social Network Perspective on Reputation Spillover. *Corporate Reputation Review*, 11(1), 94-108.

### COMPETENCY MODEL AND INNOVATION SELECTION OF CHINESE UNIVERSITY STUDENT UNION CADRES

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#### Abstract

Based on the competency model, the author investigates 223 college students in F University through the questionnaire and interviews. In this paper, it constructs the competency model of cadre of student union in colleges and universities, and explores the high performance competency and core competency of cadre of student union in colleges and universities, builds the selection model of cadre of student union in colleges and universities, verifies the effectiveness of the competency model of cadre of cadre of student union in colleges and universities with case studies, and provides suggestions for the selection of cadres.

Keywords: Competency model, Student cadre, Innovation selection, Normal university

#### Introduction

In daily management of students in colleges and universities, student cadres are the ties between students and Party and organizations of the Youth League at all levels, the secondary schools and the departments of student management. And they can help the various departments manage the various works of students. The service ability of the student cadres will have direct impact on the implementation of various tasks, which requires that we must have a strict selection system of student cadres, and dig out high-quality student cadres. In the past, the selection methods of student cadres were both subjective and arbitrary. There was no unified standard of scientific selection and evaluation. In the process of selection, it also had the unfairness. The evaluation of student cadres was not clear enough. Based on this, the construction of the competency model of student cadres can not only measure the different characteristics of student union cadres, but also identify the competence of student cadres, and carry out the scientific and dynamic analysis on the competences of student cadres in various dimensions.

#### **Literature Review**

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The definition of competency is proposed by McClelland. It is an inherent basic trait that helps people achieve their goals or accomplish the tasks successfully. Klemp, Boyer and Gelman supported and validated this view in the study. In 1993, Spencer pointed out that competency was individual and deep feature to distinguish excellent employees with high performance from ordinary employees with general performance at the same position. In 1996, Parry et al. pointed out that competency was some associated abilities, knowledge and values that had influence on one's daily work and affairs. They were closely related to work performance. They could be measured and observed by some recognized standards. After training, they could be developed and improved.

The competency model is key tool that defines key skills for specific job, and clarifies the relationship between the requirements of specific jobs and different job roles. And in most cases, the competency model is more accurate than the definition of job. It includes the necessary competencies to get high-performance jobs. And then, the standards of vocational qualification are more actionable and specific in the organizations and the teams. Competency model has two characteristics. The first is the ability, knowledge and personality characteristics to complete the work. The second is the behaviors, which directly affect the work performance and the occupational success. And it is different from the characteristics of the competency. The former is for the personality characteristics. Competency models describe the distinct characteristics of the enterprises or organizations.

#### 1. Foreign Research

In 1973, Professor McClelland wrote an article in the American Psychologist magazine to unveil the prelude to the competency movement. Most of the initial discussions are at the individual level, and the study focuses on the ability of excellent managers, excellent managers, and government officials. For example, in 1982, Rechard Boyatis conducted a detailed analysis of the competency characteristics of multiple managers in a large industry management position, and established six competency features and 19 factor projects for the manager's competency model. Six years later, Yessian constructed the competency model of American political leaders, and summarized the competency factors into three major orientations: personal orientation, orientation of others, and orientation of things, covering innovation, expression, spontaneous management, and leadership. Competency characteristics such as sensitivity to others. Lyle.M.Spencer summed up the manager's competency in one year, and built a generic competency model for technicians, salespeople, community service staff, managers and entrepreneurs, and developed a set of comparisons. Complete interview steps and coding content.

The competency model study in the field of education was originally carried out by the American Education Office in 1968. They reformed eight teacher education content, thereby standardizing the knowledge and abilities that trained teachers need to learn. Two years later, the former Oxford Institute of Technology and the American Association of Secondary School Principals jointly established the National Education Evaluation Center. The center carried out the competency of school administrators in accordance with American thinking and constructed a school manager competency model that

includes four aspects. Subsequently, the Scottish Principal Association conducted a survey of school management requirements in the UK model and built a school management standards system. Based on this, the specific requirements for the school management are to innovate, maintain, and provide an atmosphere in which students and teachers can learn positively. The system includes 10 competency requirements in four major areas.

#### 2. Domestic Research

In the domestic research on competency, the structure of the competency model is later than that of foreign countries. Some experts and scholars combined with the existing research in foreign countries, combined with the unique situation of China, and constructed some innovative competency models in different fields. In 2003, Peng Jianfeng summarized the manager's general competency model and provided the enterprise human resource management standard. In the second year, Jing Xiaojuan, the human resources consultant of Huaxia Jiushi, compared the cognitive abilities of people's knowledge, skills and experience with the ideology and morality, interpersonal communication and initiative, and concluded that the latter is the key factor that can promote people's success. Further innovation and improvement of the domestic theory of competency model. In 2004, Chen Wansi interviewed the human resources management personnel of provincial and municipal enterprises and formed a competency model of enterprise human resource management personnel with Chinese characteristics. In 2005, Wei Wei and Zhang De analyzed and verified the three Chinese commercial banks, and the innovation formed the competency model of the commercial bank account manager.

In the field of education, especially in the current Chinese colleges and universities, the study of the competency of college students, there is a discussion on the competence of management college students, there is an analysis of the competency of college students, and there are surveys of college students' evaluation indicators. There are preparation and verification of the master's degree competency questionnaire. However, in general, there are few studies on the selection of cadres in colleges and universities, and the factors of competency of outstanding student cadres.

#### **Statement of Problem**

With the opening of the university campus and the integration of the society, students also participate in the development of social diversity, which brings a broad space and convenient conditions for the shaping of students' personality. The increase of students' self-management power, the ruling degree of future job development direction, the highlight of human rights awareness, etc. The new development trend of college students poses a potential crisis for school education management and student self-development. Therefore, colleges and universities must put forward higher requirements for the competency of student cadres. It is especially important to select outstanding student cadres. Reviewing the traditional selection and training mode, the method is more subjective, and often uses the more common interview method. The candidate's competency characteristics lack the scientific system evaluation criteria. The fairness, reasonableness and objectivity of the selection are not complete, and the evaluation of talents is rather vague.

Some of the selection methods adopted by the current school are more random and tend to cause evaluation errors on the students' comprehensive competency. This kind of evaluation method may lead to the lower performance level of the student cadres in the future work. The selection focuses on the students' achievements, the experience as a student cadre, etc. These can not be used as the basis for scientific selection. Based on the current situation of the selection of university student cadres, the author has based on existing research at home and abroad. Try to structure a more scientific competency model to provide a more scientific basis for students to organize selection of cadres.

The concept of competency model used in this paper is a series of different competencies proposed by Peng Jianfeng in his paper entitled "The Design of Competency Model for Employee" to fulfill specific tasks and achieve the requirements of performance. It covers different competency techniques, personality traits, attitudes and professional knowledge. It should measure, observe and guide all competencies and qualities. And they have direct impact on the individual performance of workers and the operational development of the enterprises .

#### Methods

#### 1. To Compile the Check List of the Competency

In the compilation of questionnaire, the author draws on Hay's "basic competency dictionary". At the same time, the author compiles The Dictionary of the Competency of Student Cadres in Normal Universities and Colleges, The Check Table of the Competency of Student Cadres in Normal Universities and Colleges with the deliberation of experts and literature comparison.

#### 2. The Selection of Subjects

The sample of the paper is taken from the school where the author is located. In 15 student unions of secondary schools and the universities of F normal university, the author randomly selected student cadres, various professional students, counselors and some advisers of student cadres as the samples. The samples don't include the cadres of the associations, psychiatric federations and class.

#### 3. Investigation Methods

In this study, data were collected through semi-open and structured questionnaire. To avoid the sequential effect of the competency of each item, The questionnaires were divided into different versions according to different sample groups.(according to they grade, experience and so on). And then, it initially formed 65 entries of the competency. After that, three counselors and six advisers of student cadres had respectively revised and deliberated the questionnaires. They made a summary of the 65 items. And they found some important items were not in the check list. Finally, the author got 20 items of the competency of student cadres of normal universities.(these 20 items include: self

confidence, leadership, good at coordination, responsibility, communication skills, Honesty and integrity, Service awareness, Self-reflection, Be active in work, To respect the classmates, Tolerance, Be cautious, Be assertive, Transposition thinking, Decision-making capacity, Be patient, Keep calm, Concern for others, Be candid about the matter, Action execution). And then, it once again formed the questionnaire. These questionnaires were distributed to the sample again. After we get the frequency analysis of software, we can extracted the relevant dimensions with existing theories. Then, it ultimately formed the competency model of student cadres of normal universities.

#### 4. The Data Analysis of the Check List

In this survey, 223 undergraduates of F normal college were selected as the sample. And they were asked to select 20 items from the 65 items of the competency of the student cadres. A total of 223 questionnaires were sent out. 220 questionnaires were collected, and 199 valid questionnaires were completed. The effective rate was 89.23%. The author made frequency analysis of the survey results through SPSS22.0. The top high-frequency 20 items were listed in "Table 1".

Order	Competency	Frequency	Percentage	eOrde	rCompetency	Frequency	Percentage
1	Confidence	144	72.36	34	To obey the rules	51	25.63
2	Leadership	132	66.33	35	Managerial knowledge	51	25.63
3	Be good at coordination	129	64.82	36	Learning capacity	50	25.13
4	Responsibility	123	61.81	37	To resolve contradictions	49	24.62
5	Communication ability	D111	55.78	38	To take challenges	49	24.62
6	Personal integrity	98	49.25	39	Todiscoverotherpeople'sadvantages	s 46	23.12
7	Service awareness	95 S T I	⊤47.74 (	40	Be devoted to one's duty	46	23.12
8	Self-reflection	93	46.73	41	To trust others	46	23.12
9	Be active in work	92	46.23	42	The creativity	44	22.11
10	Torespect the classmates	88	44.22	43	Enthusiasm	44	22.11
11	Tolerance	85	42.71	44	Be outgoing	39	19.60
12	Be cautious	78	39.20	45	Be good at finding problems	37	18.59
13	Be assertive	78	39.20	46	Be energetic	36	18.09
14	Transposition thinking	77	38.69	47	Be loving	35	17.59
15	Decision-making capacity	75	37.69	48	Emotion management	35	17.59
16	Be patient	75	37.69	49	Perseverance	35	17.59
17	Calm down	74	37.19	50	Be brave to explore	33	16.58
18	Concern for others	73	36.68	51	Observation	32	16.08
19	Be candid about the matter	r 72	36.18	52	Self-control	31	15.58
20	Action execution	71	35.68	53	Be attentive	29	14.57
21	Principle	67	33.67	54	Analysis and conclusion	27	13.57
22	Analytical thinking	64	32.16	55	Be cautious	27	13.57
23	Be flexible	63	31.66	56	Independence	26	13.07
24	Effectiveness	61	30.65	57	To take the chance	25	12.56
25	Sense of discipline	61	30.65	58	To obey the management	25	12.56

#### Table 1 The Frequency Analysis of the Competency of Student Cadres

Order Competency		Frequency	Percentage	FrequencyPercentage			
26	Desire to advance	59	29.65	59	To collect the information	22	11.06
27	The cohesion	59	29.65	60	Wide interest	22	11.06
28	To deal with the pressure	59	29.65	61	Adaptability	20	10.05
29	Psychological endurance	58	29.15	62	Humor	18	9.05
30	Moral accomplishment	58	29.15	63	Critical spirit	13	6.53
31	Be ready to help others	57	28.64	64	Self-motivation	11	5.53
32	Persuasive ability	56	28.14	65	The desire of achievement	8	4.02
33	To cultivate others	53	26.63				

#### 5. To Compile Closed Questionnaires for Formal Investigation

According to the above results, the software is used to compile the questionnaire again. The content includes two aspects. First, it is the basic information of the sample group. Second, it converts the above 20 items into concrete measurement standards, which are scored by students. The secondary questionnaire statistics are shown in the following "Table 2":

Survey Name	Category	Number	Proportion
		of People	
Total		186	100
Gender	Male	73	39.25
	Female		60.75
Grade	Grade One	5	2.69
	Grade Two	L114AGEM	61.29
	Grade	40	21.51
	Three		
	Grade Four	27	14.52
Speciality	Liberal Arts	44	23.66
	Science	133	71.51
	Engineering	8	4.3
	Agriculture	1	0.54
	Science		

**Table 2** The Statistics of Sample Information

6. To Analyze and Verify the Survey Data

Firstly, the author makes the reliability and validity analysis of the survey data through spss22.0 software. It verifies the validity of the questionnaire. And then, the author makes the analysis of the principal component of the project. It has extracted the common factors. Then, it forms the model dimension.

The analysis of the reliability and validity: Cronbach consistency coefficient is generally used to test the reliability. The Cronbach's Alpha of the data reliability analysis is 0.972. That is, the reliability coefficient in this paper shows that the reliability of the test and the scale is very credible.

To analyze the factors and Refine public factors: With the further analysis of the factors, the author could rank the competency and form common factors. There is a prerequisite for the factor analysis. First, it should check out KMO and Bartlett. According to KMO metric given by Kaiser, the original variables are suitable for factor analysis. "Table 3"

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		
Approx.	4696.88	
Chi-Square		
df	190	
Sig.	.000	
	Approx. Chi-Square df	

#### Table 3 KMO and Bartlett's Test

#### Table 4 Communalities

		Initial	Extraction
6	Self-confidence	1.000	.806
7	The leadership	1.000	.863
8	Be good at coordination	1.000	.790
9	Responsibility	1.000	.888
10	The communication ability	1.000	.841
11	Honesty and integrity	1.000	.770
12	Service awareness	1.000	.849
13	Self-reflection	1.000	.811
14	Be active in work	1.000	.849
15	To respect the classmates	1.000	.864
16	Tolerance	1.000	.864
17	Be cautious	1.000	.822
18	Be assertive	1.000	.886
19	Transposition thinking	1.000	.852
20	Decision-making capacity	1.000	.862
21	Be patient	1.000	.841
22	Keep calm	1.000	.854
23	Concern for others	1.000	.834
24	Be candid about the matter	1.000	.883
25	Action execution	1.000	.833

<sup>a.</sup> Extraction Method: Principal Component Analysis.

In "Table IV", it shows that the commonality of all the variables is greater than 0.5, indicating that the common factor extracted by each variable has high-degree interpretation. And less information is loss. It can be used for the factor analysis.

As can be seen from Table V, according to the standard that the percentage of information interpretation is more than 80%, three common factors in all are extracted. It can be further found that the five common factors can explain 73.881%, 3.916% and 3.385% of the related information respectively. Finally, the total can explain 81.182% of the overall information. The result shows that the three common factors can reflect the overall information well.

	Initial E			Extraction Sums of Squared				
Component	Initial E	igenvalue	S	Loadings				
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %		
1	14.776	73.881	73.881	14.776	73.881	73.881		
2	.783	3.916	77.798	.783	3.916	77.798		
3	.677	3.385	81.182	.677	3.385	81.182		
4	.626	3.128	84.311					
5	.489	2.446	86.757					
6	.315	1.577	88.334					
7	.284	1.419	89.753					
8	.272	1.359	91.112					
9	.236	1.178	92.290					
10	.211	1.056	93.346					
11	.204	1.021	94.366					
12	.175	.875	95.241					
13	.171	.856	96.098					
14	.150	.752	96.850					
15	.132	.660	97.510					
16	.118	.588	98.098					
17	.112	.562	98.660					
8	.105	.524	99.185					
19	.090	.448	99.632					
20	.074	.368	100.000					

Table 5 The Extraction of Common Factors

Table 6 Naming Rotation	Factors after	<b>Common Factors</b>
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Component Matrix <sup>a</sup>			
	(	Compon	
	1	2	3
5、self-confidence	.805	.314	.099
7、leadership	.770	.502	.006
be good at coordination	.834	.189	104
9、responsibility	.910	.039	098
10、communication	.882	.150	125
capability			
11、honesty and integrity	.847	055	028
12, service awareness	.869	210	143
13、self-reflection	.865	087	.226
14、work actively	.900	092	097
15, respect for students	.888	215	079
16、generosity	.830	064	.378
17、 doing things carefully	.814	183	.349
18、 being assertive	.794	.262	.365
19, empathy	.911	121	011
20、capacity to take	.825	.225	211
decisions			
21, be patient	.894	100	.024
22、Keeping calm when	.911	124	069
problems crop up			
23、 caring about others	.868	217	.015
24, be impartial	.904	132	146
25, the implementation of	.848	.049	272
executive force			
Extraction Method: Princip	al Con	ponent	i į
Analysis.			
a. 3 components extracted.			

X1=0.805F1+0.314F2+0.099F3

X2=0.770F1+0.502F2+0.006F3

The rest can be done in the same manner. The absolute value of the load for each factor on the original variable does not draw close to 0 and 1. Then the factors are rotated.

#### Table 7

	Comp	onent	
	1	2	3
5、 self-confidence	.349	.674	.425
1、leadership	.281	.825	.292
be good at coordination	.538	.606	.295
• responsibility	.661	.517	.368
0, communication capability	.602	.599	.309
1, honesty and integrity	.626	.397	.414
2, service awareness	.779	.290	.361
3, self-reflection	.519	.351	.643
4, work actively	.717	.400	.391
15、respect for students	.760	.288	.425
16, generosity	.403	.337	.749
7、 doing things carefully	.465	.231	.740
18, being assertive	.225	.596	.654
19, empathy	.694	.373	.474
20, capacity to take decisions	.571	.643	.193
21, be patient	.652	.378	.491
22、Keeping calm when	.726	.376	.427
problems crop up			
23、caring about others	.697	.266	.494
24、 be impartial	.766	.374	.360
	.705	.512	.189
25、 the implementation of			

In this paper, the rotation component matrix is constructed by orthogonal rotation of the maximum variance method. Three common factors were extracted. The first common factor: Responsibility, communication skills, honesty and integrity, service awareness, work actively, respect for students, empathy, patience, calmness, caring about others, being impartial, the implementation of executive force, named responsible service orientation ; second common factor: self-confidence, leadership, being good at coordination, decision-making ability, named the art of management; third common factor: self-reflection, generosity, prudent work, being assertive, named self-development awareness.

#### The competence model structure of student union cadres in normal schools (Figure 1)

After the evaluation team of professional teachers making sequence of three common factors on their significance to students union cadres' work, the following pyramid model of the student union cadres' competence is built. The first indicators are the service-oriented first common factor, including responsibility, communication skills, and sense of duty and so on. That is to say, the factor is the foundation and the capability and awareness of candidates should be focused in the selection phase. The second indicator is the art of management. Although it is not necessary in the cadre selection phase, it needs to be learned and belongs to the core elements in future management activities. The third indicator is the awareness of self-development. Colleges and universities provides a development platform for students; in the selection, they get capabilities of management through training, make great progress in the leadership and organization, and their relevant skills will also be improved.

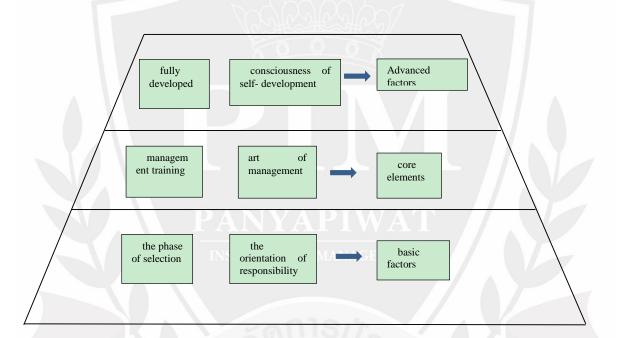


Figure 1 Pyramid Model of Student Union Cadres' Competency at F College

#### Verification of the model

Through the construction of the competency model of the pyramid-type student union cadre, on the one hand, the school administrators and the student union cadres are provided with the competency characteristics that must be possessed in order to be qualified for the cadre work of the student union, so that the student cadres can constantly reflect on themselves and summarize in time. Their own strengths and weaknesses, and enable the student managers to train and strengthen the weak links of team members in a timely and targeted manner; on the other hand, they can further apply the competency model to the selection of outstanding student council officers, and select Students who are qualified for the work requirements of the Student Union will improve the overall ability level of the Student Union cadres. According to the author's research, the college student union cadre competency model is constructed, and the effectiveness of the model is verified through the application of specific cases.

#### 1. Source of Cases

This paper is based on a run for the chairman of the student union, and the students' names were replaced by letters in the specific cases. The selection of presidium includes the procedures of the recommendation of superior, written examination, democratic voting and so on; finally, two candidates met the requirements and got to the final. In the election interviews, the group members formed include teacher C in charge of student affairs of the college, Teacher W, Secretary of League general branch, student W and X of the former Presidium of student union.

(A) The interview team prepared structured interview questions through pyramid model of the student union cadres' competence. After the group members' study and discussion, 20 questions including the three competence indicators were finally identified. Each question was controlled in 5 minutes, including the self-introduction of candidates, thinking time and so on; each person had about one hour to answer the questions.

(B) After the preparation of structured interview questions and scoring standards, the interview team carried out the evaluation before the interview and interview specialization, and assigned the youth league teacher of the college work to the main interviewer, the president of the student union, student W to the recorder; after that the writer explained to them the connotation of each competency index and description of the relevant behaviors, making them know the specific meaning and the scoring basis of the interview questions, correct questioning methods, practicing questioning skills and filling in the format according to interview scores.

(C) After completing the summaries of the candidates' ratings, all the data were collected and analyzed.

	teacher	teacher	student	student	single	
	С	W	Х	W	average	
responsibilities of service	15	16	16	17	16	
Art of management	15	15	15.5	16	15.3	
Self- development	18	17	16	17	17	

#### Table 8 Scores of Candidate, Student C (Interview of president of Student Union)

#### Table 9 Scores of Candidate, Student L

	teacher	teacher	student	student	single	
	C	W	Х	W	average	
responsibilities of service	16	14	15	16	15.2	
Art of management	16	16	15	16	15.75	
Self- development	17	15	16	17	16.25	

After calculating scores, the evaluation team used weighted average formula to calculate scores of the two candidates respectively. The weighted average scores of student C were slightly higher than those of student L, so the evaluation team and counselors went to discussions: in view of the evaluation using newly established model, on the one hand, impartiality of the evaluation should be ensured; on the other hand, whether there are corrections or supplements in experiment process, examination and verification also should be discussed. And the discussion mainly includes: through written examination, interview and daily performance of the two candidates, what is the general impression of two candidates? Is there something need to be discussed in the entire competition? What are the weaknesses that the two candidates show during ordinary performance and the process of interview? Is there something needs to be further improved and perfected? Is there any need to conduct relevant psychological tests and role tests on the two candidates?

The team further analyzed the difference between the two candidates through a line graph. Scores of individual tests was 20 points. According to the scores, it can be seen that the overall scores of the two students are not very high, and the scores of student C are higher than student L in the aspect of responsible service orientation, but lower in the art of leadership. In view of the test serving as a verification process in the meanwhile, the conclusion that the responsibility of service orientation was the most important and the art of leadership can be developed can be drawn from previous data and empirical analysis; finally, assessment team unanimously agreed on student C acting as president of the student union. Currently, student C in the author's college has been on the post of the student union president for nearly a month; through feedbacks from all sides, her performance has been very good, and after training and learning, her leadership was also enhanced than ever before, which verified the validity of the established model.

#### Deficiencies

The competence model of student union cadres in normal schools in this paper is only applied to the selection of student union cadres. However, the model is not involved in the professional training and performance assessment of student union cadres for the time being. Scope of the study is relatively narrow and has not formed coherent theoretical system yet.

#### References

- Boyatzis, R. E. (1994). Rendering into competence the things that are competent. *American Psychologist*, 64-66.
- Clemp, S. (1998). Managing by Competencies: a study on the Managerial Competencies of Hotel Middle Managersin HongKong. 253-273.
- Gelman, H. R. (2004). The competent Manager. New York: Wiley.
- Han, H. & Xie, J. (2010). Academic Research on the Models and Evaluation of Competences for College Student Cadres. *Academic Discussion*, 77-79.
- Lu, Y. (2012). *Competence Investigation and Analysis of College Student Cadres* (unpublished doctoral dissertation). Social Science, Xi'an.
- Ma, Y. (2010). Research on the Construction and Verification of Competency Model of College Student Cadres (unpublished doctoral dissertation). Liaoning Normal University, Liaoning.
- Xiong, Q. (2011). The Competency Model Construction of Undergraduate Mental Members (unpublished doctoral dissertation). Hubei University, Hubei.
- Zou, L. (2010). Preparation of Specific Competencies Questionnaire on College Student Cadres (unpublished doctoral dissertation). Southwest University, Chongqing.

#### THAILAND AND OTHER MAINLAND ASEAN COUNTRIES

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#### Abstract

The Mainland ASEAN, especially the CLMV countries grew very rapidly, real GDP more than 6% per year on average for last ten years. This high growth has been accomplished through several factors such as large inflows of foreign direct investments (FDIs), each government efforts to invite FDIs like setting up of special economic zones, ASEAN's support through the "Initiative for ASEAN Integration", infrastructure developments by the Asian Development Bank, and the role of Thailand with the development of manufacturing industries. Thailand has succeeded to invite foreign manufacture industries such as automotive and electronics industries. When wage rates in Thailand increase, some labor-intensive parts and component makers, especially those formed supply chain systems under the core assemblers tend to move to the CLMV countries where wages are still low. This is called "Thailand +1". The CLMV countries will also confront soon the "middle income trap" that is now Thailand struggles. Some solutions for it will also be introduced. The paper mainly emphasizes the relationship between Thailand and the CLMV countries.

Keywords: Fragmentation theory, Fdis, 2<sup>nd</sup> Unbundling, Middle income trap, ODA, R&D

#### Introduction

The relationship between Thailand and the CLMV countries (Cambodia, Lao PDR, Myanmar and Vietnam) becomes tight and tighter in the future because globalization continues. Thailand succeeded to grow the manufacturing industries such as computer memories and car production while the economic opening-up of CLMV countries was delayed due to the civil wars (Lao PDR and Cambodia) and the military rule (Myanmar). Actuary, Thailand started industrialization from the 1960s, while Vietnam in the 1980s (the Doi Moi policy began), Lao PDR and Cambodia in the 1990s and Myanmar after 2011 (the end of the military government). Globalization and economic opening-up brought about wage-rate sensitive economic management. If wage rates increase, manufacturing companies tend to move labor-intensive production processes to countries where the wages are still low. This is called the "fragmentation theory". It refers to the relocation of technologically standardized intermediate products,

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especially those of labor-intensive production processes move to other low-wage countries. In other words, supply chains are created crossing over national boundaries (cross-border inter-process division of labor).

Thailand enjoys manufacturing industries mentioned above. Some Thai companies tend to move their labor-intensive production processes (especially, intermediate goods producer in the automotive companies) to neighboring countries because the Thai wage rate is increasing, especially after 2013. As a result, several factories moved to the CLV (later M, too) countries. This is sometimes called "Thailand + 1".

The paper will mainly explain the relationship between Thailand and the CLMV countries on the new cross-border division of labor. First review economic conditions of each country. Second shows FDI of related countries. Third explain the relationship between Thailand and the CLMV countries, especially in relation to the wage rate difference. Then the other factors which helped the growth of the CLMV countries are pointed out. Finally some problems and solutions will be mentioned.

#### 1. Present Situations of the Mainland ASEAN Countries

Among the CLMV countries, per capita GDP is highest in Lao PDR (\$1,845) at average terms from 2008 to 2018, then follow Vietnam (\$1,821), Myanmar (\$1,115) and Cambodia (\$1,047) (see Table 1). Thailand shows \$5,678. It is amazing that the real GDP growth rate of the CLMV countries is quite high such as Lao PDR 7.5% at average terms of 2005-2018, Myanmar 6.4%, Cambodia 6.3% and Vietnam 6.1%. This high growth rate can be explained by the following factors: (1) the CLMV countries are late-comers after the long experience of wars and/or military rules so that the growth potential is very strong; (2) active foreign direct investment (FDI) by China and developed countries such as Japan, (3) ASEAN put priority to grow these countries under the Initiative for ASEAN Integration (IAI), (4) the Asian Development Bank (ADB) has the Greater Mekong Sub-region (GMS) program to provide infrastructure, especially roads, and (5) Thailand led to form global value chains.

Country	Item		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Average
Cambodia	N.P. GDP	(US\$)	742	735	782	878	945	1,011	1,091	1,168	1,278	1,390	1,499	1,047.2
	R. GDP G. RATE	(%)	6.7	0.1	6.0	7.2	7.3	7.4	7.1	7.2	7.0	6.9	6.9	6.3
	I/GDP	(%)	18.6	21.4	17.4	22.0	23.5	23.5	23.2	22.4	22.9	22.2	22.0	21.7
Lao PDR	N.P. GDP	(US\$)	1,014	1,080	1,243	1,463	1,641	1,900	2,075	2,212	2,417	2,542	2,706	1,844.8
	R. GDP G. RATE	(%)	7.8	7.4	8.0	8.0	7.8	8.0	7.6	7.3	7.0	6.8	6.8	7.5
	I/GDP	(%)	(No Data)											
Myanmar	N.P. GDP	(US\$)	704	770	997	1,197	1,182	1,180	1,275	1,147	1,210	1,264	1,338	1,114.9
	R. GDP G. RATE	(%)	3.6	5.1	5.3	5.6	7.3	8.4	8.0	7.0	5.9	6.7	6.9	6.4
	I/GDP	(%)	13.1	14.7	16.0	14.9	17.1	22.3	22.6	23.2	21.5	23.2	22.4	19.2
Vietnam	N.P. GDP	(US\$)	1,154	1,181	1,297	1,532	1,752	1,900	2,049	2,088	2,172	2,354	2,546	1,820.5
	R. GDP G. RATE	(%)	5.7	5.4	6.4	6.2	5.2		6.0	6.7	6.2	6.8	6.6	6.1
	I/GDP	(%)	36.5	37.2	35.7	29.8	27.2	26.7	26.8	27.6	26.6	26.6	27.8	29.9
Thailand	N.P. GDP	(US\$)	4,380	4,208	5,065	5,482	5,850	6,155	5,933	5,831	5,970	6,591	6,992	5,677.9
	R. GDP G. RATE	(%)	1.7	-0.7	7.5	0.8	7.2	2.7	1.0	3.0	3.3	3.9	3.9	3.1
		(%)	28.2	20.6	25 4	26.8	28.0	27 5	22.0	22.3	21 1	22.8	24.2	24.6

Table 1 Nominal per capita GDP, real GDP growth rate and total investment (i) per GDP

Source: International Monetary Fund (IMF), World Economic Outlook Database, April 2018.

Laos PDR is rich with power generation, mineral materials, rubber while Cambodia is famous for textile products. Myanmar produces natural gas, rice and precious stones while Vietnam can now export electrical parts and machinery. So their exports are splendid based on these products. ASEAN set up the IAI based on the recommendation of Singapore (2000) in order to reduce income gap between rich and poor ASEAN countries, especially the CLMV countries. The ASEAN Economic Community (AEC) put this as the third core objectives (fair economic development). The GMS of the ADB promoted (a) highway projects among CLMV and Thailand, and (b) the Cross Border Transportation Agreement (CBTA). As a hard infrastructure, ADB has been already constructing three highways passing through the CLMV countries and Thailand (the North-South Economic Corridor, the East-West Economic Corridor and the Southern Economic Corridor). Now the most advanced one is the East-West Economic Corridor. The Corridor now connects between Danan (Vietnam) and Kawkareik (Myanmar), crossing Laos PDR and Thailand. It will reach Mawlamyine, Myanmar. As a soft infrastructure, CBTA provides more simplified border procedures such as one stop services and the mutual entries of transportation trucks. These procedures remarkably improve logistics and reduce time and transportation costs.

Thailand as a core country in the Mainland ASEAN countries contributed to increase the CLMV incomes through cross-border inter-process division of labor because of the wage rate increase as compared with that of the CLMV countries. Thai automobile industries thought that if the labor-intensive intermediate goods production can move to low labor-cost countries, they can increase profits. At the same time, the CLMV countries get benefits to increase job opportunities. Thus the relocation of technologically standardized intermediate products moved to the CLMV countries. This helped the growth of the CLMV countries.

These phenomena accelerated the FDI from other countries such as China, Japan, South Korea, and other developed countries to the CLMV countries. The ratio of the Cambodia 21.7%, Myanmar 19.2%).

Finally Thailand's growth seems at a standstill (average GDP growth at 3.1%). Some say if the country reached a middle income state, it suffers the "middle income trap". Other says that the military occupation from 2014 in Thailand would affect this stagnation because some FDIs fled away. However the most important and lacking thing is the development of new technologies and innovational mind to overcome its slow growth.

To summarize, the CLMV countries grow rapidly in the last ten years although their per capita GDP is still less than US\$3,000. One of the growth reasons is globalization and free-market principles. The other is huge FDI inflows to modernize these countries. We should realize the role of Thailand as the main promoter to activate global value chains between Thailand and the CLMV countries (Kuroiwa 2018).

#### 2. FDI in the CLMV Countries

If we look at the FDI in the approval base for the CLMV countries and Thailand from 2010 to 2016,

we can see several interesting facts (see Table 2). First, Vietnam was the most FDI receiving country among 5 countries between 2010 and 2016. It reached US\$135.9 billion in terms of approval base. Next followed Thailand with US\$91.1 billion, and other countries such as Myanmar with US\$54.3 billion, Cambodia with US\$15.3 billion, and Laos PDR (but only three years from 2014 to 2016) with US\$8.1 billion.

Among the top 6 FDI countries • area in each receiving country, the China • Hong Kong group was one of the largest contributors to this region such as 44.9% in Myanmar, 36.7% in Cambodia, 30.1% in Lao PDR, 9.5% in Vietnam and 8.1% in Thailand in the total FDIs between 2010 and 2016. The China • Hong Kong group has a strong relation with Myanmar, Cambodia and Lao PDR in terms of FDI. Japan showed 45.5% in Thailand, 16.2% in Vietnam, 9.2% in Cambodia, 1.3% in Lao PDR and 0.5% in Myanmar. Japan's investment concentrates in Thailand. On the other hand, South Korea showed 22.3% in Vietnam, 10.2% in Cambodia, 6.8% in Myanmar and 2.7% in Lao PDR. South Korea seems to use Vietnam as a stepping board to invest into the CLM countries.

Vietnam showed its presence at 17.3% in Lao PDR, 7.8% in Cambodia and 3.4% in Myanmar while Thailand showed 24.7% in Lao PDR, 7.5% in Myanmar and 1.7% in Cambodia. Vietnam invests in Cambodia larger than Thailand does. On the other hand, Singapore shared 27.9% in Myanmar, 14.8% in Vietnam, 5.0% in Thailand and 1.3% in Cambodia. Singapore emphasizes industrial parks, real estate and financial businesses. Malaysia's presentation is not so large such as 5.4% in Lao PDR, 2.0% in Thailand, 1.8% in Vietnam, 0.7% in Myanmar and 0.1% in Cambodia.

In the case of the FDI from Thailand, such Thai companies invested in the CLMV countries as PTT Exploration and Production Public Companies Ltd. (Natural gas development, Myanmar), Glow Energy P.C.L. (Hydro-electric generation, Lao PDR), Siam Cement P.C.L. (Cement production, Cambodia, Myanmar and Vietnam), Mitr Phol Group (Sugarcane farming and sugar refining, Laos PDR), C.P. Group (Animal husbandly, meat processing and shrimp farming, Vietnam), Pranda Group (Jewelry, Vietnam), High-Tech Apparel Co. Ltd. (Sewing, Lao PDR and Vietnam), and Amata (Vietnam) Co. Ltd. (Construction of industrial parks, Vietnam).

According to Rattanakhamfu & Tangkitvanich (2017), the top 100 companies listed on the Securities Exchange of Thailand (SET) had 130 subsidiaries and/or joint ventures in the CLMV countries in 2013. Among them 26.2% were related to energy and infrastructure, 16.9% to commerce, 10.8% to real estate and also 10.8% to construction materials. It seems that Thai corporate strategies for the CLMV emphasize natural resources which can't be produced in Thailand and the products which have an expectation of strong expansion and future demand of the CLMV countries.

	Cambodia		Lao PDR		Myanm		Vietnam		Thailand	
2010	Total 2,41				Total 19,		Total 17,230		Total 9,308	
	S. Korea 1		_		China		Singapore	4,350	Japan 🗧	3,344
	China	711	_		Hong Kong		Netherlands	-	Netherlands	859
	Malaysia	167	_		Thailand	2,945	Japan	2,040	Singapore	639
	Vietnam	117	—		S. Korea	2,675	S. Korea	2,039	China	577
	Taiwan	113	_		Singapore		U.S.A.	1,833	HongKong	434
	Australia	50	_		Malaysia			1,759	Switzerland	299
2011	Total 5,25	6	_		Total 4,		Total 11,5		Total 9,135	
	U.K. 2,		_		China		Hong Kong	-	Japan !	•
	China 1	-	_		U.K.	100	Singapore	-	Singapore	826
	Vietnam	631	_		India		Japan	1,849	China	555
	Hong Kong	331	-		Malaysia	a 52	S. Korea	873	U.S.A.	303
	S. Korea	146	-		S. Korea	a 26	U. K.	802	S. Korea	230
	Japan	102	_		Panama	<u>126</u>	China		Malaysia	
2012	Total 1,56	3			Total 1,4	<del>1</del> 19	Total 16,34	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Total 17,66	
	China	290	_		China	407	Japan	5,593	Japan 1	1,214
	S. Korea	284	-		Vietnam		Taiwan	2,658	Singapore	625
	Japan	277	-		Singapore	248	Singapore	1,938	Netherlands	578
	Taiwan	143	-		U. K.	233	S. Korea	1,285	U.S.A.	576
	Thailand	133	_		Hong Kon	g 81	U.K	. 870	Hong Kong	414
	Hong Kong	117	_		Japa	n 54	Hong Kon	g 729	Australia	401
2013	Total 1, 47	1	—		Total 4,1	L07	Total 22,35	52	Total 15,59	0
	China	494	-		Singapore	2,340	Japan	5,875	Japan	9,456
	Vietnam	265	_		S. Korea	641	Singapore	4,769	Hong Kong	1,257
	Hong Kong	111	_		Thailand	489	S. Korea	4,466	Netherlands	1,079
	Taiwan	103	_		U. K.	157	China	2,310	Malaysia	697
	Singapore	97	-		Vietnam	142	Russia	1,032	Singapore	652
	Japan	93	_		Hong Kong	119	U. K.	876	U.S.A.	306
2014	Total 1,24	2	Total 2,025		Total 8,011		Total 21,922		Total 14,88	6
	China	668	Thailand 🛛		Singapore	4,297	S. Korea	7,705	Japan	5,601
	S. Korea	109	China	464	U. K.	851	Hong Kong		U.S.A.	
	Hong Kong	94	Vietnam	226	Hong Kong		Singapore			1,301
	U. K.	87	S. Korea	76	China	517	Japan		Luxembourg	
	Japan	47	Japan	60	Netherlands	302	Taiwan	-	China	
	Taiwan	29	_		S. Korea			790	Hong Kong	581
2015	Total 898		Total 3,		Total 9,4		Total 24,1		Total 14,41	
		323	China		Singapore	•	S. Korea	-	Japan 4	-
	U. K.	115	Vietnam		China	3,324	Malaysia	,	Singapore	-
	Hong Kong	109	France		Malaysia	257	Singapore		Indonesia	
	Vietnam	89	Malaysia		Thailamd		Japan		U.S.A.	941
	Japan	61	Thailand	253	Hong Kong		Taiwan		Malaysia	916
	Taiwan	46	_		Japan		Samoa		China	820
2016	Total 2,47		Total 2,		Total 6,		Total 22,3	~~~~~~	Total 10,14	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
	Japan		China		Singapore		S. Korea		Japan	
		824	Thailand	729	Vietnam	-	Japan		China	
	Hong Kong	320	Vietnam	449	China		Singapore		Netherlands	817
	Thailand	133	S. Korea	144	Thailand	423		1,706	U.S.A.	717
		104	Japan	45	Hong Kong	214	Hong Kong		Singapore	641
	Vietnam	88	-		S. Korea	66	Taiwan	1,352	Australia	563

#### Table 2: INCOMING FDI TO CLMV AND T COUNTRIES (Approval Base, US\$Million)

Source: JETRO (Japan External Trade Organization), JETRO World Trade and Investment Report, Each year version from 2011 to 2017 (in Japanese).

#### 3. The Wage Rate Difference

When we look at the Mainland ASEAN countries, the wage rate difference came up to be the key

factor for private companies to decide where invest next. Usually Thai minimum wage rate was not so high, decided by the government less than TB170 per day for 7 different regions in 2001. However, it gradually increased and in 2012 it suddenly jumped (in the case of the Bangkok area to TB300 per day). Then the government decided to be a uniform wage rate for all regions in 2013 to be TB300. From that on, not only the minimum wage but also other wages had a rising tendency. On the other hand, those wages in the CLMV countries are still low as compared with that of Thailand.

When a company invest in a new country, of course, the company has to consider the following new cost factors such as the set-up cost (buying a new land and/or lease a land for its factory and construction costs), several taxes for regional and state governments as well as checking tax exemption, duty drawbacks and the existence of special economic zones, etc., electrical situation (if the black-out very often occurs, factories need to own a generator), logistics costs which include transportation, storage, and information costs. Production costs include machines, row materials, workers, and costs for developing new ideas and designs.

If labor-intensive intermediate products move to a nearby country, it is called a "fragmentation theory" (Kagami 2018). As it was explained before, "the relocation of technologically standardized intermediate products, especially those of labor-intensive production processes move to other low-cost countries". The most important factor in this occasion is labor costs. This phenomenon is called the "2nd unbundling" by R. Baldwin (2011). According to the Japan External Trade Organization, if the Bangkok wage rate for general workers (US\$/month) put as one, that of Hanoi was 0.52, Ho Chi Minh 0.55, Vientiane 0.51, Phnom Penh 0.47 and Yangon 0.36 (see Table 3).

	Thailand	nd China				tnam	Cambodia	Lao PDR	Myanmar	
		Bangkok	Beijing	Shanghai	Shenzhen	Hanoi	Ho Chi	Phnom	Vientiane	Yangon
							Minh	Penh		
General Worker	Dollar/month	348	578	477	435	181	193	162	179	127
	(Bangkok=1)	1.00	1.66	1.37	1.25	0.52	0.55	0.47	0.51	0.36
Middle-level	Dollar/month	659	954	865	693	346	349	323	424	388
Engineer	(Bangkok=1)	1.00	1.45	1.31	1.05	0.53	0.53	0.49	0.64	0.59

**Table 3** Wage rates of the main cities (OCT. 2015 – JAN. 2016)

Source: JETRO, Comparison of Investment-related Costs at the Main Cities/Areas in Asia and Oceania No. 26, (in Japanese), June 2016. Also see: https://www.jetro.go.jp/ext\_images/\_Reports/01/42952cecddce53c3/20160032.pdf

If the Bangkok wage rate for engineers as 1, Vientiane 0.64, Yangon 0.59, Hanoi and Ho Chi Minh 0.53, and Cambodia 0.49. It shows persons who have technical knowledge and skill are relatively lacking in Lao PDR and Myanmar as compared with Vietnam and Cambodia. In any case, however, Thai wages are higher than those of the CLMV countries. This is the strong reason why Thai companies invest in the CLMV countries.

Examples of Japanese companies in Thailand which transferred their labor-intensive intermediate production processes to neighboring countries are as follows: Denso Corporation (automobile parts, Cambodia), Yazaki Corporation (wire harness, Cambodia), NIDEC Corporation (motor parts, Cambodia), TOYOTA Boushoku Corporation (car sheet, Lao PDR), Mitsubishi Materials Corporation

(electronics parts, Lao PDR), Minebea Mitsumi Inc. (NMB) (ball bearing, Cambodia), and Nikon Corporation (camera parts, Lao PDR). These are examples of "Thailand + 1", which show that the relocation of technologically standardized intermediate products, especially those of labor-intensive production processes move to neighboring low-labor cost countries.

#### 4. Other Factors for the CLMV Growth

There are several factors which helped the CLMV development. As explained before, those are (1) ASEAN's support through the "Initiative for ASEAN Integration (IAI)". This was proposed by Singapore in 2000 to reduce income differences among ASEAN countries, especially among CLMV and other ASEAN countries. Singapore constructed a training center for each CLMV country. It is said that 35,000 people were trained through this facility by 2016. (2) the Asian Development Bank (ADB) funded road infrastructure for the CLMV countries through the Greater Mekong Sub-region (GMS) Economic Cooperation Program and also proposed the Cross-Border Transport Facilitation Agreement (CBTA). (3) Thailand also changed from the aid receiving to aid donner country, especially from the Thaksin government. Thailand offered aid to the neighboring CLMV countries. Finally, (4) other countries aid such as China and Japan also helped the economic growth of the CLMV countries. Among them (2), (3) and (4) will be shortly explained below.

#### 4.1 ADB's Contribution

ADB established GMS in 1992. The members are 4 CLMV countries, Thailand and China (Yunnan Province, later Guangxi Zhuang Autonomous Region joined in 2005). GMS strongly pushed infrastructure development, especially cross-border expressway development. The North-South Economic Corridor stretches over Kunmin (Yunnan Province) and Bangkok. It has also two sub-corridors between Kunmin and Hanoi-Hai Hong, and Nannin (Guangxi Zhuang Autonomous Region) and Hanoi routes. The East-West Economic Corridor is planned to cover from Da Nang (Vietnam) to Mawlamyine (Myanmar) through Mukdahan (Laos border), Savannakhet (Thai border), Mae Sot (Thai border) and Myawaddy (Myanmar border). The Southern Economic Corridor covers from Ho Chi Minh (Vietnam) to Bangkok with some sub-corridors. But recently it is said to bridge two ports, Vung Tau (Vietnam) and Dawei (Myanmar) for this Southern Economic Corridor.

The East-West Economic Corridor was said to be already constructed between Da Nang and Kawkareik (Myanmar). These corridors are greatly useful to goods transportation and the people's movement and hence the economic development of related countries.

The CBTA was admitted in 2003 to simplify the border procedures such as immigration controls, border inspections, customs procedures and introduced single stop or single windows at the border of contacting two countries. The permission of the two-way passage for the convey vehicles was also signed. Thailand, Lao PDR, and Vietnam agreed for 400 vehicles each other to pass the border in 2009. Thailand and Cambodia permitted 40 vehicles each to pass between the two countries in 2012.

#### 4.2 Thai Aid to the CLMV Countries

Thailand became an aid offering country in 1995 although continuing receiving aid, establishing the Neighboring Countries Economic Development Cooperation Fund (NECF) under the Ministry of Finance. In the Thaksin government period (2001-2006), Thailand International Development Cooperation Agency (TICA) was established in 2004 under the Ministry of Foreign Affairs. The NECF was transformed to the Neighboring Countries Economic Development Cooperation Agency (NECA) in 2015.

The "Ayeyarwady, Chao Phraya, Mekong Economic Cooperation Strategy (ACMECS)" was declared by four countries (CLM + Thailand) by the Thailand initiative in 2003. Vietnam also participated in this group in 2005. The activities of ACMECS went weakened after the Thaksin period but Vietnam's Prime Minister Nguyen Xuan Phuc called the 7th Summit Meeting to strengthen the activities in 2016.

Examples of Thai aid was materialized as follows: (1) the Third Thailand–Laos Friendship Bridge (Nakhon Phanom–Thakhek), (2) the Fourth Thailand–Laos Friendship Bridge with China (Chiang Khong–Huay Xai), (3) the improvement construction of the Pakse International Airport, Lao PDR, (4) the railway construction between Nong Khai–Thanaleng, Lao PDR, (5) the road repair works between Trat–Kao Kong, Cambodia, (6) the Second Thailand–Myanmar Friendship Bridge (Mae Sot–Myawaddy, Myanmar), (7) the construction of new road between Myawaddy and Kawkareik, Myanmar, (8) the construction of the subroute of the North-South Economic Corridor between Jinghong and Chiang Rai (the Laos route), with China and the ADB.

#### 4.3 China's Approach to the Mainland ASEAN Countries

As sawn in 2, China (+) • Hong Kong are the second biggest FDI supplier in terms of accumulated FDI (at approval base) between 2010 and 2016. It occupied 44.9% in Myanmar, 36.7% in Cambodia, 30.1% in Lao PDR, 9.5% in Vietnam and 8.1% in Thailand. During the military regime, Myanmar faced economic sanctions by the advanced countries such as U.S.A. and Europe so that China invested instead to Myanmar. Cambodia and Lao PDR has historically a good relation with China. China's FDI to Vietnam is not so large but the relationship is strong in terms of trade. Among the ASEAN countries, China's export to Vietnam was the biggest (2.9%) in 2015, followed by Singapore (2.3%) and Malaysia (1.9%) while China's import from Vietnam was the third (1.8%) after Malaysia (3.2%) and Thailand (2.2%). China's investment will rise in the future since China's border adjoins with Vietnam, Lao PDR and Myanmar and the mainland ASEAN region grows to be the world production center and its regions' production and consumer markets become larger and larger.

The Belt and Road Initiative (BRI) was announced by President Xi Jin Ping in 2013. The idea

covers the "Silk Road Economic Belt" and the "21st Century Maritime Silk Road". It connects China to Baltic, East Europe, Mediterranean and Africa. More specifically, six economic corridors were proposed to cover the belt land area: (1) China-Mongolia-Russia Economic Corridor, (2) New Eurasia Land Bridge Corridor, (3) China-Central Asia-West Asia Economic Corridor, (4) China-Pakistan Economic Corridor, (5) Bangladesh-China-India-Myanmar Economic Corridor, and (6) China-Indochina Peninsula Economic Corridor. ASEAN countries are involved in the last two of the above six corridors (Tang, 2018).

The construction fund will be financed by the following monetary facilities: Silk Road Fund, China-ASEAN Investment Cooperation Fund (CAF), Asian Infrastructure Investment Bank (AIIB), BRICS Development Bank, Bank of China, China Construction Bank, EXIM Bank, etc.

The BRI plans railway and road connection from Kunmin to Singapore. Its negotiation is going on. This Initiative definitely affects the mainland ASEAN development.

#### 4.4 Japanese Official Development Assistance (ODA)

Recently Japan shows the mainland ASEAN region with great interest because (1) its geopolitical position facing China and India. Economically speaking, if you can produce in the region, you can sell products to these two biggest neighbors. (2) ASEAN puts priority to grow the CLMV countries through the "Initiative for ASEAN Integration" program. Japan wants to help this program. Japanese government called 5 countries (CLMV + Thailand) to organize the Foreign Affairs Minister Meeting in 2008 and the Summit Meeting was followed in 2009 and called the year as the "Mekong-Japan Exchange Year". The fourth Summit in 2012 adopted the "Tokyo Strategy 2012" in which Japan would provide Yen600 billion for the next 3 years in the region as ODA (Official Development Assistance). This amount was almost consumed by 2015 and the "New Tokyo Strategy 2015" was adopted in 2015 and set the ODA of Yen750 billion for next three years.

The following table (Table 4) shows Japan's ODA from 2006 to 2016 for the CLMV+T and Indonesia and China for references. Before, the large amount of the Japanese ODA went mainly to China and Indonesia. However the recent trend shows that Vietnam and India receive a great amount of it. The net expenditure balance in stock terms (repayments of the ODA loans were deducted) of ODA shows China US\$17.1 billion, Indonesia US\$15.3 billion, and India US\$14.7 billion in 2015.

Table 4 Japan's ODA\* to CLMV countries (Gross Expenditure)

	Cambodia	Lao PDR	Myanmar	Vietnam	R	eference Countri	US\$™IIIION) es
	Cambouna				Thailand	Indonesia	China
2006	107.06	66.13	30.84	657.53	276.43	1,018.29	1,304.89
2007	117.57	83.08	30.52	764.99	137.35	1,058.11	1,191.20
2008	114.77	68.13	42.48	794.71	118.97	1,323.77	1,200.48
2009	128.48	94.39	48.28	1,414.12	115.33	1,415.90	1,199.96
2010	149.57	123.62	46.83	1,117.06	226.02	1,593.68	992.69
2011	136.53	55.09	46.51	1,368.49	310.40	1,030.87	964.53
2012	184.76	93.17	92.78	2,035.65	289.02	822.49	532.43
2013	143.39	79.84	5,331.76	1,680.41	607.21	968.16	325.12
2014	126.96	106.91	213.92	1,883.98	415.72	569.94	142.13
2015	106.08	107.17	351.13	1,418.88	172.77	478.60	151.45
2016	140.92	63.77	506.82	1,583.47	414.05	399.92	27.97

\* ODA (Official Development Assistance) includes ODA bans, grants and technical cooperations. Source: Ministry of Foreign Affairs, *White Paper on the Japan's ODA 2017*, also see http://www.mofa.go.jp/mofaj/gaiko/oda/files/000247508.pdf#page=15

For Myanmar, US\$5.3 billion was offered in 2013 for infrastructure improvement of the Thilawa Special Economic Zone, development of legal systems, manpower training, and improvement in living standards to help introducing democratic reforms. Japan also puts stress on manpower training. Like Singapore, Japan established the training centers (called Japan Center) in Cambodia, Lao PDR, Myanmar and Vietnam to train business oriented persons. Japan also established the "Japan-Singapore Partnership Program (JSPP21)" in 1997, helping Singapore to contribute to train CLMV persons by the use of technical cooperation fund, which continues presently although Singapore graduated from the aid receiving country in 1998.

Notable examples of the Japanese ODA to the region are (1) the Second Thailand–Laos Friendship Bridge (1,600 m) between Mukdahan (Lao PDR) and Savannakhet (Thailand) constructed in 2006. This bridge is on the route of the East-West Economic Corridor, and (2) the Neak Loeung Bridge (2,215 m) over the Mekong River passing the National Highway No. 1 in Cambodia constructed in 2015. This bridge is also on the route of the Southern Economic Corridor of the ADB.

#### **Closing Remarks**

Generally speaking, low income countries such as the CLMV countries under per capita income of US\$3,000 can have a chance to grow if they make good use of the FDIs. Because there is a wage rate difference between Thailand and the CLMV countries, several manufacturing companies in Thailand invest into the CLMV countries, especially intermediate goods producers. This is called the fragmentation theory, i.e. labor-intensive intermediate goods companies move to neighboring low-wage rate countries and send back their products to the core companies to assemble the final products. Such high-tech industries like cars and computer-related ones push their parts and component subsidiaries to move to the low-wage countries.

If income grows, people want to buy more things so that the further FDIs come in to catch up with the growing market. FDIs come in to not only the manufacturing industries but also agriculture, mineral, energy, commerce, service and information industries. In the case of the Thai investment, the future demand (market) expansion of the CLMV countries as their growth continues to grow is expected. It should also be noted that the Thai government provides its official aid money for the CLMV countries.

However, once they reach the mid-income level, the growth stops, what we call the "middle income trap". At that stage, large physical investments do not improve the growth but new ideas and new technologies (called the "total factor productivity") are required. It is said that Thailand presently faces the "middle-income trap". So Thailand is now promoting new ideas and new industries to introduce robotics, next-generation automobiles, airplane industry, digital industry, medical hub and environment-friendly petrochemical industry. It was planned to realize in the present "Eastern Economic Corridor (EEC)" project.

Thus, two things are very important. One, train the people to catch up with new technologies, and two, strengthen Research and Development (R & D) expenditures.

As explained before, Japan and Singapore enthusiastically promote manpower training in the CLMV countries. This should be continued. According to the World Bank (2018), the ratio of R&D expenditure against GDP was 0.63% in Thailand, 1.30% in Malaysia and 2.07% in China in 2015. This expenditure should be increased to overcome the "Middle Income Trap" for any developing countries.

## References

- Baldwin, R. (2011). Trade and Industrialization after Globalization's 2nd Unbundling: How Building and Joining a Supply Chain are Different and Why it Matters, Working Paper 17716, National Bureau of Economic Research, U.S.A.
- Kagami, M. (2018). "ASEAN and Japan" in *The ASEAN Community and Beyond*, edited by S. Manarungsan, S. Komolavanij and M. Kagami, Panyapiwat Institute of Management, Thailand.
- Kuroiwa, I. (2018). "ASEAN and Globalization" in *The ASEAN Community and Beyond*, edited by S. Manarungsan, S. Komolavanij and M. Kagami, Panyapiwat Institute of Management, Thailand.
- Rattanakhamfu, S. & Tangkitvanich, S. (2017). Challenges and Strategies of CLMV Investments by Thai Companies" in *Thailand plus One Corporate Strategy*, (in Japanese) edited by M. Ishida, S. Umezaki and Y. Yamada (Vol. 6, ERIA-TCER Series in Asian Economic Integration), Keiso Shobo, Tokyo.
- Tang, Z. (2018). "China and ASEAN" in *The ASEAN Community and Beyond*, edited by S. Manarungsan, S. Komolavanij and M. Kagami, Panyapiwat Institute of Management, Thailand.
- The Mainichi Shimbun. (2018). Japan to end official development aid to China. From https://mainichi.jp/english/articles/20181023/p2a/00m/0na/016000c
- World Bank. (2018). *Data, Research and development expenditure* (% of GDP). From https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS?view=chart

# THE MEDIATION ROLE OF EMOTIONAL LABOR BETWEEN JOB DEMAND AND TURNOVER INTENTION

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#### Abstract

The way in which frontline service employees interact with customers is crucial to service quality, so restaurant management pay much attention to "smiling service" job demand. High "smiling service" job demand increases frontline service employees' turnover intentions. Nevertheless, few literature explain how the relationships are investigated. Drawing on job demands-resources theory, this study applies emotional labor concept to illustrate the role of job demand on turnover intention, further demonstrating the specific process how the relationship is investigated in the restaurant industry.

This study built a conceptual model after literature reviewing, on-site survey was conducted and SEM model was adopted to test the hypothesis. This study found that the two dimension of emotional labor (surface acting and deep acting) played the mediation role of job demand and turnover intention respectively. The recruitment of employees should consider assessing the level of emotion resource. Restaurant management should increase job resource to help the frontline service employees better cope with smiling service job demand.

Keywords: Emotional labor, Job demand, Turnover intention

## Introduction

China is a big country with a large population. The restaurant industry plays an important role in the field of residents' consumption. The restaurant industry in China has experienced rapid growth for providing many job opportunities. Nowadays, restaurant industry faces hot competition from customization and globalization, the restaurant management pays much attention on gaining the good relationship with customers through delivering superior value, in order to survive the fierce competition. The superior value to customers is continuously and systematically developed through the adoption of "smiling service" job demand, which refers to the requirements that restaurant management asks frontline service employees to keep ardent attitudes and behaviors toward customers' demands (Chu et al., 2012). Over-emphasis on "smiling service" may evoke high job pressure that the frontline service employees may feel can't bear the long-time emotion demand, and may generate turnover intentions.

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High frontline service employee turnover rate badly damaged the service quality (Qureshi et al., 2012), and the expenditures on recruitment and training have increased substantially (Karatepe & Karatepe, 2009). The high turnover rate in the restaurant industry will lead to a great resources consumption. Low employee turnover rate will increase profits by reducing costs (Mendes & Stander, 2011). The restaurant management would expend resources to reduce employee turnover rate. The aim of this study is to explore the reason why employee turnover rate is high in restaurant industry. There were many researches gave the contributing factors to employee turnover intention. High job demand has been empirically supported as an antecedent which plays a positive role on employee turnover intention in various research studies (Nohe & Sonntag, 2014; Sims et al., 2016). In restaurant industry, high job demand mainly refers to emotion demand. According to job demands-resources theory, if the frontline service employees don't have enough resources to meet the job demand, they will generate turnover intention.

For the development and profitability of the restaurants, the frontline service employees have to obey the required display rules for hiding negative expressions and attitudes, showing warm and cordial expressions and attitudes. When interacting with a rude customer, the frontline employee is likely to detect the negative emotions of the rude/hostile customer and choose a regulation strategy accordingly (e.g., suppress their own negative emotions and fake a positive display). The frontline employees must hide their true feelings and emotions and show the demanded emotions for the sake of restaurant demand, that phenomenon is called emotional labor. This study calls the frontline service employees emotional laborers. Emotional laborers are viewed as the "faces" of their restaurants, and they try hard to adjust their inner emotions to adapt to display rules (Zablah et al., 2012). The frontline employees daily utilizes the demanding emotions in a long time of service interaction, so emotional labor an inevitable phenomenon in restaurant job.

After reviewing the relevant literatures, this study finds a research gap. There are few studies showing how job demand specifically act on turnover intention, especially ignoring the emotional labor concept in service job. "Smiling service" job demand and turnover intention and their connection with emotional labor have not been researched before. In order to fill the gap, this study intends to put emotional labor as the mediator to explain how "smiling service" job demand affect turnover intention.

Job demands-resources theory (JD-R theory) was adopted to explain the relationship between variables. This study built a research model among job demand, emotional labor and turnover intention. Through on-site survey, this study empirically verified the hypotheses in the model.

#### **Literature Review**

JD-R theory is a common used organizational theory (Babakus *et al.*, 2010) that all job factors can be divided into either job demands or job resources (Demerouti & Bakker, 2011). JD-R theory suggests that if outside resources don't match with job demands may require employees' individual resources to deal with job demand. Some jobs the frontline service employees performing will drain

their energies (job demand). JD-R theory suggests that employee's individual resources including their personality traits (Tremblay & Messervey, 2011), emotion adjust ability (Priya, 2012), job adaptability (Rich et al., 2010). When job demands and job resources are unbalanced, employees will feel job stressed and job burnout, and ultimately generate turnover intention (Bakker, 2015). Job demands include emotion requirement (Yoo & Arnold, 2016), behaviour requirement (Bakker, 2015). When working for a long time with smile, employees will feel emotional exhaustion (Van et al., 2010). Job resources can make up for lost resources caused by job demands (Babakus et al., 2009).

JD-R theory can well explain how frontline service employees in restaurant industry respond to "smiling service" job demand. High job demand will require frontline service employee to treat customers with smile in the working time. As the working time is normally so long in restaurant industry, that frontline employees' job resources, including the emotional and cognitive resources. If the frontline service employees don't have enough resources to deal with job demands, they tend to spend time and energy worrying about how they can avoid or manage this situation, the process will consume their resources (Babakus et al., 2010). When the job demand is high, the frontline service employees will adopt withdrawal-based coping mechanisms as they face resource loss, they have no enthusiasm considering customers' needs, they have perfunctory working attitudes, and they will generate turnover intention. Frontline service employees face high job demand will view their jobs as high burdened, and feel stressed, therefore, generate turnover intention. This study hypothesized that:

#### H1 Job demand is positively associated with turnover intention.

Emotional labor can be divided into two dimensions, surface acting and deep acting (McCauley & Gardner, 2016). Surface acting means that the inner feeling and outside expression is different, there is a "faking" expression. If the discrepancy between inside feeling and outside expressions keeps for a long time, employees will feel emotional dissonance (Grandey et al., 2013). Deep acting means although employees have negative feelings, but they will try to actively adjust their negative feelings to align with display rules (Grandey et al., 2013), contains a process of effort (Burch et al., 2013). Consistent with JD-R theory, high job demand will consume frontline service employees' emotional resources, when their emotional resources decrease and are inadequate to meet job demand, their automatic adjusting ability will decrease and they will decrease deep acting. Conversely, frontline service employees with insufficient emotional resources will be worried and dissatisfied about their jobs, low level of emotional resources in faking their emotions, their behavior only to cope with basic job demand, may lead to negative outcomes. When they face high job demand, they are inclined to adopt in surface acting because they don't have the natural fit with the display rules. This study hypothesized that:

## H2 Job demand is negatively associated with deep acting H3 Job demand is positively associated with surface acting

Employees adopt deep acting due to a mount of resources, and they have the ability to understand and adjust their emotions. In the service process, they try to stand in the customer's point of view, have compassion for the customer, and take the initiative to assess their own emotions. They use positive incentives to adjust their emotions, increase positive emotions to meet display rules. They think they are qualified for the job and don't want to quit. Employees adopt surface acting due to lack of resources, in order to meet the rules, they have to suppress their inner feelings and pretend to express positive emotions, and their displays are not consistent with their feelings, the process will drain emotional resources (Lings et al., 2014), they will consider quitting their job. This study hypothesized that:

H4 Deep acting is negatively associated with turnover intention H5 Surface acting is positively associated with turnover intention This study proposed conceptual model, which is shown in Fig.1.

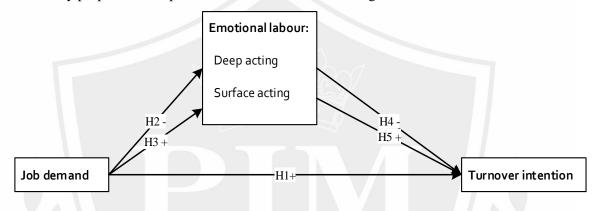


Fig. 1 Proposed conceptual model

#### Methods

The study adopted convenience sampling of high customer-contact employees of restaurants in Nanjing Road Walking Street, Shanghai. The author sent out 391 questionnaires on-site, finally, only 322 questionnaires were used.

All questionnaire items were measured on a 5-point Likert-type scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). Job demand with 3 items drawn from (Bakker et al., 2003). Surface acting and deep acting with 6 items drawn from (Groth et al., 2009). Turnover intention with 3 items drawn from (Mobley, 1982).

Descriptive statistical analysis, reliability analysis, confirmatory factor analyses (CFA), regression analysis were used.

#### Results

The demographic characteristics results were illustrated in Table 1:

Demographic information	Cotocom	Numbers	Percentage
Demographic information	Category	(N = 322)	(%)
Gender	Male	165	51.2
Gender	Female	157	48.8
	≤20	13	4.0
	21-30	132	41.0
age	31-40	107	32.0
	41-50	51	15.8
	≥50	19	5.9
	Junior school and below	6	1.9
Education qualification	High school	32	9.9
Education qualification	Junior college degree	105	32.6
	Bachelor degree	179	55.6
	0-1	26	8.1
Europianos in hospitality	2-3	146	45.3
Experience in hospitality	4-5	105	32.6
	≥6	45	14.0

Table 1	Characteristics	of the sample
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Reliability analysis results were illustrated in Table 2.

## Table 2 Reliability analysis

Variable	Number of items	Cronbach's Alpha	
Job demand	3	0.82	
Deep acting	3	0.84	
Surface acting	3	0.90	
Turnover intention	3	0.89	

CFA results were illustrated in Table 3.

## Table 3 CFA results

Variable	AVE	CR
Job demand	0.74	0.89
Deep acting	0.73	0.89
Surface acting	0.65	0.85
Job burnout	0.63	0.84

Discriminant validity analysis results were presented in Table 4.

Variable	М	SD	1	2	3	4
1. Job demand	3.44	1.02	0.86			
2. Deep acting	3.18	0.96	-0.32***	0.85		
3. Surface acting	3.67	1.02	0.44***	-0.38***	0.81	
4. Turnover intention	3.29	0.97	0.56***	-0.47***	0.19***	0.79

Table 4 Discriminant validity results

Notes:  $\beta$ =standardised coefficients; \*P<0.05, \*\*P<0.01, \*\*\*P<0.001

Mediating role of deep acting on job demand and turnover intention was illustrated in Table 5. Job demand was negatively associate with deep acting (F = 6.247, P < 0.001; $\beta$  = -0.322, P < 0.001). Job demand accounted for significant variance in turnover intention and the coefficient was significant ( $\beta$  = 0.560, P < 0.001), therefore, supporting hypothesis 1. Deep acting was negatively associate with turnover intention (F = 27.708, P < 0.001;  $\beta$  = -0.322, P < 0.001). Deep acting added significant variance to turnover intention (AdjR<sup>2</sup>= 0.415, F = 27.708, P < 0.001) and its inclusion in the model resulted in a drop in the coefficient of job demand (0.456 < 0.560), thus, deep acting played a partially mediating role on job demand and turnover intention.

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	Dependent variable	Dependent variable		
Independent variable	Deep acting	Turnover intention		
	ANYAMPIV	M1	М	
 Job demand	-0.322***	0.560***	0.456***	
Deep acting			-0.322***	
$AdjR^2$	0.122	0.324	0.415	
$R^2$	0.103	0.309	0.400	
F	6.247***	21.464***	27.708***	

 Table 5 Mediated regression analysis of deep acting

Notes:  $\beta$ = standardized coefficients;\*P<0.05, \*\*P<0.01, \*\*\*P<0.001

Mediating role of surface acting on job demand and turnover intention was illustrated in Table 6, job demand was positively associate with surface acting (F = 11.595, P < 0.001; $\beta$  = 0.455, P < 0.001). Surface acting was positively associate with turnover intention (F = 30.752, P < 0.001; $\beta$  = 0.383, P < 0.001). Surface acting added significant variance to turnover intention (AdjR<sup>2</sup>= 0.426, F = 30.752, P < 0.001) and its inclusion in the model resulted in a drop in the coefficient of job demand (0.389 < 0.560), thus, surface acting played a partially mediating role on job demand and turnover intention.

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	Dependent variable	Depender	it variable	
Independent variable	Surface acting	Turnover intention		
	M1	M1	M2	
Job demand	0.455***	0.560***	0.389***	
Surface acting			0.383***	
$AdjR^2$	0.197	0.309	0.426	
$R^2$	0.205	0.324	0.440	
F	11.595***	21.464***	30.752***	

#### Table 6 Mediated regression analysis of surface acting

Notes:  $\beta$ = standardized coefficients;\*P<0.05, \*\*P<0.01, \*\*\*P<0.001

#### Discussions

The findings of the study supplement JD-R theory, especially adds to the essence of emotional labor in service industry, and explains in detail how high job demands of frontline service employees in service industry lead to high turnover intention through emotional labor. The findings of the study have practical implications. Based on JD-R theory, emotion resource plays a more critical role in matching job demands. Frontline service employees with sufficient emotion resource are inclined to use deep acting to meet the "smiling service" job demand, and would not generate turnover intention. Frontline service employees lacking of emotion resources are inclined to adopt surface acting, and more likely to generate turnover intention. Therefore, the recruitment should consider assessing the level of emotion resource. Emotion control ability is a job resource, it means that the frontline employees with sufficient emotion resource can well understand the rules, well cope with job demands (Babakus et al., 2009).

Restaurant management should increase job resource to help the frontline service employees better cope with smiling service job demand. Restaurant management should build a good working environment, such as providing yummy food, equal promotion opportunities, recreation programs, harmonious atmosphere, and position autonomy (Jung & Yoon, 2014).

This study didn't add any variable as moderator in the conceptual model. Future studies may add in some job resource variables to test whether these variables can help frontline service employees better adjust their inner feelings and cope with smiling service job demand and decrease turnover intention. Job resource variables such as emotional intelligence, customer orientation, organizational support, peers support may added.

#### References

Babakus, E., Yavas, U. & Ashill, N. J. (2009). The role of customer orientation as a moderator of the jobdemand–burnout–performance relationship: A surface-level trait perspective. *Journal of Retailing*, 85(4), 480-492.

- Babakus, E., Yavas, U. & Ashill, N. J. (2010). Service worker burnout and turnover intentions: Roles of person-job fit, servant leadership, and customer orientation. *Services Marketing Quarterly*, 32(1), 17-31.
- Bakker, A. B. (2015). A job demands–resources approach to public service motivation. *Public Administration Review*, 75(5), 723-732.
- Bakker, A. B., Demerouti, E., Deboer, E. & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, 62(2), 341-356.
- Baron, R. M. & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Beal, D. J. & Weiss, H. M. (2003). Methods of ecological momentary assessment in organizational research. Organizational Research Methods, 6(4), 440-464.
- Burch, G. F., Batchelor, J. H. & Humphrey, R. H. (2013). Emotional labor for entrepreneurs: A natural and necessary extension. *Entrepreneurship Research Journal*, *3*(3), 331-366.
- Chu, K. H., Baker, M. A. & Murrmann, S. K. (2012). When we are onstage, we smile: The effects of emotional labor on employee work outcomes. *International Journal of Hospitality Management*, 31(3), 906-915.
- Demerouti, E. & Bakker, A. B. (2011). The job demands-resources model: Challenges for future research. *Journal of Industrial Psychology*, *37*(2), 1-9.
- Grandey, A., Foo, S. C., Groth, M. & Goodwin, R. E. (2012). Free to be you and me: A climate of authenticity alleviates burnout from emotional labor. *Journal of Occupational Health Psychology*, 17(1), 1-14.
- Groth, M., Hennig, T. & Walsh, G. (2009). Customer reactions to emotional labor: The roles of employee acting strategies and customer detection accuracy. *Academy of Management Journal*, 52(5), 958-974.
- Jung, H. S. & Yoon, H. H. (2014). Moderating role of hotel employees' gender and job position on the relationship between emotional intelligence and emotional labor. *International Journal of Hospitality Management*, 43, 47-52.
- Karatepe, O. M. & Karatepe, T. (2009). Role stress, emotional exhaustion, and turnover intentions: Does organizational tenure in hotels matter? *Journal of Human Resources in Hospitality & Tourism*, 9(1), 1-16.
- Lings, I., Durden, G., Lee, N. & Cadogan, J. W. (2014). Socio-emotional and operational demands on service employees. *Journal of Business Research*, 679(10), 2132-2138.
- McCauley, K. D. & Gardner, W. L. (2016). Emotional labor among West Texas Baptist Pastors: Potential threats to leader authenticity and lessons learned. *Monographs in Leadership and Management*, 8, 369-401.
- Mendes, F. & Stander, M. W. (2011). Positive organization: The role of leader behavior in work

engagement and retention. SA Journal of Industrial Psychology, 37(1), 1-13.

- Nohe, C. & Sonntag, K. (2014). Work–family conflict, social support, and turnover intentions: A longitudinal study. *Journal of Vocational Behavior*, 85(1), 1-12.
- Priya, K. R. (2012). Social constructionist approach to suffering and healing: Juxtaposing Cassell, Gergen and Kleinman. *Psychological Studies*, *57*(2), 211-223.
- Qureshi, M. I., Iftikhar, M., Abbas, S. G., Hassan, U., Khan, K. & Zaman, K. (2013). Relationship between job stress, workload, environment and employees turnover intentions: What we know, what should we know. *World Applied Sciences Journal*, 23(6), 764-770.
- Rich, B. L., Lepine, J. A. & Crawford, E. R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, *53*(3), 617-635.
- Sims, R. L., Ruppel, C. P. & Zeidler, P. (2016). Work strain, job satisfaction, and intention to quit: The moderating effect of long-term orientation. *International Journal of Stress Management*, 23(1), 23-29.
- Tremblay, M. A. & Messervey, D. (2011). The job demands-resources model: Further evidence for the buffering effect of personal resources. *Journal of Industrial Psychology*, *37*(2), 10-19.
- Yoo, J. & Arnold, T. J. (2016). Frontline employee customer-oriented attitude in the presence of job demands and resources: The influence upon deep and surface acting. *Journal of Service Research*, 19(1), 102-117.
- Zablah, A. R., Chonko, L. B., Bettencourt, L. A., Allen, G. & Haas, A. (2012). A job demands-resources (JD-R) perspective on new product selling: A framework for future research. *Journal of Personal Selling & Sales Management*, 32(1), 73-87.

STITUTE OF MANACEMEN

# THE EMPIRICAL STUDY ON THE INFLUENCING FACTORS OF INFORMATION CONSUMPTION OF UNIVERSITY STUDENTS IN "WE-MEDIA" ERA

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#### Abstract

With the increasing popularity of Internet in China, people pay more and more attention to information consumption. At the same time, the rapid development of the Internet also directly drives the development of mobile phone, a series of social applications to promote the advent of the era of "We-media". Therefore, we hold that the information consumption in the era of "We-media" is greatly influenced by other people, and it often shows different states and characteristics from that in the ordinary Internet environment. We further narrow the main body of information consumption, fixed it as a group of college students. A model of influencing factors of college students' information consumption is built, mainly referring to a general model for influencing factors of Information consumption under the Internet environment and Kotler's four dimensional factor analysis methods. Through sampling the data of the college students in the three university towns of Nanjing, Jiangsu Province, and using SPSS 19.0 to analyze the data, the influence factors and the weight of each factor are obtained. Through the analysis of the model, we find out the common problems of college students' information consumption: most college students are influenced by information consumerism. It shows that information dependence and technology indulgence and the deviation of college students' values in the process of information production. At last, we put forward the corresponding suggestions to these problems.

Keywords: Information consumption, "We-media" Era, College students

#### Introduction

In the 1990s, China was officially accepted as a country with Internet. Since then, the number of Internet users in China has been increasing day by day. With the continuous popularization of the Internet, the technology associated with the Internet is also continuously developing: the development of 4G/5G has made more and more devices that can access the Internet. The series of technologies and products are raising the tide of information consumption with great advantage. Information, as

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important consumer goods in the era of knowledge economy, has been paid more and more attention, and information consumption has become a new growth point of the national economy. It is estimated that China's information consumption scale reached 2.3 trillion in the first half of 2018, an increase of 15 percent over the same period, which is 2.2 times the growth rate of GDP in the same period <sup>[1]</sup>. It plays an important role in stimulating domestic demand, promoting employment and leading industrial upgrading.

At the same time, under the popularity of the Internet, mobile phone users have reached 788 million and the proportion of mobile phone Internet access continues to rise. In terms of social applications on mobile phones, We-Chat, QQ and Weibo have become the three major social application platforms. As the number of We-Chat and QQ continues to rise, the media age has spawned a new form-"We-media" era. The greatest feature of "We-media" era is that each individual is the publisher of information which to a large extent affects the consumers' purchase decision, and each consumer even can interact with the enterprise.

College students, as a very active group in the era of media, are keen on the consumption of information on the Internet, and prefer to publish their feelings of use on the media platform. Their information consumption behavior to a certain extent represents the overall trend of information consumption and the development trend in the future. However, because the college students are young and unable to distinguish much complex information in the network, they often form incorrect information consumption. Therefore, we hope to construct the model of influencing the information consumption factors of college students in "We-media" era, from which we can find out some problems existing in the information consumption.

#### **Literature Review**

## 1. Internet consumption in "We-media" era

With the development of science and technology, the spread of "We-media" is the media turn caused by "we-media", represented by Facebook, Twitter and Weibo. Dan Gillmor (2004) believed "we-media" is a way for ordinary people to begin to understand how they provide and share their own facts after they have been strengthened by digital technology and linked to the global knowledge system. Openness, ease of use, high efficiency and strong interaction are its most remarkable features.

The past purchasing behavior of consumers was driven by the demand for commodities. Consumers realize that there is a gap between the ideal state and the actual state, so they need to take further action. However, in "we-media" era, consumers' purchasing decisions have quietly changed. Purchasing decisions in "we-media" era have come from consumers' active attention to online information, such as WeChat, Weibo. Buying behavior is driven by other people's use experience and information provided by others stimulates internal consumer demand.

## 2. Information consumption

Spreng & Olshavshy (1997) thought Information consumption is the feeling, understanding and integration of information. Tao Ha (2001) believed Information consumption is the social activity that information consumer acquires information content, cognitions information content and reproduce information content <sup>[5]</sup>. We generally believe that information consumption is an economic activity that directly or indirectly takes information products and services as the object of consumption.

Through the collection of a large number of literatures, we summarize the motivation and present situation of college students' information consumption in "we-media" era. Information consumption decisions in "we-media" era have come from outside drivers, such as Weibo, WeChat. Due to the guidance of college students' group behavior and the spread of network culture, this external driving factor will be more intense. Finally, in "we-media" era, the content of college students' information consumption mainly includes two aspects: learning and entertainment.

## 3. Influencing factors of Information consumption

Tang (2016) thought the influencing factors of information consumption are personal factors (subject), information consumption product and service (object) and information consumption environment. Information products and services, which includes information consumption content, service hardware and service software satisfaction, account for the most important factors, followed by personal factors, and finally information consumption environment factors<sup>[6]</sup>.

Fu (2014) thought the framework of consumer behavior research includes consumer decisionmaking process, external environmental factors, and individual and psychological factors. Individual and psychological factors such as group psychology and comparison psychology are easier to influence consumer's purchase decision. In the environmental factor, the author focuses on cultural and social factors, such as traditional culture and the guidance of network group behavior<sup>[7]</sup>.

## Methods

## 1. The construction of conceptual model

After collecting a large amount of literature, we follow the traditional three-factor analysis of information consumption, plus Fu Guoqun's framework of consumer behavior research to study information consumption in the era of the media.

	Primary index	Secondary index
Subject factors	Personal factors	Demographic characteristics <sup>[6]</sup>
		Capacity to pay <sup>[6]</sup>
	psychological factor	Group psychology <sup>[7]</sup>
		Comparison psychology <sup>[7]</sup>
Object factors	Information consumption products	Information consumption content <sup>[8]</sup>

		Information consumption tool <sup>[8]</sup>
	Information consumption service	Information service satisfaction [8]
Environmental factors	Cultural factor	The influence of traditional Culture <sup>[7]</sup>
		The influence of network culture <sup>[7]</sup>
	Social factors	Network group behavior guidance <sup>[7]</sup>
		Information market <sup>[9]</sup>
		Laws, regulations and policies <sup>[9]</sup>

## 2. Questionnaire Design

In order to make the design of the questionnaire more scientific, we first conducted a group interview with eight college students and two university teachers. The contents of the interview are mainly the specific details of the variables of the message consumption influencing factors model. Through the understanding of the specific influencing factors of college students' information consumption and the discussion with two university teachers, some variables in the original model are modified. Finally, we decided on the design of the questionnaire.

## 3. Research Hypothesis

After an exploratory survey of the above panel interviews, we identify the basic variable settings and the questionnaire questions, and present the following assumptions: Each primary index is the main influencing factor of college students' information consumption, and each secondary index is positively related to university students' information consumption.

## 4. Data Collection

In order to ensure the comprehensive coverage of the sample, this sampling will take all the students in Nanjing as the sample frame. Because nearly 90% of the university students in Nanjing are in the three university towns, the sampling location is Xianlin, Jiangning and Pukou University City. We mainly selects ten universities, which include comprehensive colleges, science colleges, liberal arts colleges, pharmaceutical colleges and specialized colleges, covering a wide and comprehensive range.

250 questionnaires are expected to be extracted, and the average recovery rate of the questionnaires based on previous studies is 85%. Therefore, 300 questionnaires need to be distributed. The number of questionnaires issued by each university is based on the total number of students in each university. Finally, random sampling is adopted in each university to ensure the randomness of the sample. After a period of actual visits to various universities, the final actual number of questionnaires is 352. Through the screening of the questionnaires, some abandoned questionnaires are eliminated. The final valid questionnaires are 315, and the effective recovery rate of the questionnaires reaches 89.5%.

## Results

## 1. Reliability and Validity Analysis

The reliability and validity of influencing factors of college students' information consumption is analyzed by using SPSS. The output results are as follows. The reliability and validity of the data are all good.

	Cronbach α	Credibility	КМО	Bartlett teat Sig.
Subject factors	0.786	fairly good	0.604	.000
Object factors	0.685	acceptable	0.589	.000
Environmental factors	0.742	fairly good	0.715	.000

## 2. Regression Analysis

## **Table 3** Regression analysis

Dependent variable	Sig.	Conclusions
Demographic characteristics	0.000	Assumption is valid.
Capacity to pay	0.000	Assumption is valid.
Group psychology	0.000	Assumption is valid.
Comparison psychology	0.127	Assumption is invalid.
Information consumption content	0.000	Assumption is valid.
Information consumption tool	0.000	Assumption is valid.
Information service satisfaction	0.000	Assumption is valid.
The influence of traditional Culture	0.000	Assumption is valid.
The influence of network culture	0.000	Assumption is valid.
Network group behavior guidance	0.003	Assumption is valid.
Information market	0.245	Assumption is invalid
Laws, regulations and policies	0.000	Assumption is valid.

In this paper, the regression analysis function of SPSS is used to verify whether the primary index and its subordinate index are relevant and whether the theoretical hypothesis is valid, so as to determine the influencing factors of college students' information consumption.

From the above table, we can clearly see that the P value of "comparison psychology" and "information market" is bigger than 0.1, so these two indexes are not positively related to college students' information consumption. Other items are positively related to college students' information consumption.

## 3. Factor Analysis

The main factors that affect the information consumption of college students have been identified. If we want to study them in depth, it is not enough to determine these factors, but also to determine the weight of each factor. In this paper, the factor analysis function of SPSS is used to get the variance contribution rate of principal component, then normalize it and calculate the weight of each principal component.

Element		Initial eigenvalu	e	Extra	ct sum of squares	and load
	Summation	% of variance	Grand total %	Summation	% of variance	Grand total %
1	3.617	25.839	25.839	3.617	25.839	25.960
2	3.371	24.080	49.919	3.317	24.080	49.919
3	1.616	11.542	61.461	1.616	11.542	61.461
4	1.230	8.786	70.247	1.230	8.786	70.247

 Table 4 Explain the total variance

Four main components in the table are Information service satisfaction, psychological factors (group psychology), environmental factors (cultural and social factors) and network group behavior guidance, whose variance contribution are 25.839%, 24.080%, 11.542% and 8.786%. Normalize it and get the weight of the four factors. The results are as follows:

Information service satisfaction: 25.839 / (25.839 24.080 11.542 8.786) = 0.36;

Psychological factors (group psychology): 24.080 / (25.839 24.080 11.542 8.786) = 0.34;

Environmental factors (cultural and social factors): 11.542 / (25.839 24.080 11.542 8.786) = 0.17; Network group behavior guidance: 8.786 / (25.839 24.080 11.542 8.786) = 0.13

According to the weight of each factor, the satisfaction degree of information service is the most influential factor among the four principal components. Secondly, it is the influence of crowd psychology, culture and social factors and network group behavior.

## Discussions

The factors influencing the information consumption of college students are demographic characteristics, capacity to pay, group psychology, content and tools of information consumption, the satisfaction degree of information service, cultural and social factors. The most influential indexes are information service satisfaction, group psychology, cultural, social factors and network group behavior guidance.

Through the analysis of the above data, we find that there are common problems in college students: (1) College students' Information consumption requires higher information service in "we-media" era. (2) College students' Information consumption is easily influenced by group psychology and internet group behavior in "we-media" era. (3) The content of college students' information consumption is mostly entertainment.

#### Conclusions

There are many problems in the information consumption of college students, which shows that the information consumerism has already appeared. Youth information consumerism is the blindness in the process of obtaining information and the deviation of values in the process of information production <sup>[10]</sup>. Based on these problems, we must give cultural guidance to information consumption behavior and help students develop correct consumption values.

First of all, college students should pay more attention to cultivating the correct View of Information consumption. College students in "we-media" era have both as communicators and consumers, so they participate in the information society with good morals. College students could not only restrain themselves, but also realize their own responsibility, and take on the responsibility of building a good information society.

Next, the guidance of the people around them is also important, the most important of which are parents, teachers, friends or classmates. Parents should lead by example and influence college students' concept with their own good consumption behavior. Teachers should advocate the moderate consumption of students through education. As friends and classmates, we should be friends of positive energy, with our own positive energy to influence our classmate around us, so as to guide college students to civilized consumption.

#### References

- China Internet Network Information Center. (2018). *Statistical report on the Development of Internet in China*. Retrieved from http://www.cac.gov.cn/2018-08/20/c\_1123296882.htm
- Dan, G. (2004). *We the Media Grassroots Journalism by the people, for the People.* Retrieved from http://oreilly.com/openbook/wemedia/book/index.html
- Fu, G. (2014). Consumer Behavior Theory. Beijing: Higher Education Press.
- State Internet information office of the People's Republic of China. (2018). *The three-year action on expanding and upgrading information consumption* (2018-2020). Retrieved from http://www.miit.gov.cn/n1146295/n1652858/n1652930/n3757022/c6309188/content.html

Ta, H. (2001). Information consumption in the age of knowledge economy. Business Studies, (7), 6-8.

Takses, S. O. (1997). The Frequent Information Consumer. Dissertation.

- Tang, D. (2016). An empirical study on the influencing factors of College students' Information consumption. Master thesis, Heilongjiang University, China.
- Xiao, F. (2009). Discuss information consumerism. Jiangxi social science, (5), 55-62.
- Zhang, Y. (2013). Research on the influencing factors of College students' Network Information consumption. Master thesis, An Hui University.
- Zhang, Y. (2015). Research and empirical analysis of influencing factors of Chinese college students' network information consumption. Master thesis, Heilongjiang University.

# THE INTER-RELATIONSHIP BETWEEN CUSTOMER EXPERIENCE VALUES AND CUSTOMER LOYALTY IN VIRTUAL BRAND COMMUNITY

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## Abstract

This study aims to explore the correlation between customer experience values and customer loyalty in virtual brand community. This study is a quantitative research and the instruments used were questionnaires. The sample includes 538 Chinese students in different universities in Bangkok. The data were collected by multi-stage random sampling technique. Path analysis was employed as the hypothesis testing tool. The structural equation modeling (SEM) was used to test the customer loyalty model for virtual brand community. The result showed that: 1) practical value is associated with community loyalty; and brand loyalty positively; 2) entertainment value is associated with community loyalty and brand loyalty positively; 3) social value associated with community loyalty and brand loyalty positively; 4), community loyalty is positively associated with brand loyalty.

Keywords: Customer experience value, Community loyalty, Brand loyalty

## Introduction

With the development of social media and digital technique, virtual brand community has become an efficient platform of value co-creating and co-sharing between companies and customer, customer and customer (Schau, 2009). In the virtual brand community, customer experience value were reached by means of communication with other members of the community, and companies get intangible and tangible profits by means of supplying information, services and any other consumer needs to customer. From the perspective of customer, value of customer needs is the value of co-creating and co-sharing. Customer experience value in virtual brand community is a kind of "communicative, relative and preferred experience (Holbrook, 2006)".Customer loyalty is the key to develop the virtual brand community sustainable. Also the customer loyalty become the most important, the most valuable and the most stable property in platform. However the researchers have shown different arguments, (Huang, 2015) and several studies were done on customer loyalty in virtual brand community in terms of defines and measurement index. They studied customer loyalty in different focuses, such as "the correlation

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between customer experiences and customer loyalty in virtual brand community". Different arguments studied customer experience values in virtual community, but it is lack of the study to the interrelationship among them, so, this study focused on the interrelationship among customer experience value and customer loyalty in virtual brand community. Virtual brand community is the virtual community equipped with brand, customer perceived experience value or benefits could become loyalty. Virtual brand community is the common carrier of brand and community, in virtual community, what kinds of factors influence to customer loyalty? From perception of virtual brand community, how the customer value creating and sharing communicating value drives the customer loyalty? What is the inter-relationship between the customer experience values and the brand loyalty?

#### **Literature Review**

There are amount of studies in customer loyalty influencing factors, customer value is one of the important factors influencing customer loyalty has been recognized, for example, Blackwell et al., (2009) argued value—loyalty model and Ryan (2011) argued double drive model. But customer experience value is different to customer value, some academic focus on experience drives to customer loyalty, for instance, We Qinggan (2013) study customer loyalty in medical service industry, the results reflected practical value hand entertainment have positive to customer loyalty. Customer experience value in virtual brand community: virtual brand community is the value, co-creating and sharing platform and customer is the core of value creating and sharing, and who experiences the value. Different researchers have different perspectives to customer experience value in virtual brand community, and found five perspectives in the literature. They are: information value, financial value, social communication vale, image value and entertainment value (Jin, 2007); four perspectives: function value, knowledge value, society value and mood value (Wei, 2013); three perceptions: function value, society value and entertainment value (Sicilia & Palazon, 2007; Ma, & Yang, 2014); two perceptions: practical value and virtual value (Overby, & lee, 2006; Zhang, 2012). Therefore, this study adapts three perceptions as the research perceptions that is to define customer experience values in virtual brand community into practical value, entertainment value and social value. Customer loyalty was defined as the purchase and repurchase decision making on basic of customer satisfaction to products or services (Oliver, 2009), which means the definition of brand loyalty. With the development of internet and virtual brand community, customer loyalty is developed to internet customer loyalty, community loyalty and so on. Therefore, in virtual brand community customer loyalty means the response between customers and community. This study defines customer loyalty of virtual brand community into community loyalty and brand loyalty.

The influence of customer experience value to community has been verified. Wang (2011) studied the non-trade virtual brand community that has reflected that the perceived value of customer in virtual brand community has positive influence to community loyalty. The virtual brand community is one of

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the types of communities, practical value (information value), entertainment value and social value have positive influence to virtual brand community theme (Jin, 2007). Experience value is the core target of customer taking part in virtual brand community, for the non-limited in space and time, therefore, it is assumed their experience value co-creating and co-sharing and perceiving in virtual brand community is positively associated with their loyalty to community.

The virtual brand community features in the themes of brand, which has become the platform building customers loyalty to brand. Furthermore, customer experience value is the key to drive brand loyalty. Kim et al., (2004) argued customer have loyalty to the internet web community on condition getting information value and practical value. Positive entertainment experience drives entertainment value for customer, the entertainment experience in virtual brand community positively influence to brand loyalty (Huang,2015), thus it is assumed entertainment is associated with brand loyalty positively.

More and more companies construct the non-trade relationship between companies and customers, brand and customer by means of setting up and management to virtual brand community, furthermore, to target at constructing the selling and buying relationship, aiming at benefits and profit of companies (e.g. MI group, Alibaba group). As the important media of informal word of mouth, virtual brand community is influencing more and more customer brand attitudes and its effectiveness to influence customer attitude and behavior to brand by promoting brand and products in the platform. Thus, there is a correlation between community loyalty and brand loyalty. The above literature were expression to the customer loyalty in virtual brand community, and the relationships among the customer experience values and customer loyalty, which can be the basic theory to the frame work of this study

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#### **Research Objectives and Hypotheses**

In light of the above theory analysis, this research aims to study 1), the interrelationship among customer experiences value and brand loyalty and virtual brand community and 2) to set up the strategies strengthening customer experience value, and constructing brand loyalty for internet companies. Hence, the hypothesis of this research are designed as following:

- H1: Practical value is positively associated with community loyalty;
- H2: Practical value is positively associated with brand loyalty;
- H3: Entertainment value is positively associated with community loyalty;
- H4: Entertainment value is positively associated with brand loyalty;
- H5: Social value is positively associated with community loyalty;
- H6: Social value is positively associated with brand loyalty;
- H7: Community loyalty is positively associated with brand loyalty (See figure 1).

## **Research methodology**

**Questionnaires development:** this study aims at the virtual brand customer loyalty; the data was collected through questionnaire. In light of reading and referring to abundant of academic literature, 9 questions related to customer experiences value and 7 questions related to customer loyalty are finalized

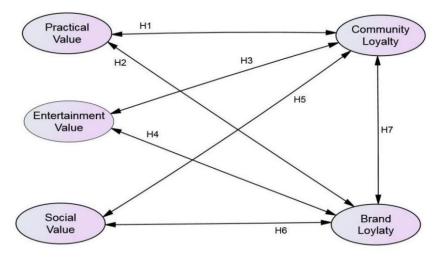


Figure 1: The conceptural framework

(See table 1)

## Table 1 Questionnaires development

Dimension	Sub-dimension	Items in sub-dimension	Reliability
	Practical value	3(PV1,PV2,PV3)	α= .868
Customer experience value	Entertainment value	3 (EV1,EV2,PV3)	α= .831
สเ	Social value	3(SV1,SV2,SV3)	α= .845
	Community loyalty	3 (CL1,CL2,CL3)	α= .821
Customer loyalty	Brand loyalty	4 (BL1,BL2,B3,BL4)	α= .892

**Data collection:** the data collection was started from March 1<sup>st</sup> and ended at August 30<sup>th</sup>, 2018. The measurement table of this study was designed on "Questionnaire star Website. The respondents are Chinese students in Bangkok, and the sample can response the features of customer in virtual brand community. In order to get correct data, the questionnaire was distributed in two ways: first, taking part in the social media, such We-chat and QQ community, secondly, putting the questionnaire on the web

forum, members of virtual brand community could answer questionnaire freely. The missed samples through online questionnaire were deleted in order to ensure the quality of the data. This study tested and kept track the time of answering the questionnaire, in average, 4.5 minutes for answering the questionnaire. 538 samples were kept after deleting ineffective questionnaires. "Likert" 5 scales with agree level from 1=Very disagree, 2= Less disagree, 3=Agree, 4= More agree, 5= Very agree, were hired in this survey.

**Statistical analysis tools:** descriptive and explanation were employed in this study. Structural equation modeling (SEM) was hired to examine the conceptual model and associated hypothesis under the literature review. Soft ware SPSS Version 22 and AMOS 22 version were employed as the tools of measurement in this study, Maximum likelihood estimation (ML) method was employed for theory testing and developing the conceptual model and hypotheses and an overall test of model fit.

**Structural equation modeling fits:** Confirmatory factor analysis (CFA) was employed to test the measurement model that set of observed (indicator) variables identified the hypothetical latent construct and confirming theory generated model. All indices of hypothesis model exceed acceptable standards of model showed a good fit to the data (See figure 2 and table 2).

Model goodness-of-fit statistics	Acceptable levels Criteria	Hypotheses model
Chi-square PA	NYAPIWA	213.289
DF	ITUTE OF MANAGEME	85
CMINDF	<3	2.509
p-value	>0.05	p=.713
GFI	>0.90	.954
AGFI	> 0.90	.927
RMR	< 0.08	.042
RMSEA		< 0.08
MINDF	<3	2.509
CN	> 200	271

Table 2 Structuring equation modeling fitting

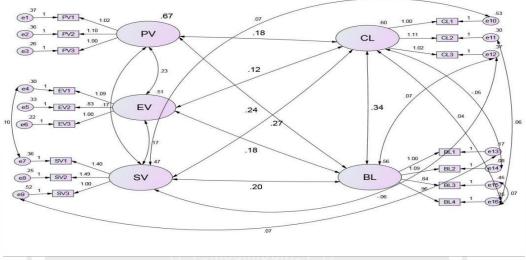


Figure 2 The hypothesis analysis result

#### Results

The hypotheses mode for the study fitted data well as above. All structural paths shown in the model were statistically significant at p< .001. Structural paths and their estimates were summarized in table 7 with results of hypotheses test. The results indicated: practical value is associated with community loyalty positively, (H1: $\beta$ =0.281); and brand loyalty positively (H2: $\beta$ =0.393); entertainment value is associated with community loyalty positively (H3: $\beta$ =0.214); and brand loyalty positively (H4: $\beta$ =0.339); social value associated with community loyalty positively (H5: $\beta$ =0.506); and brand loyalty positively (H6: $\beta$ =0.387); community loyalty is positively associated with brand loyalty ( $\beta$ =0.591) (See table 3).

Table 3 Summary of structural paths and hypothesis test results, standardized estimates (Correlations
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Hypotheses	В	etween	Standard Estimate	t-value	Hypotheses support
H1	PV	CL	.281	5.281**	Accepted
H2	PV	BL	.393	7.501**	Accepted
Н3	EV	CL	.214	4.03**	Accepted
H4	EV	BL	.339	6.487**	Accepted
H5	SV	CL	.506	7.321**	Accepted
H6	SV	BL	.387	6.938**	Accepted
H7	CL	BL	.591	9.173**	Accepted

Significant \*\*p<0.001

**Demographic profile of respondents:** The profiles of the sample are insisted of gender, marriage, education backgrounds, times in virtual brand community per week, details are as indicated in table 4.

Profles of s	Frequency	Valid percent	
Gender male		260	48.3
	female	278	51.7
Age	<23	246	45.7
	23-27	196	36.4
	27-35	66	12.3
	>36	30	5.6
Marriage	Married	195	36.2
	Single	327	60.8
	Others	16	3
	>26	A 32	5.9
Education backgrounds	undergraduate	EMEN 211	39.2
	graduate	173	32.2
	postgraduate	154	28.6
Times in virtual community	< 3	237	44.1
per-week	4-8	246	45.7
	>8	55	10.2
	Total	538	100

## **Discussions and Recommendations**

Customer value is the key to success marketing, firstly, it is the things that consumer needs, wants and demands, secondly, it is the profit that companies get return from consumer as the profit of the companies. In digital age, with the development of techniques, such as the mobile internet, the boundaries between online and offline will be cut, so that customers' experience value online and offline will be in the same dimension, supply the value that consumer need and want is the key to construct customer loyalty, in other words, the future research should be focused on strengthening the customer experience values by ways of increasing consumer engagement.

This study only exlored the virtual community brand community from perspectives of internet in personal computer, which leads this study ignored the most important trends of internet, the mobiel internet, in other words, the mobile internet has become reality of internet system, the virtual brand community that installed on mobile internet, defenitly, will be the fields for future research.

It is highly recommended that for companies who supply products and services to consumer, especially, for internet companies to construct strategy of customer loyalty on the foundation of the interrelationship among the customer experience value and the virtual brand community.

#### **Conclusions and Implications**

The final structural model that is equipped with a good fit with observed data, statistically supported by major goodness-of-fit indices. The results of this study showed in virtual brand community, the three dimensions of customers' experience value, namely practical value, entertainment value and social value. All structural paths shown in the model were statistically significant at p<.001. Structural paths and their estimates summarized in table 3 with results of hypotheses tests. The result showed: Practical value correlated with community loyalty and brand loyalty. Entertainment correlated with community loyalty lightly but correlated with brand loyalty significantly. Social value correlated with community and brand loyalty at a very significant level. Community loyalty correlated with brand loyalty at a high level.

For constructing brand loyalty toward customer, in light of the results of this study, an integrated model with the empirical testing should be developed, focus on practical value and social value in virtual brand community the practical value, social value should be put in the priority in the virtual brand community, thirdly, community loyalty in virtual brand community should be gained by promoting practical value and social value.

In nutshell, in the course of putting the research into practice, it is efficient to equip the practical value, entertainment value and social value into the constructing and building of virtual brand community for internet companies.

### References

- Brown, A., Adams, J. D. & Amjad, A. A. (2007). The relationship between human capital and time performance in project management: A path analysis. *International Journal of Project Management*, 25(1), 77-89.
- Blackwell, S. A. & Szeinbach, S. L. & Barnes, J. H. (2009). The antecedents of customer loyalty [J]. *Journal of Service Research*, 1(4), 362-375.

- Huang, M. & Liao, J. (2015). Community Experience Promote Customers'Brand Loyalty—Study to different system of different element function [J]. *Nankai Management Theory*, *18*(3), 151-160.
- Holbrook, M. B. (2006). Consumption experience, customer value, and subjective personnel introspection: An electroencephalographic. *Business persons Research*, *59*(6), 714-725.
- Jin, L. (2007). The value Perspective of Virtual Brand Community to Community Sense, Loyalty and Action of Member. *Science of Management*, 20(2), 36-45.
- Kim, W. C., Chang, L. & Hiemstra, S. H. (2004). Effects of an online virtual brand community on customer loyalty and travel products purchase [J]. *Tourism Management*, 25(3), 343-355.
- Li, C. (2014). A study to value creating and sharing in virtual brand community in perspective of *customer's participation*. Doctoral Dissertation, Bei Jing Post University.
- Ma, Y. J. & Yang, D. J. (2014). Intercommunication affect to experience value in service—the adjust function of brand value. *Economic Management*, (6), 86-89.
- Oliver, R. L. (2009). Satisfaction: A behavioral perspective on the consumer [J]. Asia Pacific Journal of Management, 2(2): 285-286.
- Overby, J., W. & Lee, E. J. (2006). The effects of utilitarian and hedonic online shopping value on consumer preference and intention. *Journal of Business Research*, 59(10-11), 1160-1166.
- Ryan, M. J., Rayner, R. & Morrison, A. (2011). Diagnosing customer loyalty drivers. *Marketing* research, 11(2), 19-26.
- Schau, H. J., Muniz, A. M. & Arnould, E. J. (2009). How brand community practices create value [J]. Journal of Marketing, 73(5), 30-51.
- Sicila, M. & Palazon, M. (2008). Brand communities on the internet: A case study of coca-cola, Spanish virtual community. Corporate Communications: An International Journal, 13(13), 255-270.
- Wang, F. (2011). Study to non-trade virtual brand community customer loyalty influencing elements. *Journal of Management*, 8(9), 1339-1344.
- Wei, Q. (2013). A theory research and practical analysis to Customer experience value creating and sharing influencing. *Hebei Industry Science*, *30*(6), 407–413.
- Zhou, Z. (2013). *Study to customer loyalty in perspective of social network*. Doctoral Dissertation, Bei Jing Post University.

# RESEARCH ON COLLEGE-GRADUATE VILLAGE OFFICIALS COMPETENCY AND JOB SATISFACTIONS

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#### Abstract

With the gradual expansion of the ranks of college-graduate village officials, it is particularly important to improve their job satisfaction, reduce their turnover intention, and provide reserve forces for the construction of the new socialist countryside. In this paper, we take college-graduate village officials in Jiangsu Province as the research object, to explore the mechanism of action between their competency, perceived organizational support (POS) and job satisfaction. Data collection was done through online questionnaire survey. Research shows that (1) there is a significant positive correlation between the competency of college-graduate village officials and their job satisfaction (2) the perceived organizational support plays a mediating role between the competency of the college-graduate village officials and their job satisfaction, (3) perceived organizational support is positively correlated with job satisfaction of college-graduate village officials.

**Keywords**: College-graduate village official, Competency, Job satisfaction, Perceived organizational support

#### Introduction

Since the 17th CPC National Congress, the work of college-graduate village officials has entered the stage of growth from germination. The purpose of training college-graduate village officials is to serve the construction of the new socialist countryside. Due to the complexity and particularity of rural work, the competency of college-graduate village officials has an important impact on rural construction. At present, most of the academic research on college-graduate village officials focuses on the employment problem of village officials who end their official term and they always face the anxiety of choosing a new job after their expiration. It's necessary to study the satisfaction of college-graduate village officials. From the perspective of the competency of college-graduate village officials, this study studies the relationship between the three variables including competency, perceived organizational support and job satisfaction to improve their job satisfaction and reduce their job burnout and strengthen

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their more effective role in building new rural areas.

## Literature Review and Research Hypothesis

Cai (2012) believed that the competency of university student village officials consists of five dimensions: personal characteristics, self-improvement ability, work attitude, political literacy and interpersonal communication ability. Referring to previous research results, in this paper we adopt the multi-dimensional structure of the competency which is composed of six dimensions including knowledge, social role, skills, personality, motivation and self-concept (Tan, 2013).

Eisenberger (1986) first proposed the concept of perceived organizational support. He believed that this support would increase employees' emotional dependence on the organization, make greater efforts to achieve organizational goals. Through empirical research Ling (2006), a Chinese scholar, found that the dimension of domestic employee' perceived organizational support contains three dimensions: job support, employees' value identification and concern for interests. Based on the needs of China's national conditions, this study refers to Ling Wenquan's three dimensions of the POS.

In 1912, Taylor first proposed the concept of job satisfaction, and then Hoppck (1935) summarized previous studies to define job satisfaction as the workers' psychological and physiological feelings about the work environment and their work. The job satisfaction of university student village officials discussed in this study is multidimensional, which is based on their physical and mental perception of the village officials' work from four aspects: their policy and management, the work itself, the work relationship and the work return.

Since Mc Clelland (1973) put forward the concept of competency, the research on competency has been developed rapidly and applied fully. Wang (2014) trained 324 nurses for job competency. Through comparison, it is found that the post competency management model plays an important role in improving the job satisfaction of nursing staff. Ye (2017) indicated that their competency was positively correlated with their job satisfaction. To sum up, we propose the hypothesis.

 $H_1$  there is a significant positive correlation between the competency of college-graduate village officials and their job satisfaction,

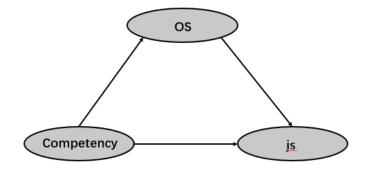
Since Eisenberger proposed the sense of organizational support in 1986, the academic circle has conducted extensive research around this concept. Li (2013) found that perceived organizational support plays a completely intermediary role in career development cognition and job satisfaction. Shen (2018) also found that organizational support plays a mediating role between sincere leadership and prosperous work. Based on the above, we take university student village officials as the object of study, to explore the mechanism of perceived organizational support in their competency and job satisfaction. And we put forward the following assumptions.

H<sub>2</sub> the competency of college-graduate village officials has a significant positive impact on their perceived organizational support

H<sub>3</sub> the perceived organizational support has a significant positive impact on job satisfaction of

university student village officials.

H<sub>4</sub> the perceived organizational support plays a mediating role between the competency of the village officials and their job satisfaction.



## Methods

## 1. Data sources

The sampling range of this study is Jiangsu province. Among the respondents, 35.1% were from southern Jiangsu, 38.78% from central Jiangsu, and 26.12% from northern Jiangsu. And the respondents in the three regions are basically balanced. A total of 245 valid questionnaires were obtained in this survey. The method of data collection is mainly online questionnaire survey. The statistical results of the samples are shown in Table 1.

Project	INS Category OF MANA	Number	Percentage (%)
Sex	Male	156	63.7
	Female	89	36.3
	21-25	83	33.9
Age	21-30	157	64.1
	Above30	5	2.0
	The communist youth league member	24	9.8
Politics Status	Probationary party member	18	7.3
CILI	Communist party member	202	82.4
	Citizen	1	0.4
Registered permanent City		60	24.5
residence	Town	68	27.8
	Country	117	47.8
Education Background	Undergraduate	228	93.1
	Postgraduate	17	6.9
	Science	44	18.0
Major	Engineering course	58	23.7
	Arts	143	58.4
Years as a village	Less than one year	54	22
official	1-2 years	55	22.4
	More than 2 years	136	55.5

Table 1 The demographic characteristics and	composition of effective samples (N=245)
rubie i ine demographie characteribrieb and	composition of effective sumples (1, 210)

## 2. Validity of Variable Measurement (Reliability Analysis)

It is necessary to make technical evaluation on the questionnaire in order to verify whether the used questionnaire can accurately measure the research variables. In this study we used SPSS to analyze the reliability of the scale. The main reference index was Cronbach's Alpha coefficient. The closer the coefficient was to 1, the higher the reliability of the questionnaire was. From Table 2, the Cronbach's Alpha coefficients of competency scale, perceived organizational support scale and job satisfaction scale are 0.956, 0.966 and 0.974 respectively, which shows that the three scales have high internal consistency and reliability.

Variable name	dimension	Number of test questions	Cronbach's Alp	ha coefficient
Competency	Knowledge	3	0.793	0.956
	Skills	6	0.889	1
	Social role	4	0.774	
	Self-concept	2	0.607	
	Personality	3	0.875	
	Motivation	4	0.870	1/ NY.
Job Satisfaction	The policy and	4	0.872	0.966
	management			
	Work itself	IA5 IV	0.910	
	Work relationship	JTE OF <b>M</b> anagem	0.929	
	Work return	6	0.932	
Perceived	Job support	10	0.961	0.974
Organizational	Value	6	0.932	
Support	identification		0.	
	Interests concerns	7	0.930	

## Table 2 The reliability test of questionnaire

## 3. Validation of Data Suitability

In the case that the reliability of the scale reaches the standard, we need to test the validity of the scale in subsequent analysis. Before the factor analysis, we used the KMO and Bartlett to test whether the data was suitable for factor analysis. In general, KMO is greater than 0.6, and the closer it is to 1, the higher the data quality indicates that it is more suitable for factor analysis, while the Bartlett test is judged by P less than 0.05. According to table 3, KMO of the three scales are very close to 1, and P is less than 0.05. Therefore, factor analysis can be done.

		Competency scale	Perceived	Job satisfaction	
			organizational	scale	
			support scale		
KMO sample		0.945	0.961	0.940	
measurements					
Bartlett's	Chi square	4150.663	5959.270	5057.442	
test of	Degree of	231	253	231	
sphericity	freedom				
	Significance	0.000	0.000	0.000	
	level				

Table 3 Validation of KMO and Bartlett in the scale

## 4. Validation of Data Suitability

## 4.1 The Analysis of the Exploratory Factors

The results of the analysis about competency scale's exploratory factor show that we took 6 common factors whose characteristic roots are greater than 1 to explain 76.928% of the total variance. The common degree of all items was above 0.623. Factor loads range from 0.584 to 0.858. The confirmatory factor analysis results of the second-order six factor model are  $\chi^2/df = 4.259$ , NFI=0.933, RFI =0.912, CFI=0.966, RMSEA=0.116.

The results of the analysis about job satisfaction scale's exploratory factor show that we took 4 common factors whose characteristic roots greater than 1 to explain 74.709% of the total variance. The common degree of all items was above 0.624. Factor loads range from 0.574 to 0.823. The confirmatory factor analysis results of the second-order four-factor model are  $\chi^2/df=4.259$ , NFI=0.933, RFI=0.912, CFI=0.966, RMSEA=0.116.

The results of the analysis about perceived organizational support scale's exploratory factor show that we took 3 common factors whose characteristic roots greater than 1 to explain 75.160% of the total variance, and the common degree of all items was over 0.630. Factor loads range from 0.574 to 0.877. The confirmatory factor analysis results of the second-order four-factor model are  $\chi^2/df=3.947$ , GFI=0.927, RFI=0.938, CFI=0.987, RMSEA=0.110.

The above results show that the questionnaire has good validity.

## 4.2 The Validation of Hypothesis

This study used AMOS17.0 to verify the above hypothesis. Based on hypothesis 1, we constructed a direct function model for the competency and job satisfaction of college-graduate village officials. Through hypothesis 2 and hypothesis 3 we can test perceived organizational support's mediating effect between the competency of the college-graduate village officials and their job

satisfaction. The results of model fitting are shown in table 3.

Fitting Index	X <sup>2</sup> /df	CFI	IFI	NFI	TLI	RESEA
Model 1	3.742	0.946	0.952	0.923	0.932	0.107
Model 2	4.090	0.935	0.935	0.916	0.918	0.113

 Table 3 Fitting index of structural equation model

According to figure 1, the standardized path coefficient of competency to their job satisfaction is 0.91, which means that the competency of college-graduate village officials has a significant positive influence on their job satisfaction. And hypothesis 1 passed the test.

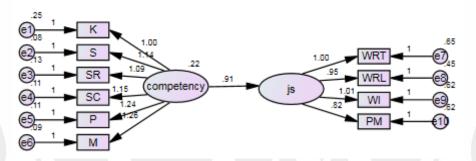


Figure 1 Estimation of the effect of the college-graduate village officials' competency on their job satisfaction

It can be seen from figure 2 that the standardized path coefficient of perceived organizational support to job satisfaction was 0.89, which indicates that perceived organizational support has a significant positive influence on the job satisfaction of college-graduate village officials.

The standardized path coefficient of competency to their organizational support is 0.70, which means that the competency of college-graduate village officials has a positive impact on their perceived organizational support. The standardized path coefficient of job satisfaction and perceived organizational support was 0.89 which means perceived organization play positive effect on job satisfaction, and the standardized path coefficient of competency to organizational support was 0.70. The results show that perceived organizational support plays a mediating role between the competency and job satisfaction of college-graduate village officials, and the mediating effect was 0.623 (0.89\*0.70). Hypothesis 2, hypothesis 3 and hypothesis 4 passed the test.

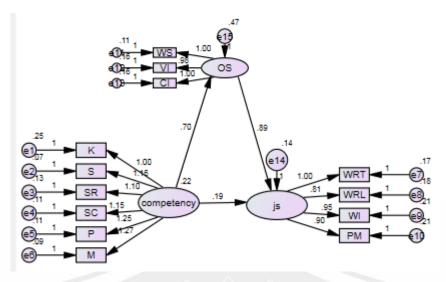


Figure 2 Estimation of the mediating effect of perceived organizational support on the competency of college-graduate village officials and their job satisfaction

## Conclusions

Research shows that (1) there is a significant positive correlation between the competency of college-graduate village officials and their job satisfaction (2) the perceived organizational support plays a mediating role between the competency of the college-graduate village officials and their job satisfaction, (3) perceived organizational support is positively correlated with job satisfaction of college-graduate village officials.

In practice, it is necessary to train college-graduate village officials, establish a complete training system and improve the organizational policy which can be implemented on the ground to improve the competency of them

## **Limitations and Avenues for Future Research**

The limitations of this study can help identify directions for future research on this topic. First, the data of this study is centralized in the same period, and future research can focus on vertical development, so as to draw more convincing conclusions. Second, this study did not go deep into the influence between the specific dimensions of each variable, and later studies could go deeper into the specific dimensions themselves. In the future, we can explore more mediating variables or moderating variables, such as psychological capital, job pressure, job burnout and other variables.

#### References

Cai, Q. Shen, X. & Li, W. (2012). Development and Application of evaluation indexes of college village officials' competency [J] *Theory and reform*, (01), 99-102.

Eisenberger, R., Huntington, R., Hutchison, S. & Sowa, D. (1986). Perceived Organizational Support. *Journal of Applied Psychology*, 71(3), 500-507.

- Han, J. (2017). *Research on the working behavior and incentive mechanism of college student village officials*. Northwest University of Agriculture and Forestry Science and Technology.
- Li, M. & Huang, Y. (2013). The impact of organizational career management perception on job satisfaction—the intermediary effect of perceived organizational support. *Human Resources Development in China*, (17), 73-77.
- Ling, W. & Yang, H. & Fang, L. (2006). Perceived organizational support for enterprise employees. *Journal of psychology*, (2), 281-287.
- Shen, L., Zhang, R. & Yu, L. (2018). Research on the influence of sincere leadership on the prosperous work of employees—multiple mediating effects of organizational support and psychological capital. *Soft Science*, 32(4), 90-94.
- Tan, H. (2013). A preliminary study on the competency model of university student village officials.Chongqing technology and Business University.
- Wang, J. & Liu, Z. (2018). The impact of perceived organizational support on the conflict between work and family conflict: the intermediary effect of teachers' competency [J]. *Education Research Monthly*, (11), 65-70.
- Wang, M. (2014). Impact of position competency management model on job satisfaction of nursing staff. *Hospital Management* BBS, 2014, 31(11), 54-56.
- Ye, B., Zheng, Q., Dong, S., Liu, L., Fang, X. & Cao, C. (2017). The impact of competency on the job satisfaction of primary school principals in rural areas: the mediating effect of leadership effectiveness and career identity. *Psychological Development and Education*, 33(3), 306-312.
- Zhou, J. & He, G. (2018). Sense of perceived organizational support and job satisfaction and turnover intention: mediating mechanism of the conflict between work and family. *Commentary on Business Studies of Nantah University*, (2), 159-175.

### THE STUDY ON THE GUIDANCE OF INTERNET PUBLIC OPINION UNDER THE NOISE INTERFERENCE

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### Abstract

It is an important part for media to guide public opinion. While in complex network environment, mixed messages will interfere the guidance of Internet public opinion, which is the main source of environmental noises. In order to study the guidance of Internet public opinion under the noise interference, we analyze the features of media and environmental noises, then propose an evolution model of public opinion viewpoint, and some computer simulations are provided to demonstrate the different influence between media, noises and both of them. The result of the experiment shows that media have important influence in the guidance of Internet public opinion. Noises not only have uncertainty interfere on opinion interaction, but also affect the process of media guidance.

**Keywords:** Evolution of Internet public opinion, Media guidance, Noise interference, Heterogeneous bounded confidence

### Introduction

With the rapid development of the Internet and the increasing number of netizens, the complication of public opinions environment bring new challenges to the government. How to make the guidance of Internet public opinion more effective is a crucial problem. Ye (2016) think the traditional media guidance can't pose the challenge from the popular and differentiating Internet, and the various styles of new media guidance is indispensable. Considering that Weibo is a vital platform for the Internet public opinion, we pay attention to the study on the guidance of Internet public opinion through the Weibo media.

### **Literature Review**

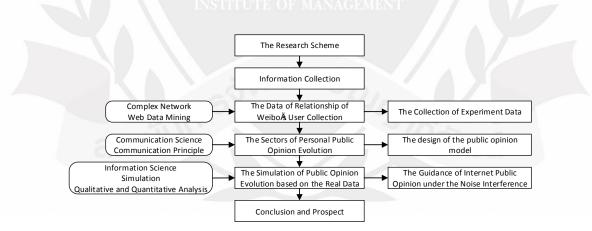
Recent years the study on the media guidance of Internet opinion, which based on the complex

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networks theory, become more and more popular. Zhu (2013) designed an public opinion propagation model under the media guidance, which based on the SEIR model. The factors of media quantity and report strength were taken into account. Zhu also had the opinion that the media guidance plays facilitating roles on opinion propagation and propagation scope. Pu (2015) think that the intervention of media accelerate the information propagation and enhance the influence of media, which promoted the cognition of people to some emergencies. Zhang (2015) think that media guidance involve strength degree and division degree. She build an Internet opinion propagation model. Cao (2019) find the frequency of media report will limit the guidance result. Crokidakis (2012) designed a Sznajd model which proved the final opinion will converge under the guidance of media. We can find that the research are lack of the systematically study in the evolution of Internet public opinion. In the real world, the media is not simple plays a propagation role, but do this by the way of point and sphere integration.

In the complicated environment, voting power is not only hold by media, but also hold by normal netizens. The noises of environment become a crucial problem in the propagation process, which caused by the easy information publishing right. Han (2012) believed that noise interfere the process of transferring information. Kong (2013) also think noise is an interference factor. Ye (2019) analysis the sectors of netizen, media and government and pay attention to the game among them.

On the basis of the above, we will firstly analysis the features of Weibo media and noise, then design the guidance of Internet public opinion model under the noise interference, which based on the heterogeneous bounded confidence, and then in order to find out the inner mechanism of Internet opinion evolution under the influence of media and noisy. The technology roadmap is as follows.



Picture 1 The technology roadmap

### The Analysis of Weibo Media and the Feature of Noisy Environment

### Weibo Media

Netizens are the main part of the Internet opinion evolution. During the process, the people's

opinion will change over time. As the guidance of Weibo public opinion, media not only promote netizens to know the ins and outs of the matter, but also the people opinion subconsciously guided by them. For the "Super-node" feature of media, we defined three attributes to media.

### (1) The Strength of Guidance

The strength of guidance is used for describing the influence of media to netizens. They will be affected by several factors, such as age, sex, profession and experience, which will make them have difference reaction under the difference strength of guidance.

### (2) The Range of Guidance

The range of guidance is used for describing the proportion of netizens who are guided successfully. r describes the proportion of media guidance, data range is [0,1]. When r = 0, media have no affect to the netizens. When r = 1, the range of guidance is the whole network. The bigger range of guidance, the more netizens are affected. Remarkable achievements have been made in this process.

### (3)The Time of Guidance

The time of guidance is used for describing how long the media used in the guidance. In order to increase guidance efficiency, the media will try to achieve a better result in a shorter time. The shorter guidance time can help to decrease the cost of media, and a better result can ensure the public opinion remains stable after the media exit.

### **Environmental Noise**

The propagation of social media adequately represents the feature of Web2.0, which is information sharing. Everyone can become a user-operated media, everyone can become the informational producers and consumers, and everyone can share and spread the information in social networks. Nowadays, Weibo is a breeding ground for the redundant information, fake news and rumors. It results from the feature of user-operated media, anonymity and virtual environment. The noise interference makes the process of propagation more complicated.

In the process of guidance, the environmental noise presents an uncertainly circumstance, such as fake information, zombie fans, junk information. Milliken (1987) think the reason of uncertainty is lack of information which can predict the external environment. Under the propagation mode, the environmental noise exponentially increase and we can hardly control. The group of netizens fall into the information asymmetry.

### The Model of the Guidance of Internet Public Opinion under the Noise Interference

### Noisy Heterogeneous Bounded Confidence Model

We design the model based on the rules of bounded confidence, a social network have N nodes, every nodes  $i(=1,\dots,N)$  has the opinion  $x_i(t) \in [0,1]$  at  $t \in \{0,1,\dots\}$ . The original opinion  $x_i(0)$  obeys random uniform distribution. According to an evolution rule, the opinion of nodes will update. If the opinions difference within the threshold  $\varepsilon$  (the level of confidence), the nodes will exchange views. The Deffuant-Weisbuch (DW) bounded confidence model (2010) and Hegselmann-Krause (HK) bounded confidence model (2002) are the representative research. There are many extended research in recent years. Si (2009) study the evolution features of nodes in the coupling network. Song (2016) study the interactive influence of network structure and confidence threshold.

The difference between intrinsic attributes (age, sex, professional knowledge and so on) and extrinsic attribute (the degree of impact, fact judgment and so on) makes the nodes have different acceptable level that the information come from media, environmental noise and neighbors. Nodes is heterogeneous. When the opinion of node equals 0, which is completely opposed to the Internet public events; when it equals 1, which completely support to the Internet public events.

### The Setting of Related Variables

Before designing the model, we should set some related variables.

When people face different guidance from media, the different people have different confidence. Because of that, the formula in detail is different. The confidence generally fall into two categories, the one is to neighbor confidence, and the other is to media confidence. While, *confidence*  $_A$  is the node *i*'s confidence to its neighbor. According to the paper of Pu Jiaohua (2015), we set the people's confidence like this,

confidence 
$$A = e^{-\frac{w}{f(x)}}$$

While, f(i) is the real number of fans from node  $i \cdot w$  is constant, with the bigger w, the confidence of people is smaller. The data range of *confidence* A is [0, 1], the smaller *confidence* A, which presents the node i have more confidence to its neighbor.

*confidence* M is the confidence of node *i* to media opinion, the data range of *confidence* M is [0, 1], which obeys normal distribution. When the node *i* face the media opinion, the smaller *confidence* M, the bigger confidence it has.

 $M_T$  presents the media's effected time to Internet opinion, and the MO is the media's

opinion to Internet public opinion.

 $\xi_i(T)$  is the strength of environmental noise which the node *i* exposed at *T* time steps.  $\xi_i(T)$  obeys normal distribution. The bigger standard deviation it have, node *i* is exposed to the serious environmental noise, and vice versa.

 $M\_impact$ ,  $A\_impact$ ,  $N\_impact$  present the node effected by media, by neighbors and by environmental noise respectively. They all obey normal distribution, and the data range is [0,1].

 $\varepsilon_i$  and  $\varepsilon_j$  present the confidence threshold of node *i* and node *j*. On the basis of Deffuant-Weisbuch (DW) bounded confidence model. In order to ensure the model have the aggregation trend during the evolution process, the data range is [0.5, 1]. The confidence of every nodes will have the same probability, and this variable will obey normal distribution. In the case of heterogeneous bounded confidence, the confidence of every node can different from each other, which means  $\varepsilon_i$  and  $\varepsilon_j$  is equality or inequality.

### The Design of Opinion Evolution Rules

Noisy heterogeneous bounded confidence model have 2 stages about the opinion rules.

In the first stage, if  $T \le M_T$ , the netizens opinion is effected by the synergy of media and noise interference.

$$O_{i}(T+1) = O_{i}(T) + \sum_{j}^{n} u_{ij}(O_{j}(T) - O_{i}(T)) + k(MO - O_{i}(T)) + N_{impact}\xi_{i}(T)$$

In the second stage, if  $T > M_T$ , the netizens opinion is just effected by noise interference.

$$O_{i}(T+1) = O_{i}(T) + \sum_{i}^{n} u_{ij}(O_{j}(T) - O_{i}(T)) + N \_impact\xi_{i}(T)$$

where,

$$u_{ij} = \begin{cases} A\_impact \times (1-confidence\_A), if |O_j(T)-O_i(T)| \le \varepsilon_i \\ 0, if |O_j(T)-O_i(T)| > \varepsilon_i \end{cases}$$
  
$$k = M\_impact \times (1-confidence\_M)$$

We assumes that the media can guide the Internet public opinion quickly after the emergency. The media opinion value MO = 1, the nodes in the network can evolve their opinion independently after  $M_T$  time steps and the media exit. In the first stage, the network is effected by media and noise interference, the opinion of node *i* is  $O_i(T)$ . By this time, according to the range of guidance *r*, corresponding proportion of nodes will effected by media opinion MO, environmental noise  $\xi_i(T)$ and neighbor opinion  $O_j(T)$ . The other nodes are just effected by the environmental noise and neighbor node. The node *i* will update its opinion to  $O_i(T+1)$  at T+1 time steps. In the second stage, the media exit, and the nodes will update their opinion under the noise interference.

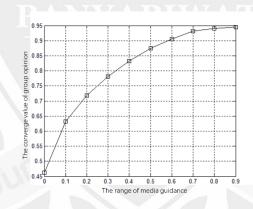
### **Simulation Experiments and Simulation Results**

The data we used in simulation experiments was collected from Sina Weibo. The Network has 1488 nodes, the average clustering coefficient is 0.114, the total sides are 16324, the average degree is 10.970. The network accords with the feature of small-world network and power-law distribution.

### 1. The Analysis of the Media Guidance to Internet Opinion

This part studies the social network is just effected by media. The strength of media  $M\_impact$  obeys normal distribution in [0.1, 0.5]. While the Weibo social network is under the media control, the value of node opinion greater than 0.7, which presents the node agrees the opinion, we can call it "positive-node".

We set the media opinion value MO = 1, and decrease the uncertainty effect by repeated experiments. The simulation result is Picture 2.



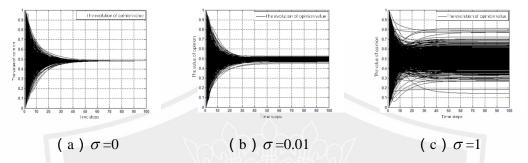
Picture 2 The effect of range of media guidance to the converge value of group opinion

From the Picture 2, we can find that the netizens' convergence opinion is bigger, when the range of media guidance expands. When the range of media guidance is [0, 0.2], the slope of curve greater than 1. When is [0.7, 0.9], the slope of curve less than 0.1. The greater range of media guidance have a better result, but the margin effect break down. With the environment take a turn for the better, the number of "positive-node" tend to be stable and increased.

### 2. The Noisy Disturbing Effect to the Evolution of Internet Public Opinion

In this part, Weibo social network is effected by environmental noise. The experiment control the strength of noise by the way of increasing the standard deviation  $\sigma$  of noise, than study the opinion evolution and convergence of nodes.

The max time steps T = 100, if the opinion of group can't converge within 100 time steps, we think the opinion of group can't make consensus.



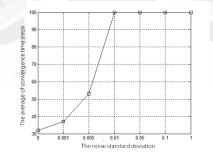
Picture 3 The evolution process of public opinion under noise interference

From Picture 3 (a), the time of netizens opinion consensus is 30 time steps when there are no environmental noise. The final convergence opinion is 0.4956, the group of nodes will have a "public opinion". The case of weak-noise (the standard deviation  $\sigma = 0.01$ ) and strong-noise (the standard deviation  $\sigma = 1$ ), from the Picture 3 (b) and (c), the time of convergence is 50 time steps or no converge. The opinion of nodes is located in [0.45, 0.55] and [0.15, 0.85]. With the increasing of noise, the public opinion is hardly make consensus, even having the unordered evolution and unordered opinion. The environmental noise have disturbing effect to the Internet public opinion evolution process.

### The Guidance of Internet Public Opinion under the Noise Interference

Synthesizes 1 and 2, on the one hand, different noisy confidence to the opinion convergence are compared, on the other hand, the netizens final opinion are under guidance or not are compared.

The simulation results are showed in Picture 4.

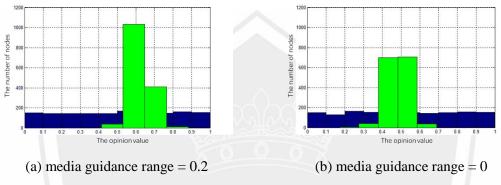


Picture 4 The effect of noise interference to the average of convergence time steps

With the increasing standard deviation of environmental noise, the convergence of time step increase rapidly. The group opinion come to converge at 32, 38 and 54 step, when the noisy standard deviation  $\sigma = 0,0.001$  or 0.005; While the noisy standard deviation  $\sigma = 0.01, 0.05, 0.1$  or 1, the group

opinion can't come to converge, the difference of opinion bigger than 0.1 at 100 time steps. The noise interference effect become stronger and the drop in media guidance efficiency in this case.

When the noisy standard deviation  $\sigma \ge 0.01$ , the group opinion can't converge with 100 time steps. We choose standard deviation  $\sigma = 0.1$  (the group opinion can't converge) to the experiment parameter, which in order to study the final opinion distribution under the strong noisy interference case.



Picture 5 The effect of media to the netizens final opinion value

From the Picture 5, we can find the final opinion distribution have significant differences under media guidance or not. When media guidance range = 0.2, Picture 5 (a) can increasing final opinion distribution, which compared with Picture 5(b). We can know that media can help the opinion guidance under the strong noise interference case, but the effect decrease. The group opinion will deviate the normal and decentralize.

### The Analysis of Experiment Results

(1) When the media guide the Internet public opinion, the wider range of media, the higher final opinion value, but the marginal guidance results is decreasing. We suggest that media should set proper range of guidance. In order to increase the guidance efficiency, media can do this by the way of point and sphere integration.

(2) The longer time of media guidance, the more number of nodes whose value of opinion trend to the media. If the time of guidance more than 25 time steps, the Internet environment will improve, the media guidance results will continually optimize. If the time of guidance less than 25 time steps, the Internet public opinion will rebound or continue to deteriorate.

(3) When the noise interference is stronger, the network can't make the group opinion under control rely on media guidance alone. The government need to reduce the harm which relies on the other methods.

### **Conclusions and Discussions**

Although the noise interference in Weibo and other social network is everywhere, we can take some detail actions to control it, such as decreasing the source of noise, increasing the nodes immunity to noise interference. Specifically, the government can increase the regulations about water army and zombie fans, strictly control the behavior of batch sending, advocate the civilization to get online; build a harmonious Internet atmosphere; the related government sectors are supposed to release first-hand real information in due course, decreasing the uncertain of information acquiring. There are still some limitations in this study, such as the problem of noise attenuation. In order to solve this problem, we will study the effect of feedback of users to media in the future.

### References

- Cao, H. & Li, M. (2019). Simulation Analysis of Coping Strategies for Public Opinions on Social Networks Based on System Dynamic-----Taking the Yabuli Incident as example. *J/OL*, *1*, 1-6.
- Crokidakis, N. (2012). Effects of mass media on opinion spreading in the Sznajd sociophysics model. *Physica A Statistical Mechanics & Its Applications, 391*(4), 1729-1734.
- Deffuant, G., Neau, D. & Amblard, F. (2000). Mixing Beliefs among Interacting Agents. *Advances in Complex Systems*, *3*, 87-98.
- Han, H. & Zhao, H. (2012). The Study on new media noise in Weibo based on the fission propagation. Modern Communication (Journal of Communication University of China), 7, 105-109.
- Hegselmann, R. & Krause, U. (2002). Opinion Dynamics and Bounded Confidence: Models, Analysis and Simulation. *Journal of Artificial Societies and Social Simulation*, 5(3).
- Kong, Y. & Yang, L. (2013). The study on the process of group decision opinion evolution under the noise interference. *Statistics & Decision*, *11*, 45-48.
- Milliken, F. J. (1987). Three types of perceived uncertainty about the environment: state, effect, and response uncertainty. *Acad Manag Rev, 12,* 133-143.
- Pu, J. & Zhu, H. (2015). Topic evolution models of Internet public opinions influenced by media. Journal of Nanjing University of Posts and Telecommunications (Social Science), 17(2), 46-50.
- Si, X., Liu, Y., Ding, F. & Xiong, F. (2009). Research on Bounded Confidence Consensus Emergency Model with Community Structure. *Journal of System Simulation*, 23, 7644-7647.
- Song, Y. & Liu, R. (2016). The Reciprocal Effect of Network Structures and Bounded Confidence on Group Opinion Evolution. *Soft Science*, *1*, 120-144.

- Ye, Q. Y., Xia, Y., Zhang, P., Lan, Y. & Wang, Q. (2019). The Evolution Mechanism and Simulation of Internet Public Opinion for Emergent Events Facing Big Data. *Information Science*, 37(1), 80-93.
- Ye, Z. (2016). The difference adaptive tendency and the new structure of accelerating public opinion guidance from the Internet propagate viewpoint. *Jiangsu Social Science*, *3*, 1-9.
- Zhang, L. & Zhao, K. (2015). Study on the Internet Public Opinion Dissemination Model with Discussion under the Effect of media. *New Technology of Library and Information Service*, 11, 60-67.
- Zhu, H., Liu, K. & Lu, Z. (2013). Study on Topic Propagation Model of Internet Public Opinion under the Influence of the Media. *New Technology of Library and Information Service*, *3*, 45-50.



### A STUDY ON THE SPILLOVER EFFECTS OF CHINA'S MONETARY POLICY ON THAILAND UNDER THE BELT AND ROAD INITIATIVE

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### Abstract

In the context of the implementation of Belt and Road Initiative, the SVAR model is built in this paper to study the spillover effects of China's quantitative monetary policy and price-based monetary policy on Thailand through impulse response function and variance decomposition. It has been found that China's monetary policy has spillover effects on Thailand's economy and the spillover effect direction of each economic variable is different; compared with the quantitative variations of China's monetary policy, the spillover effects by price variations of China's monetary policy on Thailand's economy is more obvious, which means that China's monetary policy has an apparently decisive impact on Thailand's output, but a relatively weak spillover effect on interest rate. Finally, suggestions are made from the monetary policy's international coordination, participation in reform of international monetary system and promotion of RMB internationalization.

Keywords: Belt and Road Initiative, monetary policy, spillover effects, China and Thailand

### Introduction

Good relationships between countries need to be based not only on close economic connections and institutionalized cooperation, but also on the formation of common values in a real sense between countries. It has been more than four years since the Belt and Road Initiative was proposed in 2013 and Thailand has intended to align the Eastern Economic Corridor plan and other economic strategies with Belt and Road Initiative to promote the economic transformation in Thailand. Thailand is a key junction country in the Belt and Road Initiative and it can connect with both Maritime Silk Road and Land Silk Road. Thailand will play an important role in the future Asian integration system. The scale of economic exchanges between China and Thailand is continuously expanding and their interest relationship is becoming increasingly close, which is very beneficial to realize the goals of Belt and Road strategy. If intending to increase the convergence of interests, China and Thailand should carry out further strategic cooperation and synergy to pursue for common development and build community with shared future for mankind. Over the past four decades, the scale of economic exchanges and common interests

Corresponding Author: Zhi Zhu E-mail: 627096114@qq.com between the two countries have been continuously increased, laying a solid foundation for the joint construction of the Belt and Road.

#### **Literature Review**

According to Hmada & Sakuri (1978), the domestic price will fluctuate after monetary policy adjustment, which will lead to the fluctuations in prices and output of other countries: firstly, the fluctuations in prices of imported investment products will affect the demands and output of other countries; secondly, the imported goods become more expensive, which will force other countries to raise salaries and prices; thirdly, the imported goods become more expensive and the trade condition changes, which will lead to the fluctuations in trade balances and influence the balances and foreign exchange reserves of other countries.

Kim (2010) found out that US's expansionary monetary policy will lead to actual increase in output of the other G7 members, which resulted in a positive spillover effect. By establishing a general dynamic equilibrium model between two countries, Beningno & Beningno (2016) discovered that the substitution elasticity of commodities in the current and intertemporal period determines the spillover effect of monetary policy on output from trade output channel. Miyakosh & Jalolov (2015) studied the causal impact of US interest rates and money supply on currency-revenue in Asia and which variable has the strongest effect. With more than 50 Belt and Road countries and regions as study objects, Huang Xian et al. (2017) used the high-frequency event study method to discuss how their exchange rates and interest rates would react to the adjustment of the Chinese monetary policy. Incorporating trade credit into the analysis framework of monetary policy transmission mechanism, Lu, Wang & Jin (2008) has proved by empirical tests that China's monetary policy mainly affects trade balances through "trade credit" and "affecting trade credit through exchange rate".

## Research Methods and Model Illustration

In this paper, SVAR model will be built and used to discuss how China's quantitative and pricebased monetary policies affect Thailand's economy through impulse response function and variance test.

### 1. SVAR Model

Founded by Sims & Bernanke (1986), this model can reflect the structural relations between different variables and take the simultaneous influence relationship of different variables into account. In terms of the transmission effect of monetary policy, it can identify the currency shock under the least restrictive conditions and explore how the adjustment of monetary policy causes other variables to change through impulse response function and variance decomposition.

The SVAR model with the common n elements and the lag order of P can be described as (Huang & Xia, 2016):

$$BY_{t} = A_{0} + A_{1}Y_{t-1} + A_{2}Y_{t-2} + \ldots + A_{p}Y_{t-p} + u_{t}$$
(1)

Where B represents the n-order coefficient matrix with the main diagonal line of 1, A represents multivariate coefficient matrix with n-order lag operator, and  $u_t$  represents stochastic disturbance terms.

### 2. Model Illustration

Taking 2013 when the Belt and Road Initiative was proposed as the intermediate time node, the relevant data from 2009 to the first quarter of 2017 have been collected for analysis on a quarterly basis. The raw data for the relative exchange rate between RMB and Thai Baht comes from the statistics published by IMF. Other data sources in this paper include macroeconomic database of WIND, CEIC, Central Bank of Thailand and TRENDING ECNOMICS. The meaning of each variable is shown in Table 1 below:

Variable	Meaning			
Money supply and economic indexes of China				
M2	Year-on-year growth rate of Chinese currency M2			
RAT_CH	China's benchmark one-year deposit rate			
GDP_CH	Year-on-year growth rate of China's GDP			
	Economic indexes of Thailand			
GDP_TL	Year-on-year growth rate of GDP			
CPI_TL	Comparative growth rate of CPI			
EXC_TL	Comparative growth rate of Thai Baht against RMB			
RAT_TL	Thai money market rate			
UN_TL	Unemployment rate			

Т

### 3. Data Stationary Test

Considering that the spillover effect of monetary policy is not a presentation of economic equilibrium in an open environment, it is not advisable to build a model based on non-stationary data, and moreover, the SVAR model requires stationary sequence data. The KPSS method is used to complete unit root test. It can be known from the analysis of data in Table 2 that only UN\_TL variable is non-stationary, so this variable has been removed when creating the model.

Variable	LM	Results
M2	0.1537***	Stationary
RAT_CH	0.0832***	Stationary
GDP_CH	0.3541***	Stationary

Table 2 Unit Root Test Results

GDP_TL	0.0833***	Stationary
CPI_TL	0.1342**	Stationary
EXC_TL	0.0531**	Stationary
RAT_TL	0.0988**	Stationary
UN_TL	0.3325*	Non-stationary

Note: "\*", "\*\*", "\*\*\*" indicate that the original hypothesis cannot be rejected at the significant levels of 1%, 5% and 10%, respectively, and the data are stationary.

### 4. Determination of Model's Lag Order

The stable VAR model is the premise of the effective SVAR model. In the empirical research, the year-on-year data of quantitative monetary policy M2 and benchmark one-year deposit rate of pricebased monetary policy are studied and thus, the variables of M2 and RCA are brought into the model, namely:

$$y_t = \{GDP\_CH, M2 / RAT\_CH, GDP\_TL, CPI\_TL, EXC\_TL, TAT\_TL\}^T$$
(2)

According to formula (2), the lag number of the VAR model is determined and the model stability test is performed. Finally, it is obtained that the lag phase of M2 is 2, and taht of RAT\_CH is below.

### Empirical Analysis on Spillover Effects of China's Monetary Policy on Thailand

### 1. Identification of SVAR Model

In order to identify this model, n (n-1)/2 constrain conditions must be attached to matrix B, so the analysis of economic theory is needed. In the first part of this paper, the year-on-year growth rate of China's GDP is applied; in the second part, the year-on-year growth rate of M2 or benchmark one-year deposit rate is applied; in the third part, the macro variable of Thailand is applied; based on the order of GDP, exchange rate, CPI, interest rate and unemployment rate, the SVAR system with recursive features is created and B represents the lower triangular matrix to obtain the n(n-1)/2 constrain conditions. At this point, it can be determined that the constrain matrix of SVAR model is:

### 2. Analysis of Results of Impulse Response Function and Variance Decomposition

The impulse response function provided by Eview 6.0 and the variance decomposition method are used to explore how Chinese monetary policy affects Thailand's economy.

### 2.1 Impact of M2 Shock on Spillover Effects in Thailand

Table 3 shows the value of impulse response function between a standard deviation's impact of M2 and Thailand's GDP growth rate. Through analyzing this table, the spillover effect direction and

extent of a standard deviation's shock of M2 (the increase in M2 represents an expansive currency shock) on Thailand's output can be known.

Period	3-month	6-month	9-month	1-year	1.5-year	2-year	3-year	5-year
Output	-0.0983	0.0042	0.0315	0.0412	0.0433	0.0241	0.0042	0.0031
Exchange Rate	-0.0078	-0.0071	-0.0312	-0.0420	-0.0171	-0.0038	0.0026	0.0004
Inflation	-0.0085	0.0022	0.0053	0.0051	0.0042	0.0031	0.0012	0.0002
Interest Rate	-0.0082	-0.0113	-0.0116	-0.0098	-0.0084	-0.0071	-0.0007	0.0017

Table 3 Values of Impulse Response Function between M2 Shock and Spillover Effect of Thailand

### 2.2 Impact of RAT\_CH Shock on Spillover Effects in Thailand

Table 4 shows the value of impulse response function between a standard deviation's shock of RAT\_CH and GDP growth rate of Thailand. Through this table, the spillover effect direction and extent of a standard deviation's shock of RAT\_CH (increase in RAT\_CH indicates a tight currency shock) on Thailand's output can be known.

 Table 4 Values of Impulse Response Function between RAT\_CH Shock and Spillover Effect of

 Thailand

Period	3-month	6-month	9-month	1-year	1.5-year	2-year	3-year	5-year
Output	-0.0113	-0.2242	-0.2115	-0.1432	-0.7413	-0.5211	0.0913	0.0532
Exchange Rate	-0.0088	-0.2371	0.3342	0.7410	0.1141	0.1538	0.0326	-0.0424
Inflation	-0.0083	-0.0232	0.1653	0.1751	-0.1644	-0.0131	0.0772	0.0237
Interest Rate	-0.0072	0.0573	0.0596	0.0598	0.0784	-0.0271	-0.1457	-0.0467

### **3.** Analysis of Empirical Results

The empirical test results of the spillover effects of China's quantitative monetary policy and price-based monetary policy on Thailand's major economic variables are shown in Table 5. In the table, "-" represents that the shock of China's monetary policy variable has a negative spillover effect on a certain variable of Thailand and "+" represents a positive spillover effect. And "a, b, c, d, e" represent the levels of spillover effect, "a" refers to a contribution rate of less than 1%, meaning that the spillover effect is very small; "b" refers to a contribution rate between 1% and 10%, meaning that the spillover effect is large; "d" refers to a rate between 30% and 50%, meaning that the spillover effect is larger; "e" refers to a contribution rate more than 50%, meaning that the spillover effect is great.

**Table 5** Direction and Level of Spillover Effect of China's Money Supply Expansion and InterestRate Rising on Thailand

	Output	Exchange Rate	Inflation	Interest Rate
expansion of money	-→+ ; b	-→+ ; b	-→+ ; a	-→+ ; a
supply				
increase of interest rate	-→+ ; e	-→+→- ; e	$\rightarrow \rightarrow \rightarrow \rightarrow \rightarrow \rightarrow +; e$	-→+→- ; c

### 3.1 Spillover Effects of China's Quantitative Monetary Policy on Thailand

It can be confirmed by the analysis of Table 5 that if Thailand does not adjust its monetary policy, in the long run, there will be a positive impact on Thailand's output, mainly because the impact of income absorption effect of Thai monetary policy is stronger than export increase, and thus there is a constant and positive spillover effect. The negative impact of China's money supply expansion on Thailand's relative exchange rate will lead to a decline in exchange rate and Thailand's currency revaluation. From a long-term perspective, Thailand's exchange rate will be increased because both governments will regulate the exchange rate, increase money supply and rise domestic inflation rate, which is consistent with the conclusion of empirical study of inflation. As China increases its money supply, in the short term, Thailand's export, income and prices will all reduce, resulting in a reduction in inflation. After a period of time, the authorities in Thailand will strengthen control of exchange rate, increase money supply increase on Thailand's interest rate is mainly negative and only after three years it will become positive. The reason is that China's money supply has increased and interest rate has reduced; while the interest rates in Thailand and China are inconsistent, capital will flow in at a large amount, resulting in lower interest rate.

### 3.2 Spillover Effects of China's Price-based Monetary Policy on Thailand

It can be confirmed by the analysis of Table 5 that from the viewpoint of output, there will be a negative impact on Thailand's output within three years if China's benchmark one-year deposit rate increases and the GDP growth rate and output of the latter one will reduce; after three years, Thailand's GDP growth rate and output will begin to increase, showing a positive spillover effect. In this case, the expenditure transfer effect is stronger than the income conversion effect. From the perspective of exchange rates, in the short run, Thailand's currency revaluation will continue for a long time because the interest rate increase of China has led to changes in exchange rate. The exchange rate will reduce in the later period because the relevant departments in Thailand will take measures to avoid large fluctuations in exchange rate and reduce money supply. From the perspective of inflation, China's interest rates will increase in inflation. From a medium and long term perspective, China's implementation of tightening monetary policy will have an impact on output and Thailand's price level and inflation rate will reduce. From the perspective of interest rates, China's interest rate will increase in the short

term and the capitals of both countries will flow out. After a period of time, the relevant departments in Thailand will take active actions to intervene, so the capital will flow to the two countries and the interest rate will reduce.

### **Conclusions and Suggestions**

The Chinese government has determined the ideology of Belt and Road to promote the development of regional economy. Therefore, studying the spillover effects of China's monetary policy on Thailand under the Belt and Road Initiative has great practical value. The main conclusions of this paper are as follows: firstly, China's monetary policy has spillover effects on Thailand's economy and the spillover effect direction of each economic variable is not completely consistent; secondly, the price variations of China's monetary policy has a stronger spillover effect on Thailand's economy than quantitative variations; thirdly, China's monetary policy has a greater impact on Thailand's output and the spillover effect on it is relatively stronger, but the effect on interest rate is relatively weaker.

Considering that China's monetary policy has spillover effects of various levels on Thailand, the author has made several suggestions based on the conclusions of this research: firstly, relevant Chinese departments must take monetary policies implemented by relevant countries into account and maintain the coordination of policies to the greatest extent when formulating monetary policy. The empirical test results of this paper indicate that China will have either positive or negative spillover effect on relevant countries' economy; thus, when formulating monetary policy, we should manage to strengthen positive impact and weaken negative one. Secondly, we should play a more important role in the reform of global monetary system and develop regional financial and economic cooperation mechanisms. China should proactively promote the establishment of "Belt and Road" regional cooperation framework. When formulating cooperation framework and mechanism, we must not ignore the influence and role of monetary policy, or otherwise it will limit the exerting of mechanism's function. Thirdly, we should strive to push RMB onto the path of internationalization while implementing Belt and Road strategies. The Belt and Road strategies can promote the trade, finance and investment cooperation between China and other countries, which provides a good opportunity for the internationalized development of RMB.

### References

- Aizenman, J. (2018). A Modern Reincarnation of Mundell-Fleming's Trilemma. *Economic Modeling*, (3), 11-21.
- Benigno, G. & Benigno, P. (2016). Designing Targeting Rules for International Monetary Policy Cooperation. *Journal of Monetary Economics*, 53(3), 473-506.
- Bryant C. E. & Javalgi, R. G. (2016). Global Economic Integration in Developing Countries: The Role of Corruption and Human Capital Investment. *Journal of Business Ethics*, *136*(3), 1-14.

Hamada, K. & Sakurai, M. (1978). International Transmission of Stagflation under Fixed and Flexible

Exchange Rates. Journal of Political Economy, 86(5), 877-895.

- Huang, X. & Bai, D. (2017). A Study on Spillover Effect of China's Monetary Policy on that of Economic and Trade Related Countries -- Based on the Evidence of "Belt and Road" Related Countries. *Studies of International Finance*, 361(5), 15-24. [in Chinese]
- Huang, X. & Xia, S. (2016). International Comparison of Currency Intermediary Targets -- Based on DAG-SVAR Model. *Economic Theory and Business Management*, 36(2), 71-82. [in Chinese]
- Kim, S. (2010). International Transmission of U.S. Monetary Policy Shocks: Evidence from VAR's. *Journal of Money Credit & Banking*, 48(2), 339-372.
- Lu, J., Wang, Y. & Jin, X. (2008). Excess Liquidity, Trade Credit and Sustained Trade Surplus -- An Empirical Study on Impact of China's Monetary Policy on Trade Balance Channels. *Financial Research*, 34(9), 58-70. [in Chinese]
- Miyakoshi, T. & Jalolov, M. (2015). Money-income Causality Revisited in EGARCH: Spillovers of Monetary Policy to Asia from the US. *Journal of Asian Economics*, *16*(2), 299-313.



### LOGISTICS IMPLICATION OF BELT AND ROAD INITIATIVE FOR THAILAND

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### Abstract

This paper focuses on a less researched aspect of BRI: the China-Europe Railway Express. It is proposed that through the connections of the Bangkok-Kunming highway or the China Thailand high speed railway under construction, the China-Europe Railway Express may offer an alternative logistics route for Thai traders or manufacturers with their partners in Europe. Another possible connection between Thailand and China-Europe Railway Express through the so-called Southern Transport Corridor which is heavily promoted by Singapore and the Southern Chinese province like Guangxi is also discussed. These new logistic alternatives may bring closer the European market and supply chain to the future growth engines of Thailand: the East Economic Corridor and Southern Economic Corridor.

Keywords: Belt and road initiative, China-Thai Railway, China-ASEAN trade, China-Europe Railway

### Introduction

The Belt and Road Initiative (BRI) of China has attarcted increasing attention among the scholars and business circle in Thailand (Tang, 2018). BRI may have a wide range of implications for the future development of Thailand through its "five connections", namely the connection in policy coordination, trade and investment, infrastructure, finance and people exchange. Based on recent field trip in North Western province of Gansu in China, the starting point of the ancient silk road, this paper explores an important aspect of BRI which received less attention by Thai scholars so far: the China-Europe Railway Express. It starts with an introduction of the regional growth engines of Thailand 4.0, and then explores the logistics implication of BRI for Thailand through theChina-Europe Railway Express, in its connections with the East Economic Corridor and Southern Economic Corridor of Thailand.

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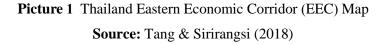
### 1. Thailand and its Growth Engines

Two regional growth engines emerged recently in the ambitious development strategy of Thailand 4.0: the Eastern Economic Corridor (EEC) and Southern Economic Corridor (SEC). The EEC Development Plan is aiming to enhance the Eastern Seaboard Development program, established and developed to support Thai heavy industries such as petrochemical, automotive and electronics for 30 years, for the development of national scheme of Thailand 4.0. (EEC, 2018)

The EEC has its own plan to develop into a modern metropolitan, a hub of trade and investment, a regional center of transportation & logistics and significant source of human resources. In addition, the EEC aims to become a gateway to Asian since it can reach more than half of world population via this gateway.

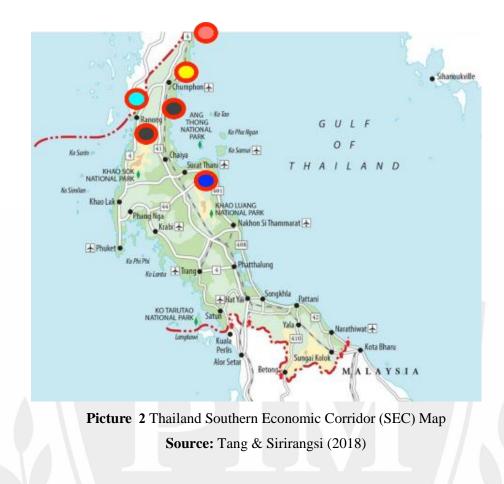
Thailand government designates three provinces, Chacheangsao, Chonburi and Rayong provinces for the development of EEC. The area covers approximately 13,000 square kilometers. The government has a short and long term plan to develop infrastructures and facilitations which are double track railway, motor way, deep seaport, airport, industrial estate, human resource development and one-stop service investor's facilitation, to support economic development in the EEC area. EEC map with relevant infrastructures can be illustrated in Picture 1 below.





There are ten key potential industries identified as highly growth engine for the growth of the Thai economy. Within this ten industries, it can be categorized into two categories which are First S Curve industries and New S Curve industries. The First S Curve Industries are aimed to boost the existing five existing industries as the First S Curve which are the next-generation of automotive industry, the intelligent electronics industry, the advance agriculture and biotechnology industry, the food processing industry and the high wealth & medical tourism industry (EEC, 2018). The new S Curve industries are alternative driving forces for Thai economy. The five industries under the new S-curve category are the digital industry, the robotic industry, the aviation & logistics industry, comprehensive health care industry and biofuel & biochemical industry. There are several privileges are exemption of corporate income tax up to 13 years, exemption of import tax on machinery using for production, research and development, machine grants for investment, permission to own land or long-term lease, lowest personal income tax in ASEAN, and five-year work VISA. The current status of EEC is the Chinese and Japanese government have planned to invest and develop mutual project under EEC development program.

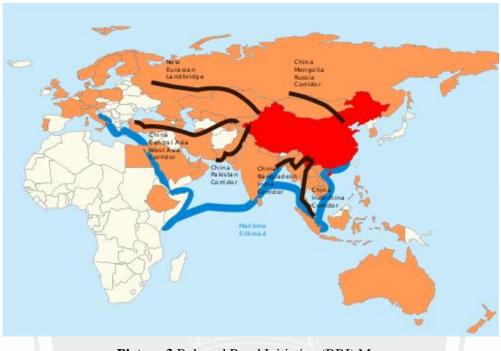
The second growth engine of the Thai Economy is Southern Economic Corridor (SEC) development program (Tang & Sirirangsi, 2018). This development program just got approval from Thai Government on year 2018. The rationale behind this program is to set up the center of fruit distribution, Bio-economy and Rivera tourism in the upper southern region of Thailand. Under this development plan, several infrastructure systems are planned to expanded or improved which are Ranong port in Ranong provinces, high speed train from Bangkok to Surat Thani province and double track train from Chumporn province to Ranong province. SEC also plans to develop Chumporn province as center of fruit distribution, Surat Thani province as bio-economy center and Petchburi & Prachuabkirikhan & Chumporn provinces as Rivera tourism.



### 2. Belt and Road Initiative and China-Europe Railway Express

The EEC and SEC plan of Thailand seems to be a good match to the" Belt and Road Initiative" (BRI) of China. President Xi Jinping of China first proposed the Belt & Road Initiative in 2013. It is the short form for the "Silk Road Economic Belt" and "21st-Century Maritime Silk Road" (Chan & Lee, 2018). The objectives of the BRI are to promote mutual trust, connectivity and share economics prosperity among the countries or regions along the BRI project. The BRI is an international massive project involving the financing and construction of various types of infrastructures such as railroad, port, highway, information technology and etc.

The Initiative aims to connect China with Asia, Europe and Africa along five routes which are 1. "Link China to Europe through Central Asia and Europe" 2. "Link China with Persian Gulf through Central Asia" 3. "Link China with South East Asia, South Asia and the Indian Ocean" 4. "Link China ports through Europe" and 5."Link China ports with the South Pacific Ocean. The first three are under Silk Road Economics Belt and the fourth and the fifth are under the 21st century Maritime Silk Road.



Picture 3 Belt and Road Initiative (BRI) Map Source: Tang (2018)

One aspect of the BRI which received less attention of Thai scholars in their discussion about the opportunity of BRI for Thailand is the China Railway Express (CRE). CRE is the name of the China trains travelling within China and from & to other countries. One rational to develop this project is one essential tools of Belt and Road Initiative (BRI) to connect China with different regions of the world including Europe, Indochina and etc. (Hillman, 2018). China Europe Railway Express services has served to the market or less than ten years ago. The rail freight service covers 43 Chinese cities and various cities in 14 countries. Picture 4 illustrates the map of express rail network in China linking with European countries.



Picture 4 The China- Europe Rail Express Map Source: Hillman (2018)

Table 1 shows the number of Rail Express trips between Chinese cities and European countries on year 2011, year 2017 and the first quarter of year 2018. According to the table, it shows that the number of trips has increased dramatically. Table 2 shows the comparison of number of shipping day and their cost to carry a container from China to Europe between two transport modes which are sea and rail. It shows that by sea takes longer time while cheaper cost and by rail takes shorter time but higher cost.

Year	Trips
2011	17
2017	3,673
2018 1 <sup>St</sup> Quarter	2,490

Table 1 Number of China- Europe Rail Express trips

**Table 2** The comparison of average time and shipping cost of a container from China to Europe

 between sea and rail

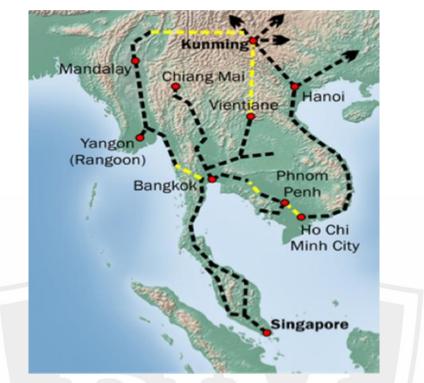
Sea	Rail
33 days	17 days
\$3,000/ container	\$5,000/ container

Source: Tang & Sirirangsi (2018)

### 3. Connecting Thailand with China Railway Express

Thailand can link with China Rail Expressway at Kunming by Thailand – China Railway and rail system in Laos from Bangkok – Nongkhai- Vientiane- Kunming as shown in Picture 5. With total length of 603 kilometers and 500-billion baht budget, the Thailand-China Railway has two phases. The first one is Bangkok and Nakorn Ratchasima province and the second links between Nakhon Ratchasima province and NongKhai province. Thai-China railway information and their current status is explained in table 3. The current situation is the construction of 3.5 kilometers of the first phase began from December 2017 has completed and starting to construct other sections in Phase 1 and Phase 2 by the beginning of next year. In addition, feasibility studies and detailed design of the second phase shall be finished by the end of year 2018.

Source: Tang & Sirirangsi (2018)



Picture 5 Map of the linkage of China Rail Express and Southern Transport Corridor Source: Tang & Sirirangsi (2018)

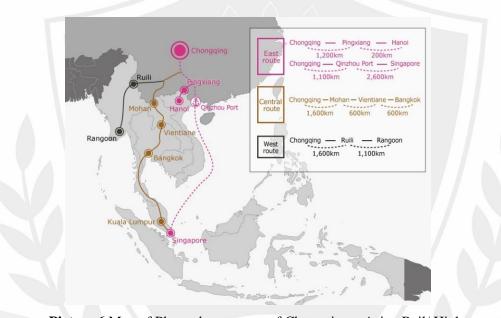
**Table 3** Thai- China Railway information (Zhimin and Sirirangsi, 2018)

	Project Information	Current Status
	ANYAFIW.	First section of 3.5 km from
	STITUTE OF MANAGEM	Klang Dong -Pang Asok
	253 km in Length	Begin December 2017
Bangkok-	with maximum speed of	Finish August 2018, 371
Nakhon Ratchasima	250km/hr., 14 sections,	million baht,
	179 billion baht budget	99% Local materials
	p	Other sections
		started March/April 2019
N-LL D. 4-L		Feasibility & Design by
Nakhon Ratchasima-	355 km	Chinese personnel in 2018
Nong Khai		Construction starts 2019
	603 km in Length with	
Tatal	around 500 billion baht	Complete by 2022
Total	budget	Complete by 2022

Source: Tang & Sirirangsi (2018)

### 4. Linking China Railway with Southern Transport Corridor

Another possible connection between Thailand and CRE is through the so-called Southern Transport Corridor which is heavily promoted by Singapore and the Southern Chinese province like Guangxi. The Southern Transport Corridor is an important linkage for Western provinces of China and the South East Asian Nation countries (HKTDK, 2018). By these routes with the corridor, the goods can be shipped from Western region of China to different cities in several countries in South East Asian countries. In addition, the merchandizes from South East Asian cities can be shipped to the Western provinces in China. The corridor is expected to offer more convenient routes among Western China and South East Asia countries helping expand economic cooperation of this region with Europe and other parts of the world.



Picture 6 Map of Planned route map of Chongqing – Asian Rail/ Highway Source: HKTDC (2018)

According to Pictures 6, there are different suggested routes from Western part of China, in this case starting or end point at Chongqing, to South East Asia cities (HKTDC, 2018) as follows:

- 1. Chongqing-Pingxiang-Hanoi. Goods from/ to Chongqing, China to/ from Hanoi can be currently shipped by rail.
- Chongqing- Qinzhou port- Singapore. Goods from Western China can be shipped to Singapore by rail at Chongqing and connected by ship at Qinzhou to Singapore.
- Chongqing-Mohan-Vientiane-Bangkok-Kuala Lumpur-Singapore. Goods from Chongqing are planned to ship from Chongqing to Laos, Thailand, Malaysia and Singapore. In Thailand and Laos, the rail systems are under construction.
- Chongqing-Ruili-Rangoon (Yangon). Goods from Chongqing are planned to ship from Chongqing to Ruili and Yangon, Myanmar.

### 5. More Realistic Choices for Thailand Shipment to Europe

Sea transportation mode using on-going vessel has been dominated for exporting goods from or to Thailand for a long time since its transportation cost is very competitive comparing with other modes. As mentioned from previous section, China-Europe railway for freight services have emerged and expanded rapidly for less than 10 years. From table 2, rail transportation between China and Europe take less time comparing with sea transportation mode. Therefore, the authors suggest another logistics route for Thai Traders to use multimodal mode via road transportation from Thailand to Kunming, China and connect with CRE mode from Kunming to Europe. Despite total transportation cost by Road and rail from Thailand to China and Europe is much higher than sea transportation mode, the road and rail logistics choice takes less time for shipping goods from Thailand and Europe according to Table 3. Since the road from Bangkok to Kunming is in operation, Thai traders may select this logistics choice for shipping high valuable goods which requires less lead time from the Thailand economy growth engines, Eastern Economic Corridor and Southern Economic Corridor and other regions of Thailand. In addition, Thai traders also have other choices to use rail mode of Chongqing-Mohan-Vientiane-Bangkok-Kuala Lumpur-Singapore route in couple more years which are under construction, mentioned in the previous section.

Table 3 The comparison of average time and transportation cost of a 40-ft. container from Thailand to
Europe between sea and rail

	Thailand-Kunming, China	Kunming-Europe	Total
Road + Rail	800 US \$ / 4-6 days	6,000-8,000 US \$ / 17 days	6,800-8,800 US \$ / 17 days
Sea	1,700 US \$ / 30-46 days		1,700 US \$ / 30-46 days

Source: Tang & Sirirangsi (2018)

### Conclusions

This paper mentions the relevant aspects of logistics implication of Belt and Road Initiative (BRI) for Thailand. The beginning of the paper illustrates Thailand and its economic growth engines which are Eastern Economic Corridor (EEC) and Southern Economic Corridor (SEC), located in the Eastern and southern regions of Thailand respectively. The paper also mentions the relationship between Belt and Road Initiative and China-Europe railway express. In addition, the authors also introduce to link the China-Europe Railway Express through the Southern Transport Corridor, which covers South East Asian countries as another logistics choice to Europe instead of using sea transport. An example of shipping from Thailand to Europe via different modes is also discussed. Further research can be the study of appropriate export/ import goods from to Thailand and other countries in South East Asia to European cities that can be benefit from using the mentioned logistics routes in the paper.

### References

- Chan, H. & Lee, H. (2018). *Prospect of Chinese Rail Export under "One Belt, One Road"*. Retrieved from https://www.worldscientific.com/
- Eastern Economic Corridor (EEC) Office. (2018). *Eastern Economic Corridor (EEC) development* program. Retrieved from https://www.eeco.or.th/en/background/
- Hillman, J. E. (2018). The Rise of China-Europe Railways. Center of Strategic and International studies. Retrieved from https://www.csis.org/analysis/rise-china-europe-railways
- HKTDK Research (2018). *The Essential of Belt and Road Link: Chongqing's Southern Transport Corridor*. Retrieved from https://hkmb.hktdc.com/en/1X0ADYQG/hktdc-research/An-Essential-Belt-and-Road-Link-Chongqing%E2%80%99s-Southern-Transport-Corridor/
- Tang, Z. M. & Sirirangsi, P. (2018). Presentation material on the Corridor & Logistics Forum of the 3<sup>rd</sup> Silk Road International Cultural Expo. Dunhuang, China.
- Tang, Z. M. (2018). China and Asean. Bangkok: Chulalongkorn University Press.

# SERVICE-LEARNING PROMOTE THE CULTIVATION OF CIVIC CONSCIOUSNESS

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### Abstract

Civic characteristics of students can be raised by service-learning practice, such as understanding and caring people & circumstance around them, their engagement of social issues and analytical thinking. In order to implement these functions, service-learning administrators should try their best to support service-learning practice, not only with the mind of equipping students with knowledge, values and skills in society, but also fully engage in the process, aiming correctly at the needs of the community or the needs of the people that students serve, meanwhile, making sure students actively participate in the planning of the project as well as engaging in direct service and encouraging group orientated service and reflections.

Keywords: Service-learning, Civic characteristics, Civic consciousness cultivation

### Introduction

This paper is divided into two parts. The first part clarifies the concepts of service learning and citizenship awareness through literature review, finds out the relationship between them, and answers why service learning can promote the cultivation of civic consciousness. The second part critical perspective presents the view through critical thinking, that is, how to do a good job of the three stages of preparation, implementation, and reflection as administrators.

This paper is intended to explore how service-learning contributes to improving civic consciousness and propose ideas of further improvement on the service-learning make sure better cultivation civic consciousness of student.

### **Literature Review**

Service-learning has hundreds of definitions of the world. Bringle & Hatcher (1995) defined service-learning as students involved in organized service activities to meet identified needs of the community, through structured reflection, to further understand the content of the course and enhance

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civic responsibility (p. 112). As an active learning strategy, the framework of service-learning is based on Dewey's "experiential learning" theory (Pacho, 2015). As a teaching method, service-learning links academic studies and community service and strengthens each other. The foundation theory of servicelearning comes from Dewey (1938) "the interaction of knowledge and skills with direct experience is the key to learning", and the fundamental purpose of education is to enable students to function effectively as adults in a democratic society.

Civic consciousness can be described as a set of relationships between rights, obligations, civil society participation, and identity (Phillips, 2003). Some researcher said that "students cannot learn democracy at school because schools are not a democratic place" (Merelman, 1980). As a complicated teaching and philosophical tool, service-learning involves many stakeholders, including students, teachers, university administrators, and community partners, which can make the study environment become a democratic place. Many researchers found that the benefits of service-learning are supporting student learning, civic engagement, community development, and university community collaboration (Harkins, 2013; Hullender et al., 2015; Cooper, 2014). Through sorting out the previous literature, we believe this pedagogy with practical attributes can cultivate civic consciousness for the following reasons.

First of all, understanding. To become a citizen, students should understand people and the environment around them as well as understand the positions and interests of others in society. It is very natural that students with diverse backgrounds and different ideas participate in the service as a team to provide services for people completely different from themselves.

Secondly, connecting. Services enable students to better build connections with the community, such as defining the community from different perspectives. Service also can make opportunities for students to care about the community and reach a compromise when a conflict happens. Battistoni (1997) believed that all academic disciplines and subjects can contribute to the concept of community, students can define it by geographically, institutionally, or culturally. Briefly, experiences in classrooms and service in communities are tied to learners' ambitions, interpersonal abilities, and desire to act (Mitchell, 2015).

Thirdly, thinking. Citizenship exactly requires students to better understand societal, political and economic issues. In the process of participating in community service, students' direct understanding of real life cultivates their analytical thinking. Service-learning can cultivate imagination, make students think about the public issues by getting out of the position of others. Practical experience gained from service-learning projects to allow students to set and reset their judging criteria.

At last, participating. Chenarani (2017) indicated that students can understand course objectives and civic life deeply through structured participation and reflection. The student's service-learning experience has some lasting impact on subsequent citizen life and community involvement. (Astin et al., 2006). Service-learning stands at the intersection of civic and academic engagement (Hunt, 2002). Fullerton, Vicki, and Kerrigan (2015) described that students who are deeply immersed in fear and uneasiness that they are different from others, but participation enables them to open their doors as human beings and even develop their abilities that they are not aware of.

#### **Critical Perspective**

The best way for students to learn is not only linear learning like reading, but also through nonlinear learning which starts with a problem and insists on using complicated ideas and skills to solve complex problems. Open communication between stakeholders and institutional supporters, as well as thoughtful structured reflections, are key lessons in improving the effectiveness of service-learning. Through the literature review, we have discussed the promotion of service-learning to the cultivation of citizen consciousness from five aspects. But as an academic administrator, we should do the following things before, during and after service-learning to make the impact work.

### **Prepare for Service-learning Practice**

"Teachers are preparing students not just for earning a living but also for making a living and contributing to the common life of their communities" (Carrington, 2011). First of all, we should do as best as we can to support the service-learning practice, especially when civics curricula focus more on knowledge but less on functional skills and civic engagement. Service-learning must go beyond an act of service to teach students to systematically address community issues. Make service-learning as a foundation part of citizen education which can from separate perspectives to face and solve problems.

Secondly, ensure the core objective of service-learning is equipping learners with knowledge, values, and skills that they can apply meaningfully in their daily lives to participate in society. On the other hand, curricula should base on the fundamental principles of active citizenship education (DBE, 2010). The experience of service also helps students take care of the needs of other people, which are the basic personality of a citizen.

### **During the Service-learning Practice**

In fact, the most challenge of service-learning in the community is the way to find the proper activities coordinating student participation. It is important for administrators to provide students with direct service opportunities as well as to strengthen preparations. Allowing the youngest students to take direct action based on the needs of the community or the needs of the people they serve, such as planting gardens near schools, testing local streams, recycling or resolving traffic control issues are simple, but important for guiding public action.

Administrators should, as far as possible, organize students into groups or groups within their service facilities. Teamwork can share and compare student service experience and create a learning environment for teachers and students through peer education experience.

At the same time, administrators should make students taking an active role in the project, even as a leader. Enthusiastic participation in service-learning can help students understand and practice democracy more. When students involved in the design and implementation of service programs actively, especially when they overcome the worst, they can experience directly decision-making and a sense of responsibility.

### At the End of Service-learning Practice

Reflection and sharing constitute an indispensable part of service-learning. Integrating democratic pedagogies in the service-learning curriculum should organize the structure of the discussion and encourage group-oriented reflections, such as group reports at the end of the semester, which should concentrate on the aspects mentioned above. As an administrator, in order to enhance the cultivation of civic consciousness, it is necessary to guide students to review their growth experience as a citizen in the process of service-learning in the final stage of the program. Students have an obligation to discuss in class, verbally report their activities, or present their own ideas in writings, all of these based on a true community environment. This kind of experience, which comes from real communities and will eventually be applied to actual society, is particularly valuable.

### Conclusions

As a teaching method connecting curriculum and community, service learning naturally has an attribute of cultivating students' civic consciousness. When we really master the method of service learning, we will find it is effective to help students to become democracy citizens by realizing themselves, understand people and the environment around them. Through social participation, students build connections with the community and cultivate analytical thinking to help students think clearly about social problems, which is the essential characteristic of citizens. However, as an academic administrator, in order to maximize such a function, we should do various things to be fully effective before, during and after service-learning. In the future, we will explore more deeply and further study on how to stimulate change in citizen learning, especially emphasize on critical variables like the course teaching, the number of hours completed, and the service locations that can influence the quality of learning.

### References

- Astin, A. W., Vogelgesang, L. J., Misa, K., Anderson, J., Denson, N., Jayakumar, U. & Yamamura, E. (2006). Understanding the effects of service-learning: A study of students and faculty. *Report to the Atlantic Philanthropies*, 1155.
- Battistoni, R. M. (1997). Service-learning and democratic citizenship. *Theory into practice*, *36*(3), 150-156.
- Bringle, R. G. & Hatcher, J. A. (1995). A service-learning curriculum for faculty. *Michigan Journal of Community Service Learning*, 2(1), 112-122.
- Carrington, S. B. & Iyer, R. (2011). Service-learning within higher education: Rhizomatic

interconnections between university and the real world. *Australian Journal of Teacher Education*, *36*(6), 1-14.

- Chenarani, K. (2017). An Introduction to Service-learning Pedagogy. Online Submission.
- Cooper, J. R. (2014). Ten Years in the Trenches Faculty Perspectives on Sustaining Service-Learning. *Journal of Experiential Education*, 37(4), 415-428.
- Department of Basic Education (DBE). (2010). Curriculum and Assessment Policy Statements (CAPS). Life Orientation Grades 7-9. Final Draft. Pretoria: Government Printers.

Dewey, J. (2007). Experience and education. Simon and Schuster.

- Fullerton, A., Reitenauer, V. L. & Kerrigan, S. M. (2015). A grateful recollecting: A qualitative study of the long-term impact of service-learning on graduates. *Journal of Higher Education Outreach and Engagement*, 19(2), 65-92.
- Harkins, D. (2013). Beyond the Campus: Building a Sustainable University Community Partnership. IAP.
- Hunt, J. B. (2002). Service-Learning Delivers Real-World Accountability. AACTE Publications, 1307 New York Avenue, NW, Suite 300, Washington, DC 20005-4701.
- Merelman, R. (1980). Democratic politics and the culture of American education. American Political Science Review, 74(2), 319-331
- Mitchell, T. D. (2015). Using a critical service-learning approach to facilitate civic identity development. *Theory into Practice*, *54*(20), 20-28.
- Pacho, T. O. (2015). Unpacking John Dewey's Connection to Service-Learning. *Journal of Education* & Social Policy, 2(3), 8-16.
- Phillips, T. (2003). Citizenship in a Global Age: Society, culture, politics. *Journal of Sociology*, *39*(2), 203-204.

### A STUDY OF AUTHENTIC LEADERSHIP IN TRANSFORMING HIGHER EDUCATION IN DIGITAL AGE

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### Abstract

In the digital age, there is a lot of technology influence education, such as ICTs, MOOCs and all kinds of the distance learning program. Digital technology rebuilt the foundation of higher education and influence basic teaching and learning. In turn, higher education need to transform with technology to meet student and teacher needs. Transformation is related about change and evolution and is a process of continue remodeling, modification, restricting. Whereas authentic Leadership could enhance educational transformation in higher education with self-knowledge, transparency, collective benefits and balance processing key components. On the one hand, authentic leadership requires leaders have to know how to conduct staff using technology, when introducing technology in school, leaders make employers decide. On the other hand, authentic leaders have to collect benefits with morals when they use technology in school transformation. While thinking about benefits of all the stakeholders, leaders can make an effective transformation and have to access and evaluate in using technology in transformation, as well as improve student outcomes as the final goal.

**Keywords:** Authentic Leadership, Higher Education, Digital Age, Educational transformation, Educational technology

### Introduction

Digital technology and digital transformation has more and more influence and change current organization (Khan, 2016). Higher education has to be transformed with technology to meet student and teacher more needs. Digital technology rebuilt foundation of high education and influence both teaching and learning. There more and more customers rely on websites of universities. It is tremendous challenge and difficult for leaders to transform and change in digital age, especially combine digitalization and leadership. In digital age, higher education leaders should not only focus on student access and affordability of using technology, but also should pay attention to teachers, administrators, staff and technical workers. Higher educational leaders have to construct effective action and behaviors to promote organization rather than authority. As for the dealing with previous problems, higher

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education institutions need enough money. Similarly, universities and colleges have to design and implement technologies and provide more effective online instruction. Technical communicators need professional development that can enhance their applying and managing technologies and digital tools like course offerings. And staff and teachers have to develop their ability in using these digital tools and also learn to work in this new paradigm and environment.

### **Objectives**

To explore transforming higher education in digital age.

To determine authentic leadership in transforming higher education in digital age.

### **Literature Review**

### 1. Higher education in digital Age

### **1.1 Higher Education in Digital Age**

Higher education in digital age, leaders should not only focus on students access and affordability, but also should pay attention to teachers, administrators, staff and technical workers. As for the dealing with these problems, higher education institution needs economy support and have to design and implement technologies and provide more effective online instructions. Technical communicators need professional development that can enhance their applying and managing digital technologies tools like course offerings. To achieve these objectives, staff and teachers have to develop their ability in using digital devices and also learn how to be adaptive in this new paradigm and environment (Kathleen, 2014).

### **1.2 Higher Education Development Trend**

Traditional university will be out-of-date because of the development of information technology, distance learning program and other digital devices. In the coming few decades, the traditional university will disappear. Technology is the key factor in transform higher education in the 21<sup>st</sup> century. Internet is change how the knowledge is interacted. Now ICTs (information communication technology) affect all the dimensions in higher education institutions. Email and online social media provide platform to collaborate and communicate of learning and teaching. Traditional publication is substituted by electronic journals and books online. The open massive free resource of learning is provide online. Students want to access digital learning or even use their personal digital devices to use. Student population is increasing of the distant education program. (Rena & Namibia, 2010)

### **1.3 Education in Digital Age**

Having 40 years influenced by digital technologies, education continually get positive benefits. Research conducted by a lot of digital technologies in different kinds of contexts, so to definite precise implications on educational practice in schools is difficult. As for using technology, the goals and reason should be clear-if technology could foster students study and engagement, if technology address learning continue, deeper and efficient. And also make sure if teachers apply and support learners better. Concurrently, educational leaders have to identify technology help learners gain learning content. However, technology show many benefits. For instance, it can assess learners and more better selfcontrol of leaner selves. Technology have to support collaboration interaction of learning. Schools invest digital technology into classroom, which will stimulate student collaboration and interaction with teachers. Teachers have to master skills in using digital technology through continue professional development (Higgins, Xiao & Katsipataki, 2012).

### 1.4 Technology Enhance Students Learning Outcomes in Higher Education

Use technology in higher education, it will boost teaching and learning in three factors. First, efficiency-technology will carry out more effective, efficient, continue learning and teaching procedure. Second, enhancement-technology will improve present process and outcomes. Third, transform-provide positive, better transformation in present process or create new process. Technology will improve teaching and learning operation, such as increase instruction flexibility, influence learning engagement and time or tasks. Technology also impact learning qualitatively, for example, provide learning feedback, improve learning practice with deep involvement and understanding. Besides, technology have effect on teaching activities, such as supervise, assessment, planning, and knowing more of students refer to studying, outcomes and learning objectives. At the same time, digital devices also afford teacher information about whether their teaching is effective and successful. Technology includes five core factors-information, communicate skills, creation of content, safety issue and problem-solving skills. These key elements are deeply help address student learning. (Fossland, 2016) Technology improve interaction between teachers and students. Tutors apply digital platforms to evaluate students' works and give feedback to students. (Navitas Ventures, 2017)

### 2. Transformation in Higher Education in Digital Age

### **2.1 Educational Transformation Theory**

Transformation is related about change and evolution, and is process of continue re-modeling, modification, restricting. Transformation can be external and internal. External transformation responds to outside resource while external transformation is reflect internal content and complexity. (Peerz, 2016) In education, leaders transform with technology in digital age, introduce digital equipment in schools, which effect teaching and learning. The whole organization also have to be transformed according to digital technologies applying.

There are five key characteristics in educational transformation in school. Firstly, moral areaeducational leaders have change staff attitude positively. Positive attitude is very crucial in transformation, if teachers, staff behave negative, which will make damage. Secondly, leaders should have understand the complex situation when they do the transformation in a school. Leaders have the ability and skills to deal with problems when something happen. Thirdly, leaders should build a good relationship in an organization. Leaders should communicate with staff and teachers, to know what are their difficulties and try to help them. Fourthly, create knowledge and share it in the whole organization. Leaders should create related knowledge and information for staff and let them understand what have to do, why need to do. Finally, coherence making is import, such as give meaning to the ambiguity things of transformation. (Kitchenham, 2009)

# 2.2 Educational Transformation in Higher Education

Digital technology rebuilt foundation of higher education and influence basic teaching and learning. There more and more customers rely on websites of university to get information of student satisfaction and outcomes. Such as grades ranking that can be reflected on website, these records will influence students and parents choose which school they want to go. Millenials are growing up with social media likes Facebook, Twitter and Instagram. Students would like these social medias than read textbooks, or go to listen classes. In order to interact with these "digital" students, leaders have to think of effective methods.

Furthermore, at present, customers of higher education want to get more services while many universities are running from student payment. Based on this situation, better service for students will help universities receive higher tuition income. Higher education leaders want to balance these forces. There are new players join the market. Such as massive open online courses, which stimulate customers to seek a cost-effective method of learning and regardless of get a degree or certificate. Personalization learning and distinct learning program are popular among people. These outcome-based or more adaptive market learning methods have come out. Monolithic and linear pedagogical models will become a past and will be instead of. (Cognizant, 2013)

## 2.3 Educational Transformation in Digital Age

In digital age, how to use digital technology is the most necessary problem to solve in education. The MOOCs-massive open online courses is from international university which are used by hundreds and thousands of people. Education in digital age, technology change the educational foundation a lot, both external and internal resource have transform the way people to teach and learn all of the world. External factors of technology in education is the different social media and application of big data, those digital drivers also change the education system. Massive and personalize learning have been come out with technology, which provide opportunities for learning, and drive educational revolution. The digital age transform teaching and learning from traditional education, and call for innovate traditional pedagogy and education industry. (Eiselt, 2014)

# 3. Transformation of Higher Education with Technology

## 3.1 Transformation Technology in Education

In education transformation, technology has some important functions, such as provide more chances to enhance teaching and learning, especially to meet learner's needs with technological equipment. People have to learn skills like digital literacy. From the literature, technology is a key element to acquire the higher level competence that related to 21st Century Skills which is very powerful capacity in 21<sup>st</sup> century. (Groff, 2013) Educators and educational reformers points out technology playing a main facilitate role in transforming teaching and learning, especially technology will provide digital equipment for individual people. Implementing technology in education, leaders

should consider students firstly and meet learner's needs, and make sure learners can obtain benefits from digital technologies. (Bush & Mott, 2009)

In higher education, leaders find a way to transform technology for enhancing teaching and learning in present. Simultaneously, leaders transform education in order to enhance student learning outcomes and to meet the student and teacher's needs. These digital devices will promote learning practice, for example, develop course with ICTs, though improving student interest for more engagement, and promote management by using digital technology. (Navitas Ventures, 2017)

## **3.2** The Trend of Technology Development in Higher Education

There are two areas of mainly transformation in higher education-in campus and virtual campus. In a university, information grow quickly under the digital quick developing and internet equipment coming out. However, traditional teaching method may not be the most effective and efficient, which is passive and less interaction. Lecture with technology will add more interaction with students and enhance their motivation. The second change is virtual campus development. Distance learning program is very welcome. In website "Google", there are nearly 15 million links is about virtual learning. (Price, 2005)

# 4. Leadership Support Educational Transformation

## 4.1 Leadership Characteristics in Higher Education

In higher education, leaders should do effective action and behaviors to facilitate organization. Leaders provide vision for organization and empower follower, in return, staff have to be responsible and take risks. Educational leaders share a clear vision in the organization, understand how to make a proper decision and assess aims and results. Leaders who in higher education institutions have to evaluate the outcomes to check if meet the student and teacher needs. Higher education leaders have to understand organization culture deeply and reflect critically.

As for communication, how leaders interact staff can predict vision's outcomes. An effective communication between leaders and team members is significant for develop professional relationship. Base on a collaborative relationship, leaders will set up a creative vision for success. Educational leaders inspire all colleagues involved, to develop individual talent, skills, critical thinking. Generally, technology give more opportunities for higher education leaders. When leaders give a presentation, they can use digital equipment such as video, power point, to describe and analysis a vision or mission for an organization. Additionally, technology is not only use for give a method to creative but it provide multiple intelligences and personal learning styles. (Davis)

# 4.2 Educational Leadership in Digital Age

With the technology development, student learning outcomes has been a key point in education. Educational leaders have to enhance student learning outcomes and quality of pedagogy by technology. Such as "learning-focused envisioning" and "adventurous learning" –school leaders think student learning should be rely on introducing ICT in schools. Teachers are hope to be experiment (adventurous learning) through technology in teaching. Some researchers argue it is worthy to explore what the necessary competency of educational leader should have in digital age. As for using technology in school, educational leaders must have enough knowledge and skills of following areas: the knowledge of educational leadership and the ability to make vision for school; the capacity of transformation in learning and teaching; the capacity to enhance student learning outcomes and professional development; supporting, manage and operating; assessing and evaluating outcomes; problem-solving skills and information technologies; social and ethical problem-solving; interaction and communication skills. It has been identified four areas of leadership competencies of technology: make a vision, planning, and manage science; staff professional development; supporting with technology; evaluate and assess methods of outcomes and staff. An excellent technology leader have the skills of interpersonal and communication. (Klenke, 2007)

## 5. Authentic Leadership in Educational Transformation

## **5.1 Authentic Leadership Theory**

Authentic performance is in line with leader's values, ethics and beliefs. Leaders use true self and main self into every day work life. Authentic leadership require leaders know themselves very well and be themselves. Authentic leaders are aware of what they think and act that influence themselves and others, with those higher moral characteristics include confident, positive, responsible and moral values. And transactional, transformational, charismatic, servant, value-based leadership these also have shown similarity in authentic leadership. (Klenke, 2017) Authentic leaders can know what they do and why they do, also let others understand these action. Leaders have to know how to conduct transformation and make staff believe them, when introduce new things or system in school, leaders make employers make decision together. Authentic leaders have to collect benefits ethically, have a good communication with them, understand their situation and provide services to staff, help them get though difficulties. Leaders enhance professional development of the employers and facilitate everyone in organization to achieve the same goal.

Thus, in educational transformation, leaders have evoke staff with positive attitude and morals; leaders can understand complex situation; leaders should build a good relationship; create knowledge and share it though the whole organization. Share the direction with staff, leaders to provide mission and vision to everyone to make both individual and organizational success.

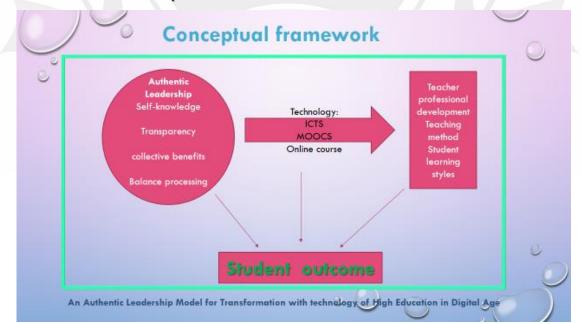
## 5.2 Authentic Leadership in Education

Authentic Leaders can be evaluated from these four basic characteristics: First of all, selfconscience-educational leaders clearly know their strengths and weakness, have already know its strong points and weak points, and also are known by other leaders. Self-knowledge means leaders' performance can be understood by other leaders, and also improve the action and the way to communicate that will address construct a team more effectively. Second, transparency-it is related to what leader talk and what leader do. Leaders adopt democratic management, allow staff and teachers join decision making with the equal and ethical rules. Third, authentic leaders should stand for collective benefits with moral values. Their ethics and decisions should have correlation with these values and beliefs. Fourth is balance processing. Before making a decision, educational leaders have thought and analysis information scientifically from all perspectives. (Bento & Riberio, 2013) As for in education, these are three factors of authentic leadership-self-knowledge, a capacity for moral reasoning, and to be sensitive to direct others. Authentic leadership related to ethical leadership, transactional or transformational leadership, servant leadership, vaues-based leadership. Moreover, researchers found authentic leadership refer to moral, sincere, genuine, trust. Authentic leaders with honesty and integrity in daily work when deal with problems and decide do something and still seek true self. Like introduce technology, educational leaders will think of this things with honesty and morals. (Smith, et. 2008)

Authentic leadership enhance transformation in high education institutions though selfknowledge, transparency, collective benefits and balance processing key components, in other word, authentic educational leaders can know themselves well and make other people understand them, also they have to know how to conduct using technology and make staff belief them, when introduce technology in school, leaders invite employers make decision. Authentic leaders have to collect benefits with ethics, to be ethical when use technology in school transformation. And think form different viewpoints, to make an effective and efficient transformation.

### **Conceptual Framework**

The following picture shows the whole article conceptual framework. Authentic leadership can enhance whole higher educational transformation with self-knowledge, transparency, collective benefits and balance processing key components. Authentic educational leaders can conduct all the members in using technologies, such as ICTs, MOOCS and online course these methods that benefit in teaching and learning. When applying technology in school transformation, educational leader can make an effective and efficient transformation to promote student outcomes.



## Conclusions

In digital age, with ICTs, MOOCs and all kinds of distance learning program developing, leaders have to transform higher education institutions with technology to meet student and teacher needs. Digital technology rebuilt foundation of higher education and influence basic teaching and learning. There more and more customers in higher education rely on websites of university. Higher educational leaders have to construct effective action and behaviors to promote organization rather than authority. Leaders share mission and vision for organization though give follower power, right, duty, risk involved. Educational leaders share a right vision and know how to make a good decision, and do not forget to assess goals and results. Leaders have to evaluate the outcomes and check if meet the student and teacher needs. Higher education leaders have to understand organizational culture deeply and reflect it critically.

In educational transformation, leaders have change staff with positive attitude and ethics; leaders should have to understand complex situation; leaders should build a good relationship; create knowledge and share it for whole organization. Share the organization vision with staff. Authentic Leadership enhance educational transformation in high education though self-knowledge, transparency, collective benefits and balance processing key components, in other word, authentic educational leaders can know how themselves and make other understand them, also they have to know how to conduct staff in using technology. When introducing technology in school, leaders invite employers to make decisions. Authentic leaders have to collect benefits with ethics, to be ethical when use technology in school transformation. Except, to make an effective and efficient transformation, leaders consider things form different viewpoints.

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### Recommendations

For school leaders: technology is key point for transformation in high education in nowadays in the 21<sup>st</sup> century. It changes how the knowledge is interacted. ICTs (information communication technology) affect all the dimensions in higher education institutions. Email and online social media provide platform to collaborate communication for students and teachers. Traditional university will disappear so higher educational leaders have to transform it in digital age.

As for using technology in school, educational leaders should be an expert on knowledge, skills of these aspects: educational leadership and make mission and vision a school; how to transform both in learning and teaching; enhance student learning outcomes and teacher or staff's professional development; supporting, manage and operating; assess and evaluate outcomes; problem-solving skills and information technologies; social and ethical problem; interaction and communication skills.

According to this article, when transforming higher education in digital age, leaders know what they have to do, how to achieve the goal and make other fellows understand them, also they have to know how to conduct staff using technology and make staff belief their ideals, when introduce technology in school, leaders make employers to decide. Authentic leaders acquire benefits ethically when use technology in school transformation. With thinking form different aspects, leaders make an effective and efficient transformation. And leaders also need to access and evaluation in using technology in transformation, and improve student outcomes as the final goal.

As for teachers, this paper address teachers to learn understand why school need to be transform in digital time and use ICTs, MOOCs, or other digital method is important. Teachers also try to understand how leaders use technology in educational transformation and teachers can help leaders a lot; also to know they need to enhance professional development of how to use technology in teaching.

## References

- Bento, V. A. & Ribeiro, I. M. (2013). Authentic Leadership in School Organization. *European Scientific Journal*, 9(31), 121-130.
- Bush, D. M. & Mott, J. D. (2009). The Transformation of Learning with Technology Learner-Centricity, Content and Tool Malleability, and Network Effects. *Educational Technology*.

Cognizant. (2013). *Transformation Strategies for Higher Education*. Retrieved August 18, 2018, from https://www.cognizant.com/InsightsWhitepapers/Transformation-Strategies-for-Higher-Education.pdf

- Eiselt, R. (2014). Beyond MOOCs: Transforming Education in the Digital Age. Centre of high education. Retrieved August 18, 2018, from file:///D:/BSt\_BackgroundPaper\_BevondMOOCs\_12\_2014.pdf
- Fossland, T. (2016). Stories of technology-enhancement in higher education a critical approach. International journal of media, technology and lifelong learning, 12(1).
- Groff, J. (2013). Technology-rich Innovative learning environments. Retrieved August 19, 2018, from http://www.oecd.org/education/ceri/TechnologyRich%20Innovative%20Learning%20Environ ments%20by%20Jennifer%20Groff.pdf
- Higgins, S., Xiao, Z. & Katsipataki, M. (2012). The Impact of Digital Technology on Learning: A Summary for the Education Endowment Foundation. Retrieved August 20, 2018, from https://educationendowmentfoundation.org.uk/public/files/Publications/The\_Impact\_of\_Digital \_Technologies\_on\_Learning\_ (2012).pdf
- Khan, K. (2016). Leadership in the digital age-A study on the effects of digitalisation on top management leadership. Master these, Stockholm University, Sweden.
- Kitchenham, A. D. (2009). School cultures, teachers, and technology transformation. *Canadian Journal* of Learning and Technology, 35(2).
- Klenke, K. (2007). Authentic Leadership: A Self, Leader, and Spiritual Identity Perspective. International journal of Leadership Studies, 3(1), 68-97.
- Klenke, K. (2007). Authentic Leadership: A Self, Leader, and Spiritual Identity Perspective. *International Journal of Leadership Studies*, (3), 68-97.
- Navitas Ventures. (2017). Digital Transformation in Higher education. Retrieved August 18, 2018,

from https://www.navitasventures.com/wp-content/uploads/2017/08/HE-Digital-

Transformation-\_Navitas\_Ventures\_-EN.pdf

- Preez, P. D., Simmonds, S. & Verhoef, A. H. (2016). Rethinking and researching transformation in higher education: A meta-study of South African trends. *Transformation in Higher Education* 1(1), a2.
- Price, S. et al. (2005). Review of the impact of technology-enhanced learning on roles and practices in Higher Education. Retrieved August 19, 2018, from https://pdfs.semanticscholar.org/369b/4a902a77f75783f9b1100cfe25468931c1cc.pdf
- Rena, R. & Namibia, W. (2010). Emerging Trends of Higher Education in Developing Countries. Retrieved August 19, 2018, from https://www.researchgate.net/publication/47753877
- Smith, R., Bhindi, N., Hansen, J., Riley, D. & Rall, J. (2008). Questioning the notion of 'authentic' leadership in education: The perspectives of 'followers'. The Changing Climates: Education for Sustainable Futures international research conference of the Australian Association for Research in Education (AARE).
- Spada, K. (2014). Book Review of William G. Bowen, Editor Higher Education in the Digital Age. *IEEE Transactions on Professional Communication*, 57(2).
- Tan, C. C. (2010). School technology leadership: Lessons from empirical research. *Proceedings ascilite Sydney*.

# SHOULD TEACHER'S VOICE BE VALUED IN CURRICULA DECISION MAKING?

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#### Abstract

The questions posed: "Should teacher have a voice in statewide curricula decision-making?" heralds the inquiry of what it takes to decide and implement a fruitful curriculum, teacher involvement is essential in curriculum planning. This article will describe the pros and cons of involving teachers in the curriculum decision making process and implementation. Curriculum offers teachers a platform to disseminate their knowledge, practice skills and improve their values and beliefs based on teacher's expertise and experience. There are both advantages and disadvantages involving teachers in the planning stages of designing and implementing the curriculum.

Keywords:Curriculum development, Teacher voice, Curricula decisions, Teacher involvement

# Introduction

There is one goal in mind for all educators, to make a successful and effective curriculum development to meet the needs and social demands of the country, the culture and the demand of people's expectation. (Kumar & Verma, 2017). Thus curriculum development and the educational revolution can be challenging by new social culture, new theories, new technology, new human needs and new global development. The reform process under goes review, revision and constant change. This paper will explore an argument which explores the teachers' involvement in curriculum development, the challenges that teacher will meet, how teacher should ready themselves for curricula decision making. Teachers should ask themselves what kind of role does teachers have in curriculum development. And if that role is pertinently changes, shaping the new models of 21<sup>st</sup> century learning.

# **Definition of Curriculum**

Curriculum is the core framework in all fields of education. It can be defined as the totality of student experience that action in the educational process. The word "curriculum" originates from Latin meaning 'the course of race'. After several decades of development the curriculum now is to be described as both the course of the study, in order to get a degree to special course content. There is not

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one generally agreed definition of curriculum. The procedures of constructing curriculum are finding the needs, clear objectives, choose content, organize content, learning experiences, evaluation.

#### **Importance of Curriculum**

Instructional content, materials, resource, and processes played an important roles in curriculum planning. Carl (1995: 40) defines curriculum development as: "An umbrella and continuous process in which structure and systematic planning methods figure strongly from design to evaluation." Curriculum equips school with a plan and functions as a guide whether group or individuals, inside or outside of the campus. It defines what educators will teach and student may possibly learn. All information teaching during and after class should be included.

The ideas and strategies which curriculum provide to teachers are aides for student learning process. If student opt to continue their education level they should meet the academic requirements. Teachers may not be able to transmit the right and necessary content to students, Student also cannot make sure if they master the wisdom and reach the curriculum criteria or not without curriculum input and voice of teachers (Quin, 2017). Curriculum can support students to fulfill their personal achievement during their semester. They could use curriculum planning effective and active learning semester.

#### **Curriculum Development**

With the speed of society and globalization change, syllabus, teaching, learning, training and exhibition modes need to be developed for curriculum. Gradually, teacher played more and more important roles and authorities in curriculum development in education system. All important information and practice about what to teach and how to teach in and out classroom are linked to curriculum development (Romiszowski, 2016). Curriculum development is the process of making plan about teaching, training, and example modes. It is the process of formulating and implementing the precise guidelines for the course. It describes how teaching and different training institutions plan and guide learning methods that can be organized for group or individual (Neubauer, Doobay-Persaud et al., 2017). Teachers looking forward to learn from curriculum with clear understand of practical aspects of teaching ask question in the nature of: What kinds of knowledge should be transmitted? What teaching skills and attitude should been used? These are the crucial questions teachers face in any educational setting (Van Manen, 2016).

Need of the Society and the stakeholders decide the direction of curriculum development. The progress is slowly, gradually and dynamically changed step by step. There are several stages such as planning, preparing, designing, developing, evaluating, revising and improving (Hunkins & Ornstein, 2016). In generally curriculum development has been seen as a stable changing system. Challenges usually comes up with curriculum development in several different types such as external, internal, and specific region challenges.

#### **Role of Teacher in Curriculum Development**

The role of teacher in curriculum development become more and more important. Teacher may better understand the needs of all learners and stakeholders during education. Which methods and strategies should been chose to be used in curriculum are noticed by teachers. After every term evaluation teacher will have the outcomes which will offer a clue for curriculum to follow. The main role of teacher can play in curriculum development are planner, designer, manager, elevator researcher, decision maker and administrator. Teacher play very important role for each step of curriculum development system.

# Advantages of Teacher Helping to Make Curriculum

Because teacher continuum system is from the lecturer, to instructor, to facilitator, to coach. These steps will help teacher to better understand curriculum from stand and deliver to adapting the student needs. Every aspect of curriculum need to be practice to justify effect. Because teacher not only have class with every student everyday but also evaluate student in and after class, test, activity, final exam and experiment (Quaglia & Kinnaman, 2015). Their voice will deliver the latest feed back to stakeholders to development curriculum.

Teacher is an expert of certain area knowledge. They already learned and Mastered the knowledge which before they are going to teach. Teacher also collected massive teaching experience when and after they teach. Many teacher continue to enlarge their knowledge by advance study after few years teaching. So the most important person in the curriculum development process is teacher (McCormack & McCance, 2016). With all their knowledge, experience and capability, teachers should have voice to curriculum development effort. Teacher who performance better will contribute to curriculum better. The knowledge and practice of teaching will offer reflect from classroom to curriculum development. Teacher always try to get better understand and use curriculum to help them in and after class in teaching. They should be deeply involved in and have more effective ideas to develop it better.

Most of the teacher are professionals, they have specialized training in their own area knowledge and they know how to teach it well. (Quaglia & Lande, 2017)They also understand qualities and needs from different student these information would help stakeholders to update their curriculum and make it more suitable for new generation. Some school use student achievement lead to teacher salaries and jobs, try to encourage teachers promote more on update their teaching skills and knowledge.

### **Disadvantages of Teacher Helping to Make Curriculum**

The first Disadvantage of teacher helping to make curriculum is time limited. Teacher who work in school not only have to pay attention to plan and individualize instruction, teach different classes, large numbers of students with great need, but also have to focus on assess students, work with staff members, collect and making teaching materials, contact parents, give advice to students, attend to various school duties and facing their manager as well. So most of teacher don't have time to think about changing curriculum. It's already excellent for them to finish their job on time.

Secondly, teacher have limitation because their position. They teach everyday and engage with students, this kind of live offer they a lot of experience but block them to see clearly about the whole structure of curriculum. Most of teacher only focus on their own subject. If they offer some idea it cannot represent all subjects. Opinion on only one side may miss leading the curriculum.

Thirdly, teacher usually don't like new technology, they practice for old way to teach for long time. New technology and literacy demands with traditional curricular demands is always grow. Student also easy to get used to the new technology especially for 21st - century student. This will make teacher uncomfortable to deal with and change.

Lastly, teacher frequently move from school to home. They don't have time to experience the society. Curriculum should been developed based on the social needs. Teachers usually only pay attention on their own best interests in mind. For Social, organizational and international issue they may not have chance to think about it.

# My Perspective of Teachers Voice and Curricula Design

I agree with curriculum designer should listen to teacher's voice, there are some reasons below:

- 1. Teachers' voice are valuable to curriculum ;
- 2. Teachers' classroom experience and preparation are essential to designer;
- 3. Teachers' voice are useful for curriculum and policy reform;

4. Teachers' insight and professional viewpoints are helpful to curriculum designer to match students' needs.

5. Teachers' opinions may influence and build a health climate for curriculum reform;

6. Teachers' moral and ethical may provide improvement to new curriculum.

# Conclusions

In short, there is no perfect curriculum. In order to make an effective curriculum, stakeholders should listen from different part and different voice. Teachers, staffs, parents and students are all have to offer their opinions for curriculum development. Design curricula should work like a process by match students, social, organizational, and international needs. Curriculum should be adaptable to changes in educational department. The change journey will take long time, there will be a lot of problems and conflicts during this progress. In my opinion, teacher must have a voice in statewide curricula decision.

# References

- Hunkins, F. P. & Ornstein, A. C. (2016). *Curriculum: Foundations, principles, and issues.* Pearson Education.
- Kumar, S. & Verma, A. (2017). Post Graduate Curriculum and Skill of Teacher. *Indian J Surg*, 79(5), 378-379.
- McCormack, B. & McCance, T. (2016). *Person-centred practice in nursing and health care: Theory and practice.* John Wiley & Sons.
- Neubauer, L. et al. (2017). Developing and Refining the MSGH Degree Program: A Theory and Competency-Driven, Multi-Phase Curriculum Development and Alignment Process. *Annals of Global Health*, **83**(1).
- Quaglia, R. J. & Kinnaman, L. L. (2015). *Teacher voice: understanding the dynamics of teacher voice and aspirations*. Thousand Oaks, Corwin.
- Quaglia, R. J. & Lande, L. L. (2017). *Teacher voice: amplifying success*. Thousand Oaks, California, Corwin: SAGE Company.
- Quin, D. (2017). Longitudinal and contextual associations between teacher–student relationships and student engagement: A systematic review. *Review of Educational Research*, *87*(2), 345-387.
- Romiszowski, A. J. (2016). *Designing instructional systems: Decision making in course planning and curriculum design*. Routledge.

Van Manen, M. (2016). The tact of teaching: The meaning of pedagogical thoughtfulness. Routledge.

# THE INVESTIGATION AND ANALYSIS OF CONTEMPORARY COLLEGE STUDENTS' COGNITION ON FEMALE STATUS

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# Abstract

The social status of Chinese women has been constantly changing since ancient times. Starting from the founding of the People's Republic of China, after the reform and opening up, this survey is aimed at contemporary college students to investigate their cognition of the female status in contemporary China. It is mainly divided into economic, political, legal, family, education five aspects, combined with Chinese cultural background and national conditions to conduct in-depth analysis of female status at the present stage of society, as well as its historical origin and future development trend. And in the research, we can find with the development of society, the vast majority of people have recognized the role of women as "social people" in society, and respected women's rights to work. And female employment rate has increased day by day, but there are some people still believe that woman should take more housework in a family. At the same time, industry gender discrimination is still exist which makes female should work harder to get the same salary and the same status in the society when it comes to law. Though the law about female protection has been revised completely day by day, but there still some legal loopholes. And that make female have more difficulties to maintain the rights.

Base on this, we did this research to find out these problems and hope that we can put up some view to promote the development of equality of male and female to make the society develop better.

Keywords: Female status, College students' cognition, Cultural background, Development trend

# Literature Review

# Survey background and content overview

It is still an important issue concerning economic, political, social, demographic and other aspects of China's development at this stage -- the female status -- which needs more attention. The change of Chinese female status is a process. At the beginning of the founding of the People's Republic of China, the all-china women's federation was founded in March 1949. The "common program" clearly stipulated that the People's Republic of China shall abolish all feudalism that binds women. During this

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period, the state encouraged women to go out to work and their status was significantly improved. After the reform and opening up, with the development of social economy, people's living standards are constantly improving, and women's status is constantly changing. We can see that more and more women yearn for independence and hope to realize their life value. All sorts of things keep bumping into each other and new problems arise. Based on this social reality and the actual situation, we have to say that female status as an important indicator of a country's civilization, openness and development should be taken seriously. In this survey, we selected contemporary college students who have received the most cutting-edge education and opinions and will more easily have various influences on the society in the future as survey samples, designed questionnaires and made statistical data. We hope to explore college students' understanding of female status in a more realistic way, find the problems reflected by these understandings, and propose future development trends and improvement paths.

## Methods

# **Questionnaire and Data Analysis**

The questionnaire design includes four aspects: economy, family, legal politics and education. The total number of questionnaires collected is 256, 118 for male college students and 138 for female college students. The age of the students participating in the paper is mostly 18-20 years old. The number of students participating in the survey is 146 in science and engineering, and 110 in literature and history. The following is the data analysis of the questionnaire content.

# **Economic Aspect**

### **1. Female Employment**

On economic issues, 81% college students said they supported the idea of women working. Only 15% said women would not need to work if a man's salary could cover the entire family. This shows that, with the development of society, the vast majority of people have recognized the role of women as "social people" in society, and respected women's rights to work.

## 2. Industry Gender Discrimination

92.58% of people thought there is discrimination against women in some industries, while only 7.42% considered there is no discrimination against women. This shows that in the actual social situation, the entry threshold for women in some industries is relatively high. Research shows that for a variety of reasons, some industries, such as engineering, are actually less demanding on women, in some service industries, such as nursing, there is a lack of male labor force and more female labor force. In business, men are often promoted faster than women. It often takes more effort and a greater price for women to achieve the same economic status as men.

# 3. The Understanding of the Word "Strong Woman"

In recent years, the word "strong woman" has appeared in society. This word, on the surface, shows that women are more capable, in a higher social and economic status. But in essence, the word "strong woman" is a kind of evaluation of women in a strong male society under the evaluation

What is your attitude towards the meaning of "Iron Lady"?	Quantity	Percentage
The economic independence of the female	165	64.45%
A signature of the female working efficiently	168	65.63%
A judgement on the female from male perspective	86	33.98%
A performance of female's strong characters	28	10.94%

standards of men. In fact, it shows that men regard themselves as the benchmark, while women largely approach or exceed this standard.

# Family Aspect: About the Proportion of Housework

Date shows that in contemporary college students' cognition, there are still more people think that men and women should share housework equally. However, under the influence of traditional concepts and reality, some college students still think that women should undertake more housework, while fewer people think that men should undertake more housework. In a family, it is more likely that women spend more energy to maintain family relations, which is corresponding to the weakening of social and economic status.

# Legal Aspect: Female Rights Protection

Only 29.69 % college students who took part in the survey said they knew about female rights protection. The majority of college students, 70.31%, said they did not know about it. The survey results show that despite the rising status of women in society, both men and women know little about the relevant legal channels for female rights protection. The findings are worrying. After all, when female rights are violated, legal protection is an important way. China has strengthened the protection of women by improving civil law, marriage law etc. However, if citizens themselves cannot understand these laws and enhance their ability of safeguarding their rights, the effect of these laws will be weakened.

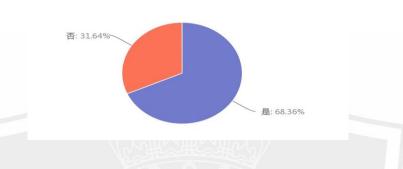
# **Education Aspect**

# **1. Professional Restriction**

Data shows that in most people's opinion, some majors are not suitable for women to study or women have poor development prospects after learning. A small number of people believe this is not the case. Women accept education to choose a major, and there is no limit. However, it must be said that, based on the reality, women are biased in choosing majors, which is related to the employment situation mentioned above, and the two factors influence each other. Some engineering subjects do have fewer female learners. In the job market, this part of female learners are also indeed less likely to find a job than men. This, in turn, affects that when choosing a major, women will naturally accept market orientation and learn some subjects "suitable for women".

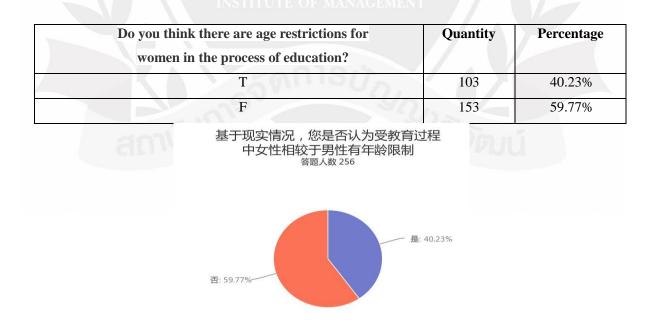
Do you think there are professional restrictions for women in the process of education?	Quantity	Percentage
Т	175	68.36%
F	81	31.64%

#### 基于现实情况,您是否认为受教育过程 中女性存在专业限制 <sup>答题人数 256</sup>



# 2. Age Limitation

This data shows that with the continuous development of social economy after the reform and opening up, the demand for talent quality in the market keeps improving, and people have higher requirements for accepting education. This proportion shows the good development trend of women's further education. Many college students do not think that women have age limit when accepting education compared with men, and that there should be no difference in age between men and women when accepting education. This phenomenon indicates that the level of knowledge of both men and women may be further improved in the future.



#### **Results and Discussions**

# Analysis on the Causes of the Problems Reflected by College Students' Cognition of Female Social Status in the Current Society

In the questionnaire, we conducted a survey on college students' cognition of female economic status and evaluated female economic status. From the social perspective, whether women can participate in social and economic activities equally with men and get the same remuneration. At the family level, we discussed whether women have the power to make independent decisions and control their income. For this part, the survey results show that contemporary college students generally respect women's labor and support women's social and economic status and labor rights as an independent individual, but they are not clear about the requirements of gender for recruitment. The misunderstanding of the word "strong woman" also reflects some problems in college students' concept, and the exploration of gender equality is not deep. So why is this happening?

First, there are socio-economic reasons. After the reform and opening up, China's economy has developed rapidly and the status of women has improved significantly. However, due to market orientation, some industries and some enterprises are more inclined to recruit male employees in order to maximize the efficiency of enterprises, while at the same time there are no perfect laws and regulations and social organizations to protect women's rights and interests. In some industries, the lack of male labor force and the overabundance of women lead to the inequality of salary. Although equal pay for equal work has been achieved in general, in some enterprises and units, there is still a phenomenon of different pay for equal work. There are also hidden inequalities between men and women in public institutions. Women's socio-economic status and family status influence and interact with each other. Women are unable to achieve a higher social and economic order, and are under pressure to have children in the family, so they turn to their family roles and invest more in family affairs. With China's economic development, although the legal framework has been constantly improved, it has not formed a complete system to protect women's rights. For example, China's existing laws and regulations do not clearly stipulate the clear concept and there is insufficient supervision and lax enforcement of policies. It is also not perfect in the female reproductive security mechanism, there is a small range of security, and enterprise pay more money.

Secondly, it is the influence of traditional cultural background and gender concept on policy. Traditional culture influences the employment market, public policy and family role distribution silently. The traditional idea of "men outside and women inside" still influences the distribution of family roles today. Too much contribution of women to the family will also reduce their social resources, so the policy making and implementation will be biased towards men. And labor industry will also exist gender bias, naturally appeared the word "strong woman". Under the influence of traditional concepts, women are facing the dual challenges of family and career in the current society.

# Conclusions

To sum up, we analyze college students' cognition of women's status and the reasons behind it. But what should we do to deal with them?

For the national government may introduce some policies that have protective effects on women in the future, such as maternity leave, social security and so on, to protect the needs of women as vulnerable groups in society. At the same time, we should improve laws and regulations to ensure equal pay for equal work. We will implement gender equality.

For individual citizens, women should improve their awareness of legal knowledge and ability to safeguard their rights. As men, they should enhance their awareness of women's protection instead of standing in a dominant position and disregarding and indifferent to the status of women.

# References

- Piao, J. (2009). *Contemporary China and South Korea Feminine Social Position Comparison*. Masteral Dissertation, Yanbian University.
- Zhang, G. (2006). A Study on the Development of Woman's Higher Education after Independence in India. Masteral Dissertation, Xiamen University.
- Zhang, S. (2011). The Analysis of the Cause of Woman's Status Raising in The Patriarchal Society. Masteral Dissertation, Beijing University of Technology.

# INFLUENCE OF CULTURAL DIFFERENCES ON INTERNATIONAL BUSINESS NEGOTIATIONS AND COUNTERMEASURES

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#### Abstract

Based on the analysis of the causes of the cultural differences and the influence of cultural differences on international business negotiation based on the path, and focus on the cultural differences on international business negotiation's negotiating team members, in the process of negotiations with the purpose of the target, for negotiation results expected, negotiation behavior and may use the strategy of influence mechanism. In this paper, it is believed that the important guarantee to avoid cultural differences hindering the realization of a win-win situation in international business negotiations is to make preparations well before negotiation, respect the customs of the other party, overcome the obstacles in communication and communication, and tolerate different cultures.

Keywords: Cultural differences, International business negotiation, Win-win

# Introduction

The era of global economic integration has come, international business activities are increasingly frequent, international cooperation is increasingly close on the road of economic globalization, our direction and choice is more and more, cross-cultural communication opportunities are more and more, compared with the original, the main body of business negotiations more diversified, more detailed negotiations. The success of business negotiations between countries is actually determined by many factors, such as the economic strength of enterprises, the needs of both sides, technology and interest relationship, etc. But in this process, it is often easy to ignore a problem, which is the impact of cultural differences on us. The differences between different cultures are the key factors to the success of international business activities.

## **Literature Review**

The frequent occurrence of economic activities in various countries in the world has promoted the attention and research of scholars from different countries on the issue of the influence of cultural differences on business negotiation. The research on cultural negotiation style is generally divided into

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two categories (Goh, 1996; Pye, 1995), this kind of research adopts a thematic approach, namely, personality culture approach. The second is the comparison between cultures, or the research with the method of common culture. It seeks to confirm certain basic elements of a negotiating style and to determine how they are reflected in different cultures. To this end, scholars have developed a variety of structures and lists of cross-cultural applications. For example, Donald w. Hendon, Rebecca Angeles Hendon and Paul Her big's cross-cultural business negotiation and Pervez n. Ghauri and jean-claude Usunier's international business negotiation use the second research method.

Salacuse (1998) of Tufts University surveyed 310 people from different countries and different professions and asked them to evaluate ten factors in negotiation. The results showed that in many cases, people from the same cultural and professional background were more inclined to deal with negotiations in a similar way. George et al. (1998) put forward three determinants of negotiators' influence: individual differences, cross-cultural differences and contextual factors. When doing business abroad, customers, employees and business partners all have the same local culture, which may be quite different from the beliefs and lifestyles of their counterparts, customers, employees and business partners in the host country (Druckman, 1996; Bezić et al., 2012; Acheson & Maule, 2006; Adler et al., 2007; Aniko, 2015). Luomala (2015) and Tse et al. (1994) found that after the failure of cross-cultural business negotiation between individualists and collectivists, people will experience different emotions (frustration vs. excitement).

#### Methods

This paper will adopt the following methods to study the impact of cultural differences on international business negotiations and countermeasures.

One is summarizing and induction method. This paper collects relevant theoretical books, journals and other data through the search method of library literature and network data, obtains and summarizes relatively detailed literature materials and research data, and provides theoretical basis for the research of this paper.

This paper also uses qualitative analysis, logical reasoning and interdisciplinary research methods. This paper mainly uses the qualitative analysis method to study the cultural factors in international business negotiations, the influence path of cultural differences on international business negotiations, the influence mechanism of cultural differences on international business negotiations and countermeasures. In the process of analysis, interdisciplinary comprehensive research is conducted by using the theories and methods of cult urology, international business negotiation and management. Logical reasoning method is used to study the conclusion.

Third is case analysis. In the research process, representative cases such as China and the United States are selected for analysis to support the conclusions of this paper.

#### **Analysis Process**

1. Cultural factors in international business negotiation

1.1 Definition and constitution of culture

Culture is the distinctive feature of a group that is different from another group in values, beliefs, attitudes, codes of conduct, customs and other aspects. It is the difference of this culture in the group that leads to the cultural conflict in international cooperation. Culture is an attitude type and value criterion that affects the overall behavior of a group. It is composed of symbols, values, norms and languages.

1.2 Reasons for cultural differences. The main reasons for cultural differences are communication barriers and different cultural values.

2. The influence of cultural differences on international business negotiations

2.1 The influence of values on international business negotiation. Different values will affect the way and style of people dealing with and solving problems, and thus have a great impact on the negotiators in international business negotiations

2.2 The influence of thinking mode on international business negotiation. Cultural differences are mainly reflected in people's different ways of thinking. Therefore, in international business negotiations, negotiators from different cultural regions often encounter conflicts in their ways of thinking.

2.3 The influence of high context and low context on international business negotiation. This section mainly analyzes the influence of the performance and characteristics of high context and low context on international business negotiation.

3. The influence mechanism of cultural difference on international business negotiation

3.1 The impact of cultural differences on the composition of the negotiating team. Different cultural negotiation groups have different composition, which results in different negotiation process and results.

3.2 The influence of cultural differences on the goals and objectives of negotiation. This section mainly analyzes the influence of specific relationship and loose relationship on negotiation.

3.3 The influence of cultural differences on the expected outcome of negotiations. The Possible outcomes of the negotiation are win the negotiation, lose the negotiation, compromise and deadlock in the negotiation.

3.4 The influence of cultural differences on negotiation behavior. This section will study the influence of differences in verbal and nonverbal behaviors, values and thinking on international business negotiation.

3.5 The influence of cultural differences on negotiation strategies. There are five basic strategies in international business negotiation: contending, yielding, inactive, problem solving, compromise. This section studies the influence of cultural differences on the five competitive strategies.

# Results

Cultural differences will affect all aspects of international business negotiations. In countries with large power distance, the members of the negotiating team are mainly composed of the top management of the company, while in countries with small power distance, the status of the members of the negotiating team is not particularly emphasized. People with collectivist backgrounds are more likely to pursue relationship-oriented goals, while those with individualistic cultural backgrounds are more likely to emphasize task-oriented goals. Collectivism always gives consideration to the interests of the other party in the negotiation process, while individualism emphasizes its own interests more in the negotiation process and takes all possible means to obtain negotiating advantages. Verbal and nonverbal behaviors, values and ways of thinking influence negotiators' specific behaviors and negotiation strategies. In general, cultural differences play a crucial role in reaching agreements in international business negotiations.

## **Discussions and Recommendations**

Based on the analysis of the causes of the cultural differences and the influence of cultural differences on international business negotiation based on path, mainly studies the cultural differences on international business negotiation team members are in the process of negotiation with the target for the purpose of the negotiation results expected behavior and may use the strategy mechanism as stated earlier, the influence of cultural differences on international business negotiations can reach an agreement have a vital role.

How to eliminate the negative impact of cultural differences on international business negotiations? This paper will give Suggestions from five aspects.

1. Do your homework before the negotiation. Adequate technical and cultural preparations can ensure the success of the negotiations.

2. Respect the cultural conventions of your negotiating partner. This section will discuss the specific practice of respecting the customs of the other party, for example, the negotiator should understand the customs of the country or region, which can affect the negotiation to some extent.

3. Overcome communication and communication barriers. The most important thing in international business negotiations is the negotiation itself. If one fails to fully express his or her own ideas and opinions, or misunderstands the attitude of the other party, the negotiation will go in a wrong direction and fail to achieve the desired effect.

4. Be tolerant of different cultures. This section discusses from three aspects: learning and respecting cultural differences; reasonably dealing with differences in negotiation; cultural exchanges after contract signing.

5. Strengthen legal consciousness, strengthen legal concept. Market economy is legal economy. International market is no exception. In modern society, all business activities should be carried out under the legal relationship. However, due to different socio-economic and cultural backgrounds, there are obvious differences between Chinese and western legal concepts.

#### References

- Acheson, K. & Maule, C. (2006). Chapter 33 Culture in International Trade. *Handbook of the Economics of Art and Culture, 1,* 1141-1182.
- Adler, N. J., Graham, J. L. & Gehrke, T. S. (2007). Business Negotiations in Canada, Mexico, and the United States. *International Executive*, *15*(5), 411-429.
- Bezić, K. H. & Galović, K. (2012). The Importance of Cultural Differences in International Negotiations. Economic System of European Union and Accession of Bosnia & Herzegovina.
- Cateora, P. R. & Graham, J. L. (2002). International Marketing (11th ed.). McGraw-Hill.
- Deborah, A. C. (1998). Culture, Plans, and the Pursuit of Negotiation Goals. *Journal of Asian Pacific Communication*, 8(2), 103-123.
- Druckman, D. (1996). Is There a U.S. Negotiating Style? International Negotiation, 1(2), 327-334.
- George, J. M. & Gonzalez, J. J. A. (1998). The Role of Affect in Cross-Cultural Negotiations. *Journal* of International Business Studies, 29(4), 749-772.
- Goh, B. C. (1996). Negotiating with the Chinese. Aldershot, UK: Dartmouth Publishing.
- Kitty, O. L. (2000). Business and Administrative Communication (5th ed.). Mc-Hill Companies.
- Luomala, H. T., Kumar, R. & Singh, J. D. (2015). When an Intercultural Business Negotiation Fails: Comparing the Emotions and Behavioural Tendencies of Individualistic and Collectivistic Negotiators. *Group Decision and Negotiation*, 24(3), 537-561.
- Pruitt, D. G. & Kim, S. H. (2004). Social conflict: escalation, stalemate, and settlement. McGraw-Hill.
- Pye, B. L. W. (1995). Chinese Negotiating Style: Commercial Approaches and Cultural Principles. *Scandinavian Journal of Management*, *11*(3), 299-300.
- Salacuse, J. W. (1998). Ten Ways that Culture Affects Negotiating Style: Some Survey Results. *Negotiation Journal*, 14(3), 221-240.
- Tse, D. K., Francis, J. & Walls, J. (1994). Cultural Differences in Conducting Intra- and Inter-Cultural Negotiations: A Sino-Canadian Comparison. *Journal of International Business Studies*, 25(3), 537-555.

# COCA-COLA'S PUBLIC WELFARE MARKETING:SOLVING THE PROBLEM OF MISMATCH BETWEEN PUBLIC WELFARE ACTIVITIES AND PUBLIC COGNITION

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## Abstract

Taking Coca-Cola's "Improving the influence and effectiveness of public welfare activities" as a starting point, we propose solutions by collecting second-hand data, questionnaires and interviews, packaging production design, recycling process design, incentive mechanism setting, promotion and promotion. Public welfare activities are a very effective form of marketing. The results show that there are some consumers who have some influence and will not change. Consumers are more focused on solving social problems than projects that bring relevant benefits to the company, which also shows consumers' expectations for Coca-Cola. Based on the solid marketing relationship, striving for the latest "green cola", the Coca-Cola Company will always stand in the international wine industry market, making Coca-Cola the eternal cola in every consumer's mind.

Keywords: Coca Cola, Environmental Protection, Public Welfare

#### Introduction

## **Background Information:**

In 1886, Coca-Cola was born in Atlanta, Georgia. Since then, it has blended with social development and inspired innovation. Now, it brings people all over the world a happy and happy feeling every day. At present, 1.7 billion consumers around the world drink Coca-Cola products every day, selling about 19,400 bottles of drinks per second. In October 2016, Coca-Cola ranked third among the world's 100 most valuable brands in 2016. Coca-Cola provides Chinese consumers with more than 50 beverage choices of 15 brands, and the daily consumption of its series products in China reaches 150 million cups. On December 18, 2018, Coca-Cola ranked 7th in the "Top 500 World Brands 2018" compiled by the World Brand Laboratory. It mainly investigates the brand of Coca-Cola and the awareness of its public welfare projects among consumers. We used the method of Aided Brand Awareness to study the questionnaire and the references found on the Internet.

#### **Literature Review**

This paper mainly studies Coca-Cola's low awareness of public welfare activities and public

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awareness of the brand. Domestic scholars have done a lot of research on the problem of cognitive mismatch, and have achieved some results, and this article uses the trash can as the carrier to realize the methods of speech recognition, LED screen, unique shape design, etc. Public awareness of the brand.

Professor Ho Di mentioned the necessity of Coca-Cola's cross-cultural marketing in his Intercultural Marketing Strategies Analysis (Modern Business and Commerce, No. 01, 2013). She illustrates the positive role of cross-cultural marketing from three aspects: avoiding marketing barriers, resisting competitor pressure and closing the distance with consumers. Then it focuses on the analysis of Coca-Cola's cross-cultural marketing activities in Africa, India, China and other regions. It lists the measures including localization of channels, popularity of brand image and local cooperation of marketing activities, and summarizes and analyses its diversified cross-cultural marketing manifestations. On this basis, this paper analyses the problems that Coca-Cola should treat cautiously in cross-cultural marketing, including how to coordinate the relationship with the external public and avoid catering to the local culture blindly. From the analysis of this document, we can see that Coca-Cola has taken a series of specific measures to design and promote its own brand image. According to the actual situation and different backgrounds, the effect is also remarkable. Similarly, on the issue of mismatch between public welfare activities and public perception, relevant methods are also needed to consider the design and promotion of public welfare activities according to the actual situation.

Professor Zhu Wenxin mentioned in the "Research on Cross-Cultural Marketing Strategy of Coca-Cola Bottle Packaging" (2016, "News Research Guide"), through a case study of Coca-Cola's series of bottle packaging in recent years, exploring its different countries. Cross-cultural marketing strategies between regions and groups, summed up the success of Coca-Cola Company in implementing strategies such as accurately positioning regional culture, using media to build product culture and grasping consumer group culture, and summing up experience from it, for the future of Chinese enterprises. Cultural marketing provides enlightenment: fully consider the combination of cultural personality and cultural commonality, pay attention to the role of new media in the marketing process, and use products as a link between enterprises to convey emotions to consumers. At the same time, we should also see the problems that Coca-Cola Company has in the process of cross-cultural marketing, and actively reflect on it.

## **Objectives**

Why consumers continue to buy products of a certain brand.

### Methods

We study and demonstrate the mismatch between Coca-Cola's public welfare activities and public perception.

# 1. Secondary data

About 260 Coca-Cola related public service videos were broadcast on Baidu search integrated

websites, and the top 60 related videos were selected for data statistics.

Content theme	Content interpretation	Play frequency	Number of likes comments	global assessment
Neonatal	The joyous smile of a	Average 3800	Average 22	Cute, fresh, healing.
correlation	newborn child Related			
	themes such as face			
Left-behind	Coca-coca co-sponsored help	Average 2677	Average 7	Worrying about the
children related	keeper Public service			situation of left-behind
	propaganda for children			children, praising the
				delicious The commonweal
1	bool	ろうろう	$\sim 1$	actions of Coke
Motion	With basketball, football,	Average 128	Average 4	Passion, energy.
correlation	etc. Sports combination		3	
Advertising	Case study of Public Service	Average 460	Average 5	Creative, touching.
contest related	Advertising initiated by			
	Coca-Cola Competition			
	entries			

 Table 1 Coca Cola related public interest video data statistics

# 2. WeChat public number and Official Weibo

	Official public name	Official Weibo
Number of concerns	20w+ INSTITUTE OF MANAGEMENT	74276
Tweet frequency	With effect from 3 January 2014, the frequency is approximately 9 articles / month	4 / month, out of a total of 7162 so far abundant
Reading times	The average number of readings is about 4000	
Number of likes	The average number of likes was around 125	The average number of likes was 200
Number of comments		The average number of comments was 400
Forwarding number		The average number of forwarding was 160

# 3. Benchmarking Enterprises: Public Welfare Marketing Events of PepsiCo:

1. Water-related industries. Cooperate with mother cellar in public welfare, pay attention to water saving and energy saving in production process.

2. Pepsi has its own agriculture, such as potato farms, water saving and energy saving in agriculture, and how to help local farmers improve their production are all the focus of Pepsi's attention.

3. Education. PepsiCo has basic education and higher education, higher education: in 2014, in cooperation with Tsinghua University, it donated \$3 million and Tsinghua University established a course of corporate social responsibility; basic education: to help some primary and secondary schools do what enterprises can do.

4. Pay attention to brand culture, represent healthy nutrition, create innovative products, and lead the public to a positive lifestyle.

We chat Public Number of Attention: 20W + Twitter Number of Attention: 42W + Twitter Number of Attention

There is no independent public service special Weixin public number and Weibo account. The proportion of public service tweets is low and the degree of attention is far weaker than that of Coca-Cola.

# 4. Survey

Questionnaire survey was used to collect data to investigate the Coca-Cola brand and its public welfare project in the consumer awareness. We used the method of Aided Brand Awareness to design the questionnaire.

According to the results of the questionnaire, consumers' awareness of Coca-Cola's public welfare is higher than we expected, although most of them (41.41) stay in the stage that they seem to have heard about it, but they are not very impressed. 46.26 Consumers think that Coca-Cola is a good thing to do for the public good. It is a performance of corporate social responsibility. But there are also 50.66 consumers who think that there is no feeling. Business enterprises seem to have done similar things.

#### **5. Interview**

The interviewees are: (1) sophomores, foreign students and sports enthusiasts; (2) junior girls, a classmate who does not drink carbonated drinks; (3) senior students, like the brand of Coca-Cola; (4) senior marketing students, do not like Coca-Cola drinks, and they admire the company; (2) middle-aged men, marketing department teachers. Coca-Cola fans

Summary of Interview Content: Summarizing the results of five respondents with different characteristics, we found that consumers who do not like carbonated drinks because of their health care, but do not affect their negative impact on Coca-Cola as a brand or company. Apart from being unhealthy, consumers still know that other Coca-Cola brands do not have a partial impact. They still think that Coca-Cola's brand building is relatively successful.

The possible drawbacks of interviews: we may have too high or too low expectations of the respondents, so when throwing questions, it may lead to the respondents' answers will not be too true, there are some deviations.

# 6. Background Analysis

# 6.1 Macro-environmental Analysis

Political factors: Our government's policy of supporting the development of foreign-funded enterprises, especially international well-known brands in China has been stable for a long time, and the relevant industrial policies and tax policies have also been relatively stable, providing a healthy, free, inclusive and development political environment for Coca-Cola's development in China.

Economic factors: China's huge population and stable economic growth have provided a huge market for the beverage industry.

Social factors: Fast food culture is gradually maturing in China, and the beverages matched with it have room for development.

Technical factors: The fierce competition in the domestic beverage industry has prompted beverage enterprises to pay attention to the improvement and innovation of taste and packaging in recent years.

Environmental factors: Global warming and other factors stimulate consumers'attention to environmental protection.

Legal factors: In recent years, the intensity of legal sanctions on pollution, labor rights and interests has increased, and related reports have increased.

# 7. Industry Analysis

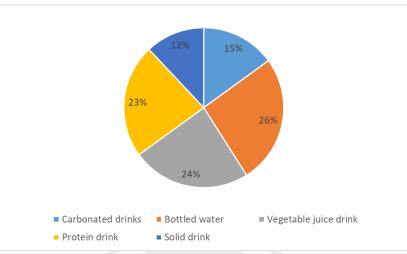
Current situation of beverage industry:

# 7.1 The Market demand is large and the demand growth is obvious.

The development of beverage industry in China is similar to that of food industry in general. The growth rate of main economic indicators is basically stable. With the promotion of consumption upgrading, the results of industrial transformation and upgrading show preliminarily. The vitality of economic development has become stronger again, which is one of the hot spots and new growth points in the development of consumer goods in China.

# 7.2 Bottled water market is huge and carbonated beverage is no longer advantageous.

Bottled water has a greater price advantage than other beverages, and it is healthy, environmentally friendly and thirsty. It is one of the best choices for consumers pursuing low calorie.



Picture 1 The share of income by segment of the beverage industry

# 7.3 Variety diversification

Since the reform and opening up, our country's beverages have developed from single soda to more than ten categories, including carbonated beverages, fruit and fruit juices, vegetable and vegetable juices, bottled drinking water, tea drinks, protein drinks and functional drinks. In recent years, new categories have been pouring into the market, including bottled drinking water, carbonated drinks, and functional drinks. Vegetable and fruit juice drinks are the three largest categories.

# 7.4 Brand competition is becoming more and more intense.

The beverage industry in China has experienced four stages: 1979-1995 is the first stage, this period is the world of Coca Cola and Pepsi carbonated drinks; 1996-2006 as the second stage, Wa, Robust and farmers spring packaging water in China's hot sales broke the "two happy" in the beverage market dominant pattern; In 2007, the Chinese beverage market entered the third phase of the Chinese beverage market due to the hot sale of the Chinese tea beverage, followed by, In 2008, juice drinks were on the market. The life cycle of soft drink product is shortened obviously, the competition of soft drink brand is becoming fiercer day by day.

# 8. Enterprise Analysis

## 8.1 Corporate mission, Vision and Values

Corporate mission: to make people around the world more refreshing; to constantly inspire people to stay optimistic; to make everything we touch more valuable.

## 8.2 SWOT Analysis

Advantages: a long history, since the establishment of 1886, popular and enduring, brand image deeply rooted in the people.

Disadvantages: the product with the same name as the brand is carbonated beverage, leaving an unhealthy and obese negative impression to consumers.

Opportunities: carbonated drinks meet the needs of young consumers; China's fast food culture is increasingly popular, conducive to the integration of products.

Threats: limited brand recognition and share in the non-carbonated beverage market; impact of increased consumer health awareness on core product sales; strong growth ability of Pepsi-Cola, the main competitor, compared with growth difficulties for Coca-Cola.

#### 9. Solutions

Core: to improve the public awareness of Coca-Cola to do public welfare, a series of activities.

# 9.1 Packaging Production and Design

Packaging production, the bottle material improvement. Replace existing materials with more environmentally friendly materials, increase the proportion of existing environmentally friendly materials.

Packaging design, one is to enhance consumers' awareness of garbage classification, the classification information will be labeled in the product packaging and promotional leaflets, to match the follow-up recycling activities

# 9.2 Design of Recovery Process

In the process of recycling, if you want to enhance the awareness of environmental protection in a way that attracts a large number of people, and can efficiently classify and recycle the waste of waste bottles, the current function is single, and the ordinary garbage can root is inconvenient to use. Ben couldn't meet our needs. Therefore, we have designed an intelligent garbage can with LED display screen, bar code scanning screen, novel shape, different delivery port, inductive switch and so on. The specific description and release details are as follows in the production of the trash can, the recycled environmental protection trash can, which is produced by the products of Coca-Cola after recycling, will further arouse the public's awareness of protecting the environment. And through the entity recycling results to promote Coca-Cola packaging environmental protection, more credibility, can improve the brand image.

# 9.3 Setting up Incentive Mechanism

Put in place effective incentives to encourage consumers to use Coca-Cola products with incentives to dump their trash in recycling bins.

Set up integral account in WeChat Mini Program.

Imitation of Germany's charge system for bottles.

Coca-Cola arcade game machine.

#### 9.4 Promotion and Promotion of Content:

Photo ads

Educational Advertising on Environmental Protection Knowledge: Combining Coca-Cola's Image with a Series of Environmental Protection Knowledge (Waste Classification, Resource Recovery, etc.)

Public Advertising Graphics: making a picture showing Coca-Cola's environment-related advertising, with emphasis on showing the contribution of Coca Cola environmental protection material

bottles to the environment. Show Coca-Cola's value of "we care" about garbage sorting and recycling.

Video advertising

Creative Advertising: making Creative Coca Cola Public Service Advertising

Traditional public service advertisements: making general public service advertisements to show the environmental problems such as the lack of earth resources, the shortage of water resources, the serious air pollution of land and so on.

Create hot topics

Carry out some Coca Cola public flash activities (E. G. arcade games, etc.)

# 9.5 Channels of Communication:

Line

Life scene Marketing-the main use scene of Coca Cola to promote: setting up advertisements in more use scenes of Coca Cola, such as night market, restaurant lights prosperous areas.

Offline

Traditional Media-reaching Middle-aged and Old people as well as Home users: using traditional Media such as Television and Radio for Advocacy.

New Media platform-reaching Young consumers and individual users: mainly using New Media platforms, such as Web, We Chat Friends, Public numbers.

# Results

In respond to the question, what problems does the team need to help the chosen institution solve? It is suggested that Coca-Cola's public welfare activities do not match public perception. And why is the problem to be solved critical to the sustainable development of institutions and their social impact? Two results of public awareness of public welfare activities of institutions are as follows: 1) Promoting brand image, maintaining business operation and Profitability; 2) Increase public participation, get public support from the beginning and end of public welfare activities, and enlarge the effect and influence of activities.

## Discussions

There are still some deficiencies in the research and Discussion on the mismatch between public welfare activities and public perception. For example, for the local people in charge of Coca-Cola's public welfare activities, we have no opportunity to visit and communicate in the field; and for the case of the effectiveness of public welfare activities marketing under similar circumstances, we also lack the opportunity and results of field visits. To this end, we quote the views of some critics to understand the impact of Coca-Cola's public service marketing from other aspects.

"Coca-Cola's public spirit of keeping pace with the times is essentially a consumer-centered quality."

---SHI Yin HA Founder of Social Brand

"Coca-Cola's promotion of the concept of health and environmental protection set an example and won the support and love of consumers with a truly responsible corporate image. Coca-Cola's concept and action are consistent and maintain a good corporate image forever."

---Professor of Central European Business in Meijiang

"Coca-Cola chooses to convey happiness with a smiling face, so that people all over the world understand that happiness can cross national boundaries."

---Commentator of Yangyu CCTV

We can see that Coca-Cola's series of public welfare marketing activities make a good and responsible corporate image deeply rooted in the hearts of the people, and also promote the transformation and progress of public awareness.

## Conclusions

(1) According to the previous analysis, we can see that consumers' awareness of Coca-Cola's public welfare is higher than we think. We have previously decided that public welfare activities will make Coca-Cola's corporate image better, but the results show that there are some consumers who have some influence and will not change. Consumers are more focused on solving social problems than projects that bring relevant benefits to the company, which also shows consumers' expectations for Coca-Cola.

(2) The Coca-Cola Company is a market leader in the world wine and water industry. It follows a multi-brand, multi-channel strategy and steadily takes every step, grasping every opportunity and giving full play to the unique marketing of "Marketing Three Rings". Strategic advantage. Based on the solid marketing relationship, striving for the latest "green cola", the Coca-Cola Company will always stand in the international wine industry market, making Coca-Cola the eternal cola in every consumer's mind.

## Suggestions

(1) Strengthen publicity so that awareness can be raised and consumers can be raised to raise awareness of Coca-Cola public interest. (2) Coca-Cola should choose more devoted efforts in the more targeted public welfare sector.

#### References

China Coca-Cola. (2017). *Coca-Cola China 2014-2016 Sustainability Report*. Retrieved November 20, 2018, from https://www.coca-cola.com

He, D. (2013). Analysis of Coca-Cola's cross-cultural marketing strategy. Modern Business, 1.

Kotler. (2003). *Strategic Marketing of Nonprofit Organizations*. Beijing: China Renmin University Press.

Lu, W. (2016). Japanese waste classification management experience and its enlightenment to China.

Journal of HUAZHONG Normal University, (1), 39-53.

- Zhang, W. (2017). Based on the Internet of Things, intelligent classification of recycling trash cans. *Computer fans*, (4), 182-183.
- Zhu, W. (2016). Cross-cultural marketing strategy research of Coca-Cola bottle packaging. *News Research Guide*, (13), 304-305.



# HOW TO IMPROVE ONLINE PURCHASE INTENTION OF CHINESE INTERNATIONAL STUDENTS IN THAILAND

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## Abstract

This paper develops and tests a model that analyzes the serial mediation effect of three variables that affect online shopping purchase intention of Chinese international students in Thailand – Thai platform service quality, Thai platform brand image, consumer trust, and the relationships among them – with control of research object's age, gender, education level, time-length in Thailand, monthly spending, expertise on Internet. This research's statistical analysis results support and developed service quality theory that not only effective in traditional brick-and-mortar stores, but also effective on online stores in the Internet age. What's more, this research points out that online shopping platform operators need to focus on build brand image and consumer trust and these make a contributes to Thailand modern e-business development. This research provides evidence for online shopping platform operators how to rapidly increase the intentions of new consumption force.

**Keywords**: Online purchasing intention, Online shopping platform service quality, Online shopping platform brand image, Consumer trust

# Introduction

As popularity of Internet in modern society, the continuous advancement of Internet technology has promoted the rapid development of global e-business. The rapid development of e-business has not only changed the traditional business model, but also greatly affected people's consumer behavior. Online shopping has become a new choice for consumer, which is to retrieve product information through the Internet, and send a shopping request through an electronic order form, and then fill in the personal checking account number or credit card number, the manufacturer sends the goods by mail order, or delivers the goods through the courier company (Lee & Lin, 2005). The data shows that in 2017, 2 billion people conducted online shopping activities (World E-commerce Report, 2017). In the field of e-business, China started earlier than Thailand, but developing rapidly, and the market

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developed and the consumer's online shopping has become a part of life (Hoppe, Lamy, & Cannarsi, 2016). The Thai government has actively promoted the development of e-business, and actively responded to the "One Belt, One Road" strategy promoted by the Chinese government, and strengthened the in-depth cooperation between China and Thailand in the field of e-business (Giap, Oei, Jiao, & Yi, 2017). In recent years, a number of well-known online shopping platforms such as KAIDEE and LAZADA have emerged in Thailand. Thai people have accepted e-business very quickly and have a passion for "online shopping". Ministry of commerce of Thailand said that e-business is expected to become Thailand's new economic growth pole. According to the data gathered from Ministry of Education in Thailand, there were 20, 309 internationals students studying in Thailand in 2011. The majority was Chinese students around 8,444 (Jaroensubphayanont, 2014). And this population has increased dramatically 45 times higher in the last five years. The Immigration Department shows academic Chinese studies reveal the figure as high as 350,000-400,000 in the past decade (Fernquest & Wangkiat, 2016). These international Chinese Students in Thailand have the habit of online shopping cultivated in China's e-business environment, making them an important part of the e-business consumer group in Thailand, and this group of students have high purchasing power, and diversified shopping needs, the continuous development of the Thai e-business market and the emergence of wellknown e-business platforms, just to meet the urgent online shopping demand of them (Ono, 2018).

With the number of international Chinese students in Thailand is increasing and reaching significant numbers, and almost all e-business platforms of Thailand regard them as an important potential customer source. However, due to cultural different, language barriers, and less understanding of the Thai e-business platform, online shopping for international Chinese students in Thailand is not smooth. On this occasion, all major e-business platforms in Thailand are must improve the quality of service, gain customer trust, create a good brand image, and win the favor of customers with professional and humanized service. There are so many factors to form one's intention. Consumer purchase decisions are not only affect directly by intrinsic and external motivation factors, but also the external motivation factors will internalize towards consumer's intrinsic factors. Our research decided to use a serial mediation perspective to study the path of how platform service quality, brand image, and consumer trust affect online purchase intention of Chinese international students in Thailand. Service quality theory will be accepted in this paper to help the e-business of Thailand develop more complexly and more internationally. Combining with the particularity of e-business industry and the research dimension of improving service quality, complements the shortcomings of the path analysis and subdivides the factors of e-business industry service quality. Based on the characteristics of Chinese International Students online purchase in Thailand, this study is willing to constructs a clearer framework about how service quality impact on Chinese international students' purchase intention. The purpose of this study is to explore and solve e-business platforms of Thailand service quality improvement dilemma.

#### **Literature Review and Hypotheses**

#### 1. Platform Service Quality and Customer Purchase Intention

According to Money, Tynan, and Chenet (1999), the initial concept of service quality comes from European countries and the theory of customer satisfaction become mature in North America. Grönroos (1984) who give a definition "services are generally one or a series of actions that can occur in an invisible manner between customer and service clerks, physical resource goods or service systems that solve customer problems." Service Quality Measurements theory is first proposed by Juran, Gryna, and Bingham Jr (1974), which contains five dimensions of technology, mentality, time, contractility and morality to discuss the composition of service quality from service providers and customers, which will use to measure platform service quality in this research. Based on the previous literatures, the platform service quality is defined as the gap between consumers' expectation and actual delivered service/product on online shopping platform, as well as it is believed that word of mouth, personal needs, past experience and external communication with customers are key factors that would affect consumers' expectations of service. The purchase intention is the probability that the consumer wants to make the purchase (Schiffman & Kanuk, 2010). With increasingly research on online purchase intention, Wu and Chang (2016) "develops a research model based on the quality-value-purchase chain", which have four quality dimensions as antecedents and three dimensions of online perceived value as mediators of online purchase intention", which find out quality dimensions positively affect online purchase intention. Both Zeithaml (1988) and Dodds, Monroe, and Grewal (1991) argue that the perceived value of consumers leads further to the consumer purchase intention, and that consumers' purchase intention often depends on their perceived value. Engel, Blackwell, and Miniard (1986) consider purchase behavior as a psychologically decision-making process by which consumers begin to evaluate and consider, compare and judge, and decide to buy, motivated by the demand motivation. Zeithaml (1988) considered that perceived value generates customer purchase intention, and therefore this research uses perceived value to measure consumers' online purchase intention. All factors that affect the consumers' online purchase intention such as price, perceived quality, perceived value, product inquiry, product attributes and so on, which can be sort into two stage, interaction stage and outcome stage. The expectations taking shape in interaction stage, and evaluation with repurchase intention formed during outcome stage (Hsu, Chou, & Min, 2014). Biswas, Wilson, and Licata (1993) measures consumers' online purchase intention by asking how likely they are to buy, if they have decided on the likelihood of buying at the time of purchase, and the likelihood of recommending others to buy.

*H1: Online platform service quality has a positive effect on consumers' online purchase intention.* 

#### 2. Brand Image and Consumer Trust

When the Internet did not appear, Martineau (1958) put forward the concept of store image, pointing out that the way consumers perceive the store according to the functional characteristics and environmental attributes of the store is defined as the store image. After decades of development, a brand is a name and/or symbolic logo, trademark and packaging design that uniquely identifies a seller's product or service and distinguishes it from competitors' products or services. Brand image is not only caused by product function, but by marketing activities, environmental factors and the characteristics of the perceiver itself. It is the brand concept owned by consumers and belongs to the perception phenomenon of consumer subjective interpretation (Dobni & Zinkhan, 1990). There are many existing studies that have shown that brand image is positively related to consumers' willingness to buy (Kwon & Lennon, 2009; Van der Heijden & Verhagen, 2004; Verhagen & Dolen, 2009). Chakraborty and Bhat (2018) "Purpose Brand image is considered as a signaling phenomenon because high brand image ensures quality product that can reduce consumer's uncertainty." Many online platforms are also aware of the importance of creating a brand image. Therefore ,

# H2: Online platform service quality has a positive effect on online platform brand image.H3: Online platform Brand image has a positive effect on consumers' online purchase intention.

The general trend of globalization and the popularity of the Internet have quietly changed the consumption habits of contemporary people. The faster and faster life rhythm has shortened the time people spend shopping (Farias, Aguiar, & Melo, 2014), and online shopping is becoming more and more popular. At the beginning of online shopping, due to the low entry barrier of the platform to the merchant, some online shopping consumers have lost trust in the platform. At the same time, a wide variety of online shopping platforms need to change the pre-trust of the online shopping consumers through certain methods and strategies, while attracting more online consumers and enhancing consumers' willingness to purchase. According to literature surveys, website brand recognition is a powerful factor leading to consumer trust (Chen & Dhillon, 2003). Octavia and Tamerlane (2017) provide the confidence to buy online, E-Trust, can raise or lower the perceived risk and security issues, so that E-Trust is crucial for the success of e-commerce companies. What's more, the brand image of the online platform can dispel the concerns and generate trust of online consumers, and it is also crucial to increase the willingness to purchase. Therefore,

# H4: Online platform brand image has a positive effect on consumer trust.

According to Gefen and Straub (2004), the form of trust that discussed in their study deals with beliefs regarding the ability, benevolence, and integrity of the trusted party, as well as consider predictability to beliefs, and their selected variables seem to be common across many settings and play a central role in management studies of trust (Gefen & Straub, 2004; Giffin, 1967; Mayer, Davis, & Schoorman, 1995; Ridings, Gefen, & Arinze, 2002). Based on Chinese students' less understanding of

the online shopping platform in Thailand, brand trust is relatively lacking. How to increase trusty become an issue need to be solved. Lewis and Weigert (1985) pointed out that trust refers to the members of the social system, for the future is expected to feel secure and create social system and symbolism. Rousseau, Sitkin, Burt, and Camerer (1998) define a mentally status includes the possibility of failure and is based on positive expectations of motivation or behavior. With the uncertainty after purchase situation and risk of betrayal included, the cost of trust must be assessed (Bohnet & Zeckhauser, 2004). Wetzels, Birgelen, and Ruyter (1998) believe that trust is composed of seller's honesty and company's goodwill, which the former means trusting each other to honor their promise and honesty, while believes they will protect the welfare of customers without damaging their rights and interests. Osman, Mohamad, and Mohamad (2016) built a model that demonstrated a path to show service quality effect customer satisfaction and service quality effect trust, while satisfaction in his model play the mediating role between service quality and trust. According to Gefen and Straub (2004), the form of trust that discussed in their study deals with beliefs regarding the ability, benevolence, and integrity of the trusted party, as well as consider predictability to beliefs, and their selected variables seem to be common across many settings and play a central role in management studies of trust (Gefen & Straub, 2004; Giffin, 1967; Mayer et al., 1995). Therefore, the study proposes three hyphotheses as follows:

H5: Consumer trust has a positive effect on consumers' online purchase intention.H6: Online platform service quality has a positive effect on consumer trust.

H7: Both online platform brand image and consumer trust create a chain mediation effect in relationship of online platform service quality and online purchase intention.

This study explores how the service quality of Thailand's online shopping platform affects Chinese international students' purchase intention and attempts to open the black box where online shopping platforms are committed to improving their services and increase customer trust with little success. The research framework originates from the PZB service quality model (Parasuraman, Zeithaml, & Berry, 2010). Further research did by Phalitnonkiat (2018) give the analysis that gathered through website quality, perceived ease of use, perceived usefulness, trust, and attitude toward online buying. Based on the understanding of the online shopping industry from many exiting literatures and access to relevant documents, as well as with considering the special situation of Thailand's online shopping platform and Chinese international students in Thailand, with consider social exchange theory, the research framework introduces two important factors, which are brand image and customer trust in a serial mediation model. The conceptual framework shown in Figure 1 below.

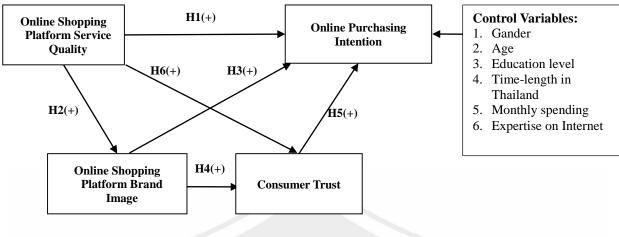


Figure 1 Conceptual Framework

# **Objectives**

This study focuses on international Chinese students who have at least one online purchase experience by random sampling method, in order to explore the impact of service quality on the customer trust, and then the impact on the purchase intention. Taking the brand image as a moderator, in order to help e-business platforms of Thailand to expand customer base and access to customer trust. It is conducive to promoting the development and improvement of the e-business industry in Thailand. It can also help the Thai e-business platforms to better serve international Chinese students in Thailand, create a better living and learning environment for International Chinese students, and promote the traditional friendship between China and Thailand. This study takes international Chinese students' purchase intention of online purchase as a dependent variable, and service quality as independent variable, while consumer trust and platform based on the literature reviews, and analyzes main effect by using ordinary least squares regression methods.

#### Methods

The study distributed an online questionnaire, there are 493 respondents that at least have one on-line purchase experience on Thailand online platform. The formal questionnaire contains one screening question (whether respondents have experience of online purchases or not) and several basic information questions (gender, age and education level, Time-length in Thailand, Cost of living, Expertise on Internet) as control variables. There are 46 questions for all four variables. In the 493 respondents, there were 280 males and 231females whose are age of 21.49 years old on average, and 92.3% of them are getting their bachelor degree with monthly spending from 2,000RMB up to 5,000RMB. The respondents are stay in Thailand for 20 to 36 months with expertise on Internet about 10 years.

The survey has 6 questions to measure consumer online purchase intention based on the study from Pavlou (2003) and Parasuraman, Zeithaml, and Malhotra (2005), which the researches are focus

on the factors of customer online purchase intention and E-patronage that will be affected by platform service quality. To measure online platform service quality, this study adopted the E-S-Qual scale, the five-dimensional scale. that developed by Parasuraman, Zeitharnl, and Berry (1985) and modified by Parasuraman et al. (2005). Also, E-S-Qual scale was summarized from an empirical study of online shopping on B2C that able to evaluate the quality of electronic services. This is a multidimensional scale that measures and evaluates the quality of online services on different platforms, which including website usability, website security, website quality, customer service quality, personalized service, which have correlated with brand image and trust issues. E-S-QUAL scale have 16 questions originally, which are specific "online platform" to "online platform in Thailand". There are 12 questions to measure consumer trust according to the existing literature of Gefen and Straub (2004), which the study is about consumer trust in e-commerce. There are 12 items for online platform brand image refers to Park, Jaworski, and MacInnis (1986) based on the differences in consumer demand, believe that any product can be theoretically differentiated into three brand concept images: (1) E-merchandise Attributes, (2) E-service Attributes, (3) E-shopping atmosphere Attributes. The questionnaire contains one open question to obtain suggestions from Chinese international students with a purpose of give online shopping platforms a direct customer reviews to improve platforms service quality.

Questions under each variable are measured by five-point Likert scale, which increasing in score means higher value for the questions. In the five-point Likert scale measure, respondents select from 1 to 5, according to the extent of self-feeling about the items. What's more, 1 to 5, refers to strongly disagree, disagree, neutral, agree, and strongly agree respectively. This study analyzed the collected data by start testing the reliability of each variables' Cronbach's alpha value to determine the scale of this study is a reliable measurement tool. Then, move on ran a correlation test to testify the existence relations among variables with the help of SPSS. Furthermore, the hypotheses will be testifying through Hayes (2013) PROCESS macros.

## **Results and Discussions**

The ultimate relevance of the online purchase intention depends on its service quality, that is, the customer buying products online or not derived from its service (Jain, 1989). Despite its critical importance, the relationship between online purchase intention and online platform service quality in Thailand received scant empirical attention. In fact, this relationship was the primary focused by many studies, while our research explores the mediating effect of online platform brand image and trust.

In this study, the scale used to measure Online purchasing intention (KMO = 0.823> 0.7, Cronbach's alpha = 0.888 > 0.7) has good reliability and validity after delete item 4 since it is not consistent with the other 5 items. Online shopping platform service quality scale, online shopping platform brand image scale, and consumer trust scale, all have good reliability and all four variables are correlated significantly, results show in table 1. Our research using AMOS did confirmatory factor analysis to test the scales' construct validity of online shopping platform service quality, online shopping

platform brand image, consumer trust, which aim to investigate the fit between the conceptual model and the actual data, as well as the relationship among each dimensions, also, common indicators used in CFA, such as GFI (SQ GFI=0.931, IMG GFI=0.934 Trust GFI=0.938), RMR (SQ RMR=0.024, IMG RMR=0.021 Trust RMR=0.024), NFI (SQ NFI =0.960, IMG NFI =0.964 Trust NFI=0.962), CFI (SQ CFI=0.972, IMG CFI=0.973 Trust CFI=0.971) and so on, are all result above 0.9, which indicates the model has a good fit and the scales has good construct validity. Table 1 covers the results of correlation analysis, which discloses all the measured variables are significantly positively related with each other, which lead our research to further step – regression analysis.

	Cronbach's a	Mean	Std. Dev.	1	2	3
1. PINI_Mean	0.888	3.6552	.93211	1		
2. SQ_Mean	0.965	3.4006	.92682	.565**	1	
3. IMG_Mean	0.964	3.5071	.85269	.551**	.724**	1
4. Trust_Mean	0.958	3.5355	.84899	.564**	.680**	.769**

 Table 1 Reliability and Correlation Analysis

\*\*. Correlation is significant at the 0.01 level (2-tailed)

We then used Hayes (2013) PROCESS macro to test our hypothesized fully saturated three stage chain of serial mediation. Model 6 is used to test the association. We used 1000 bootstrapping resamples to produce 95% confidence intervals for the indirect effect. If the confidence interval does not contain zero, one can conclude that mediation is significant. The findings supported our theorized three-stage chain of serial mediation model in which service quality positively related to online purchasing intention via establishing platform brand image that is positively related to building consumer trust. The results show in table 2 and table 3.

Table 2 presents results of hypotheses testing, where all where all the hypotheses are tested for their possible association. It is evident from the table that service quality is significantly predicting brand image and consumer trust, and relationship with purchase intention are significantly positive. These findings help us conclude that H1, H2, and H6 are supported. While exploring the relationships among brand image, consumer trust and purchase intention, it could be inferred that provision of brand image of platform will increase consumer trust, as they may form intention of purchasing online rather than other types of purchasing. These findings help us conclude that H3, H4, and H5 are supported. Findings list in table 3 reveal that H7 is also supported via brand image and trust positively predicts purchase intention. A profound explore in table 2, the explanation ability of purchase intention is increased by adding chain mediators brand image and consumer trust.

	M1 (IMG)		M2 (Trust)		Y (PINI)			Y (PINI)				
Item s	β	LLCI	UCL I	β	LLCI	UCL I	β	LLCI	UCL I	β	LLCI	UCLI
X (SQ)	0.665 4	0.608 9	0.721 9	0.240 1	0.167 3	0.313 0	0.568 7	0.495 2	0.642 1	0.288 3	0.182 5	0.3940
M1 (IMG)				0.575 0	0.495 7	0.654 2				0.162 5	0.031 0	0.2939
M2 (Trust)										0.276 7	0.152 5	0.4009
Consta nt	1.232 4	0.860 9	1.604 0	0.624 1	0.279 5	0.968 7	1.229 6	0.746 5	1.712 6	0.660 6	0.174 7	1.1465
<b>R</b> <sup>2</sup>	R <sup>2</sup> =52.84%, P=.0000		R <sup>2</sup> =62.45%, P=.0000		R <sup>2</sup> =33.30%, P=.0000			R <sup>2</sup> =39.76%, P=.0000				

 Table 2 Regression Analysis

Table 3 Direct, Indirect, and Total Effects

Effect of SQ on PINI	Effect	SE	р	LLCI	ULCI
Total Effect	0.5687	0.0374	.0000	0.4952	0.6421
Direct Effect	0.2883	0.0538	.0000	0.1825	0.3940
Indirect Effects					
Total indirect effects	0.2804	0.0477		0.1876	0.3762
$SQ \rightarrow IMG \rightarrow PINI$	0.1081	0.0490	/AT	0.0143	0.2050
$SQ \rightarrow Trust \rightarrow PINI$	0.0664	0.0210	MENT	0.0295	0.1114
$SQ \rightarrow IMG \rightarrow Trust \rightarrow PINI$	0.1059	0.0311		0.0483	0.1687

Result from open question are analyzed, and respondents mainly focus on the following three problems that are platform language, logistics distribution and payment methods. The majority of Chinese student respondents in Thailand will face language barriers when they use the Thai online shopping platform, and suggest that the platform can provide Chinese interface options. As for logistics distribution, the majority of Thai online shopping platform let customer pay for the order freight, which is more expensive and take longer delivery time on average compare to China. The opening question on survey also shows the payment methods that current online shopping platform in Thailand are immature and lack of options, especially the third-party payment platform familiar to Chinese students cannot be used for Thai online shopping platform, which is affecting the convenience of online shopping. In addition, Thailand's online shopping platform brand image awareness is not familiar by this group of consumer, the choice of product categories is limited, the platform interface friendliness is not high, which are also the impact factors of Chinese students experienced on Thai online shopping platforms.

Even though this study is based on a careful attempt in terms of research process, it is still prone to some limitations. Due to the limitations of time and budget, this study uses the online questionnaire distribution platform when selecting the sample, which has weak control over the respondent personal status scopes, which may make the sample cannot accurately represent the whole. This study suggests that in the follow-up study, the control of the respondent personal status scope of the samples should be made more specific. The study is adopted cross-sectional research design, which is not able to predict the change or trend. Normally, this type of research design has limitations of time biases and issues of common method biases. Moreover, this study covers only one form of social exchange into service quality theory as predicting force of online platform purchase intention. This study explores the path from service quality to online platform purchasing intention, selects only a few significant variables as the main variables in this study, and does not consider the customer's risk awareness, life-style, foreign language level and culture adoption status. Furthermore, the online platform development has significant differences and economic factors have significant differences across regions in Thailand (Ariyapruchya, 2017), the regions matter should be considered as well in future data selection. Recommendations for subsequent studies, other variables that can be objectively measured should be included and need to enlarge the number of valid questionnaires. The method of quantifying the questionnaire has its own limitations. Even though the study added one open question, the follow-up study should enlarge the intervenes' extent in order to obtain more practical findings.

The results of this study show that the service quality of online shopping platform has a direct significant positive effect on consumers' purchasing intention, however, this effect will reduce when adding consumer trust and online platform as mediators. The online shopping platforms' service quality has a significant positive affect on the online shopping platform brand image, and the online shopping platform brand image of has a significant positive affect on consumer trust and customer trust has a positive effect on consumer purchasing intention. What's more, the purchase intention can be affected by service quality through brand image and customer trust, in other words, brand image and customer trust are partially mediate the relationship between service quality and purchase intention positively.

The conclusion of this study confirms the predecessors' theoretical viewpoints of service quality theory, indicating that service quality theory is equally effective in the context of the Internet era, a new survey object, which played a supplementary role to the theory development. Based on the conclusion of this study, in order to increase consumer online shopping purchase intention especially the new group of Chinese international students new consumption force in Thailand, we suggest that Thai online shopping platform operators to improve service quality by enhancing brand image and enhancing customer trust, by adding Chinese language services on online shopping platforms, improving distribution efficiency and trying to reduce freight charges, and reducing payment methods complexity, especially trying to cooperate with Chinese third-party payment platforms. This research is able to help online shopping platform operators increase the intentions of new consumption force – Chinese

international students in Thailand rapidly.

# References

- Ariyapruchya, K. (2017). Thailand economic monitor: Digital Transformation. *Word Bank Group, 12*, 1-45.
- Biswas, A., Wilson, E. J. & Licata, J. W. (1993). Reference Pricing Studies in Marketing: A Synthesis of Research Results. *Journal of Business Research*, 27(3), 239-256.
- Bohnet, I. & Zeckhauser, R. (2004). Trust, risk and betrayal. *Journal of Economic Behavior & Organization*, 55(4), 467-484.
- Chakraborty, U. & Bhat, S. (2018). Credibility of online reviews and its impact on brand image. *Management Research Review*, 41(1), 148-164.
- Chen, S. & Dhillon, G. (2003). Interpreting Dimensions of Consumer Trust in E-Commerce, 4.
- Dobni, D. & Zinkhan, G. M. (1990). In search of brand image: A foundation analysis. *Advances in Consumer Research*, *17*(1), 110-119.
- Dodds, W. B., Monroe, K. B. & Grewal, D. (1991). Effects of price, brand, and store information on buyers' product evaluations. *Journal of Marketing Research*, 28(3), 307-319.
- Engel, J. F., Blackwell, R. D. & Miniard, P. W. (1986). *Consumer Behavior* (5<sup>th</sup> ed.). New York: Dryden Press.
- Farias, S. A. d., Aguiar, E. C. & Melo, F. V. S. (2014). Store Atmospherics and Experiential Marketing: A Conceptual Framework and Research Propositions for an Extraordinary Customer Experience. *International Business Research*, 7(2), 87-99.
- Fernquest, J. & Wangkiat, P. (2016). New wave of Chinese coming to live in Thailand. Retrieved from https://www.bangkokpost.com/learning/advanced/1093148/new-wave-of-chinese-coming-to-live-in-thailand
- Gefen, D. & Straub, D. W. (2004). Consumer trust in B2C e-Commerce and the importance of social presence: experiments in e-Products and e-Services. *Omega*, *32*(6), 407-424.
- Giap, T. K., Oei, L. T., Jiao, T. C. & Yi, Y. X. (2017). 2017 Asia Economic Forum On "The One-Belt One-Road Initiative: Impact and Implications". *Asia Competitiveness*, *13*(2).
- Giffin, K. (1967). The contribution of studies of source credibility to a theory of interpersonal trust in the communication process. *Psychological Bulletin*, *68*(2), 104–120.
- Grönroos, C. (1984). A Service Quality Model and its Marketing Implications. European Journal of Marketing, 18(4), 36-44.
- Hayes, A. F. (2013). Introduction to mediation, moderation and conditional process analysis: A regression based approach. New York: Guilford Press. Hein.
- Hoppe, F., Lamy, S. & Cannarsi, A. (2016). Can Southeast Asia Live Up to Its E-commerce Potential? *Bain & Company*.
- Hsu, C.-S., Chou, S.-W. & Min, H.-T. (2014). Understanding post-adoption of online shopping

continuance usage through the social exchange theory.

- Jain, S. C. (1989). Standardization of international marketing strategy: some research hypotheses. *Journal of Marketing*, 53(1), 70-79.
- Jaroensubphayanont, N. (2014). The International Student Policy in Thailand and Its Implications on the 2015 ASEAN Economic Community.
- Juran, J. M., Gryna, F. M. & Bingham Jr, R. S. (1974). *Quality Control Handbook*. New York: McGraw-Hill.
- Kwon, W. S. & Lennon, S. J. (2009). What Induces Online Loyalty? Online versus Offline Brand Images. *Journal of Business Research*, 62, 557-564.
- Lee, G. G. & Lin, H. F. (2005). Customer perceptions of e service quality in online shopping. International Journal of Retail & Distribution Management, 33(2), 161-176.
- Lewis, J. D. & Weigert, A. (1985). Trust as a social reality. Social Forces, 63(4), 967-985.
- Martineau, P. (1958). The personality of the retail store. Harward Business Review, 36, 47-55.
- Mayer, R. C., Davis, J. H. & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709–734.
- Money, A., Tynan, C. & Chenet, P. (1999). Service performance gap: re-evaluation and redevelopment. *Journal of Business Research*, 46(2), 133 - 147.
- Octavia, D. & Tamerlane, A. (2017). The Influence of Website Quality on Online Purchase Intentions: Etrust as a Mediator (Study on Agoda.Com Website Visitor). *Binus Business Review*, 8(1), 9-14.
- Ono, Y. (2018). For Thais, online shopping is a social activity: Purchases via social networks make up 20% of country's e-commerce. Retrieved from https://asia.nikkei.com/Business/Business-Trends/For-Thais-online-shopping-is-a-social-activity
- Osman, Z., Mohamad, R. K. & Mohamad, L. (2016). Mediating Effect of Customer Satisfaction on Service Quality and Trust Relationship in Malaysian Banking Industry. *Social Science Electronic Publishing*.
- Parasuraman, A., Zeithaml, V. A. & Berry, L. L. (2010). A conceptual model of service quality and its implications for future research. *The Journal of Marketing*, 49(4), 41-50.
- Parasuraman, A., Zeithaml, V. A. & Malhotra, A. (2005). E-S-QUAL: A Multiple-Item Scale for Assessing Electronic Service Quality. *Journal of Service Research*, 7(3), 213-233. doi:10.1177/1094670504271156
- Parasuraman, A., Zeitharnl, V. A. & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *Journal of Marketing*, 49, 41–50.
- Park, C. W., Jaworski, B. J. & MacInnis, D. J. (1986). Strategic brand concept-image management. *The journal of marketing*, 135-145.
- Pavlou, P. A. (2003). Consumer acceptance of electronic commerce: integrating trust and risk with the

technology acceptance model. International Journal of Electronic Commerce, 7(3), 101-134.

- Phalitnonkiat, P. (2018). An empirical study of millennial customers' buying intention to onlineentertainment tickets by Technology Acceptance Model. *Human Behavior, Development and Society, 19*(1), 40-49.
- Ridings, C., Gefen, D. & Arinze, B. (2002). Some Antecedents and Effects of Trust in Virtual Communities (Vol. 11).
- Rousseau, D. M., Sitkin, S. B., Burt, R. S. & Camerer, C. (1998). Not so different after all: A crossdiscipline view of trust. *Academy of Management Review*, *23*(3), 393-404.
- Schiffman, L. & Kanuk, L. (2010). Consumer Behavior, 10e. New Jersey: Prentice Hall.
- Van der Heijden, H. & Verhagen, T. (2004). Online store image: conceptual foundations and empirical measurement. *Information & Management*, *41*(5), 609-617.
- Verhagen, T. & Dolen, W. V. (2009). Online purchase intentions: A multi-channel store image perspective. *Information & Management*, 46(2), 77-82.
- Wetzels, M., Birgelen, M. V. & Ruyter, K. D. (1998). Marketing service relationships: the role of commitment. *Journal of Business & Industrial Marketing*, 13(13), 406-423.
- Wu, J. & Chang, Y. (2016). Multichannel integration quality, online perceived value and online purchase intention. *Internet Research*, 26(5), 1228-1248.
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidencez. *Journal of Marketing*, *52*(3), 2-22.

# ANALYSIS ON THE TRANSACTION MECHANISM AND FUNCTION OF CREDIT DERIVATIVES BASED ON PRINCIPAL-AGENT THEORY

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# Abstract

Credit derivatives are new credit risk management instruments. They could transfer and disperse the credit risk of reference assets while not changing the ownership. This article analyzes the transaction mechanism and function of credit derivatives by constructing a principal-agent model. The main conclusions are: the difference of fund costs between two transaction parties is the necessary and sufficient condition leading to credit derivatives transaction; credit derivatives transaction will optimally allocate the credit risks and improve bank's return. In addition, we analyze the realistic factors affecting the transaction mechanism of credit derivatives. The conclusions in this article explain from the economic theory angle the reasons why credit derivatives come to being and develop so rapidly and confirm their active functions in credit risk management.

Keywords: Credit derivatives, Transaction mechanism, Principal-agent theory

# Introduction

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The most important means for banks to manage credit risk is to use credit risk mitigation technology to minimize risk. Traditionally, the bank usually holds these credit assets to the end after they issue the loan. Due to the lack of loan market, the main methods of decreasing the credit risk are asking the lender to offer collaterals, requiring the third-party guarantee and decentralization, etc. The bank cannot take any remedial measures against the change in the creditworthiness of the borrower during the loan period. This credit risk management, which is completely dependent on initial credit analysis and risk control measures, has caused banks to accumulate a large amount of credit risk. In the past 20 years, because commercial bank has been experiencing the finical innovation reforms the traditional banking, they give up the traditional management methods and turn to the use of active risk diversification and transfer tools to manage credit risk. Since 20<sup>th</sup> 90s, more and more banks have taken the use of new credit risk management tool such as credit derivatives to change the bank's risk-return portfolio so that they can have a better control of credit risk.

A credit derivative is a bilateral financial contract in which both parties agree to exchange

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predetermined cash flows over a predetermined period of time, which are associated with a given credit event. Such credit events are usually associated with default, bankruptcy registration, credit rating downgrades, etc. The credit event must be observable. Credit derivatives contracts provide protection against default for the originator (the seller of credit risk). At the same time, as the credit risk receiver bears the credit risk of the reference asset, the originator must pay a certain amount of compensation to it. Compared with other credit risk management tools, credit derivatives are unique in that the transaction contract transfers the credit risk of the reference asset, but its legal rights and interests do not transfer. Credit derivatives transaction contracts manage credit risks by holding off-balance sheet credit risk hedging positions or by having contingent claims for credit losses.

The concept of credit derivatives was first proposed at the 1992 ISDA Annual Conference in Paris. In the following 1993, Bankers Trust issued a bond which is related to the credit quality of the loans it held. It became the beginning of credit derivatives transaction. Credit derivatives transaction has experienced an explosive growth: In 1996, the nominal value of credit derivatives around the world was 10 billion dollars. At the end of 2007, this number has become 58.2 billion dollars. Even after being severely hit by the financial crisis, its nominal value was 30.4 billion dollars at the end of 2009. The rapid development of credit derivatives market has shown that the positive significance of the credit risk transfer mechanism for bank credit risk management has been recognized.

Credit derivatives have experienced rapid development and its positive role has been recognized by the market. As an innovative financial derivative, domestic and foreign scholars have done much research on its transaction mechanism and role of it. Huilan Yu (2000) has analyzed the roles of credit derivatives concretely, including risk diversification, providing investors with access to the loan market, increasing the liquidity of the loan market, improving the return on capital of banks and so on which credit derivatives have positive effects on. Brandon & Fernandez (2005) suggested that the usefulness of credit derivative market shows in providing liquidity for individual loans, providing information channels between different types of asset markets, providing tools to separate credit risk, and providing flexible off-balance sheet tools and so on. They think that by fixing an appropriate price for credit derivatives, the efficiency of the development of credit derivatives can be improved. Financial institution can transfer assets risks to the most efficient undertaker. It allows the investors who cannot enter credit market to hold credit assets indirectly, eliminates segmentation of product, geographic and market participants and offers "the completion of market"

The above papers have inspired the research on the transaction mechanism and role of credit derivatives. However, its analysis is limited to qualitative descriptions, and no deep research which uses economic theory models is conducted with economic theory model. This paper extends the research results of Pennacchi (1988), Gorton & Pennacchi (1995) to the economic analysis of credit derivatives, and we use principal-agent model to study the transaction mechanism and role of credit derivatives. The main conclusion of this paper is that the difference in capital cost between the two parties is the necessary and sufficient condition for the credit derivatives transaction. Meanwhile, the product can

diversify credit risk and increase bank revenue. The above conclusions explain the reasons for the generation and development of credit derivatives transaction from the perspective of economic principles which are the main contributions of this paper. In addition, we analyzed the factors that affect the transaction mechanism of the product.

## **Principal-agent Model of Credit Derivatives Transaction**

We take both parties to credit derivatives transaction as risk neutrals. At this point, the maximum expected utility of the bank and the credit protection seller is equivalent to maximizing the expected return. In addition, we make the following assumptions about the return distribution of reference assets (in the case of bank loans), the cost of bank supervision, and the observability of bank supervision efforts.

(A1) The bank issues 1 unit of loan and the random return upon maturity is x, which satisfies  $x \in [0, L]$ . L is the promised principal and interest payment of the bank loan due, t is loan term. The bank can change the distribution of loan income through supervision. The probability density function of income distribution is f(x, a). We assume that the distribution function of loan F(x, a) satisfies the following "convex distribution function condition":

 $F(x,\lambda a + (1-\lambda)a') \le \lambda F(x,a) + (1-\lambda)F(x,a'), \forall a,a'; \lambda \in (0,1)$ 

(A2) Let the supervision cost function of the bank on the loan be c(a). If the bank has a monitoring technology with the same scale, then  $c(a) = c \cdot a$ .

(A3)The credit derivative which have neutral risk seller requires the expected rate of return on investment in the product is  $r_N$ . Assume that what the credit protection seller faces is monopoly buyers and they also face fierce competition<sup>1</sup>. Because of its competitiveness, the expected rate of return on its investment is exactly equal to its cost of capital. The bank does not have its own capital. They get capital from deposit financing and equity financing and its weighted capital cost is  $r_1$ .

(A4) The bank's efforts to supervise loans cannot be monitored, that is, information asymmetry between the two parties

(A5) The bank can purchase b units of credit protection for loan incomes and bear (1-b) units of

<sup>&</sup>lt;sup>1</sup>Tan Jingting (2002) analyzed the oligarchic phenomenon in the credit derivatives market. Taking the United States as an example, he pointed out that many small and medium-sized banks can enter the market as credit protector s, but their demand as credit protection buyers is difficult to meet. The three largest players have a market share of 95%, with the market share of the first place being more than three times that of the second. It can be seen t hat the credit derivatives market is a typical oligarch market.

credit risk. Here,  $b \in [0,1]$ . 1 unit of credit protection is full credit protection. Assume that the credit derivative being traded is a credit default swap, and the contract specifies that if the loan yields x < L, the compensation which the seller of credit protection pays the bank is L-x. Let 1 unit of credit protection price (the price of credit derivatives) be  $\pi$ .

(A6) Let the average return on the loan due be  $\overline{x} = \int_{0}^{L} x dF(x, a)$ , which is a function of the level

of bank supervision efforts. The characteristics of this function are  $\overline{x}_a = \partial (\int_0^L x dF(x,a)) / \partial a > 0$ ,

$$\overline{x}_{aa} = \partial^2 \left(\int_0^L x dF(x,a)\right) / \partial a^2 < 0$$

Under the above assumptions, the bank chooses the optimal transaction mechanism (protection level b and supervision effort b) to maximize the bank's expected profit. The maximization problem is

$$\max_{b,a} \int_{0}^{L} x(+b \ L(-x \ dF) x \ a(-c \ a) - (+)\pi \ e^{t} 1$$

$$\pi = e^{-t_{N}t} \int_{0}^{L} b(L-x) dF \ x \ a,$$
s.t. 
$$\int_{0}^{L} (x+b(L-x)) dF(x,a) - c(a) \ge \int_{0}^{L} (x+b(L-x)) dF(x,a') - c(a'), \forall a' \ne a$$
(1)

Among them, the second constraint is the incentive compatibility constraint. When the convexity distribution condition in hypothesis (A1) is satisfied, according to Hart and Holmstrom (1986), the incentive compatibility constraint can be replaced by the following first-order condition:

$$\int_{0}^{L} (x + b(L - x)) dF(x, t)'$$

Substitute the correlation function into it to get  $(1-b)\overline{x}_a = c$ 

Considering the range of values of b,  $b \in [0,1]$ . The above bank revenue maximization problem can be transformed into

$$\max_{b,a} \int_{0}^{L} x dF(x,a) - c(a) - e^{r_{t}t} + \theta \int_{0}^{L} b(L-x) dF(x,a)$$

Which  $\theta = 1 - e^{(r_l - r_N)t}$ 

s.t.  $(1-b)\overline{x}_a = c$  (2)

$$0 \le b \le 1$$

Now let's solve the maximization problem and get the bank's optimal transaction mechanism  $b^*, a^*$ . The first-order conditions for a and b are

$$\theta(L-\overline{x}) - \lambda \overline{x}_a - \mu_1 + \mu_2 = 0$$
  

$$\overline{x}_a - c'(a) - \theta b \overline{x}_a + \lambda((1-b)\overline{x}_{aa} - c''(a)) = 0$$
  

$$\mu_1(1-b) = 0, \ \mu_2 b = 0$$

in respect

Because 
$$c(a) = ca$$
, then  $c'(a) = c$ ,  $c''(a) = 0$ , also because  $(1-b)\overline{x}_a = c$ 

We substitute these conditions into the first order conditions with respect to *a* and we get  $(1-\theta)b\overline{x}_a + \lambda((1-b)\overline{x}_{aa}) = 0$ 

After setting up the other conditions, the possibilities of the conclusion are:

(1) b = 0, a is dependent on  $\overline{x}_a = c$ . At this point, the bank won't buy credit protection and there will be no credit derivatives transaction.

(2)b=1, a=0. At this point the optimal contract is that the bank should buy full protection, but the bank no longer supervises the loan at all.

Interior point solution. At this point,  $\mu_1 = \mu_2 = 0$ . After we take the first-order conditions as

simultaneous equations, we can get  $b^* = \frac{\theta}{\theta + (1-\theta) \frac{-\overline{x_a}^2 / \overline{x_{aa}}}{L - \overline{x}}}$  and  $(1-b^*)\overline{x_a} = c$ . Both determine

the optimal  $b^*, a^*$  together.

# The Transaction Mechanism and Role of Credit Derivatives

From the above analysis, it is possible for the bank to choose not to buy credit derivatives. What we are interested in is, under what conditions do the bank choose to buy credit derivatives so as to generate credit derivative transaction.

Proposition 1:  $\theta > 0$  is a sufficient and necessary condition for b > 0, that is, the generation of credit derivatives transaction.

Proof: Prove the necessity first.

Compare the two options the bank has. If a bank chooses to trade credit derivatives, the maximization problem it faces is

$$\max_{b,a} R_1(a,b) = \int_0^L x dF(x,a) - c(a) - e^{r_1 t} + \theta \int_0^L b(L-x) dF(x,a)$$
  
s.t.  $(1-b)\overline{x}_a = c$  (3)  
 $0 \le b \le 1$ 

If the bank chooses not to buy credit derivatives, the maximization problem it faces is

$$\max_{a} xR_{2} a(=) \int_{0}^{L} x dF x (a - c)a - (e^{r_{1}t})$$
(4)

Assume  $\theta \le 0$ , since  $\theta \int_{0}^{L} (L-x) dF(x,a) \le 0$  is true, for any *a*, we can get

$$R_1(a, b) \leq R(a, \oplus) R$$

That means the bank must opt out of buying credit derivatives, which means b=0. Hence,  $\theta \le 0$  is a sufficient condition for b=0 and  $\theta > 0$  is a necessary condition for b>0.

Secondly, we need to prove sufficiency. We have to prove that b > 0 is true in the case of  $\theta > 0$ , which means the bank must choose to buy credit derivatives.

Firstly, we need to solve the maximization problem. The first-order condition is  $\overline{x}_a = c$  and we can get that the optimal effort level is  $\overline{a}$ . Also,  $R'_2(\overline{a}) = 0$ .

Since  $(1-b)\overline{x}_a = c$ , We can transform the dual maximization problem into the unitary maximization problem:

$$\max_{a} R_{1}(a) = \int_{0}^{L} x dF(x,a) - c(a) - e^{r_{1}t} + \theta(1 - c/\overline{x}_{a})(L - \overline{x}), 0 < a \le \overline{a}$$

When  $a = \overline{a}$ , we can get  $R_1(\overline{a}) = R_2(\overline{a})$  and  $R'_1(\overline{a}) = \theta(L - \overline{x})\overline{x}_{aa}/c < 0 = R'_2(\overline{a})$ .

Since  $R_1(\overline{a}) = R_2(\overline{a})$ ,  $R_1(\overline{a}) = R_2(\overline{a})$ , the bank inevitably chooses to buy credit protection and get the revenue  $R_1(a)$ . Meanwhile, the bank will reduce the level of effort and choose a new lower effort level  $a^*$  to maximize  $R_1(a^*)$ . The revenue must be greater than the maximum revenue of the bank not buying credit protection. At this point,  $b^* > 0$ .

Let's analyze the economic implications of proposition 1. Since c'(a) = c, c''(a) = 0,  $r_I < r_N$  is a necessity of the emergence of credit derivatives transaction. According to the meaning of  $r_I$ ,  $r_N$  in the hypothesis,  $r_I < r_N$  represents that the sufficient and necessary condition for the emergence of the credit derivative transaction under the condition of information asymmetry is that the bank capital cost is less than the capital cost of the credit protection seller. The bank uses the "absolute advantage" in the capital cost to choose to purchase credit protection instead of "self-insurance" to obtain additional

benefits. This is the key reason for the generation of credit derivatives transaction.

We can get the following corollaries from proposition 1

Corollary 1: The generation of credit derivatives transactions increases the total revenue of the bank.

Proof: When a starting from  $\overline{a}$  decreases, the reduction in the net return of the loan caused by the reduction in supervision in the objective function is less than the increase in the credit protection

return. b will increase when a decreases until the marginal decrease of 
$$\int_{0}^{L} x dF(x,a) - c(a) - e^{r_{t}t}$$

(the net return of loan) with respect to *a* is equal to the marginal increase of  $\theta \int_{0}^{L} b(L-x)dF(x,a)$ 

(credit protection income) with respect to a. At this point, the bank increases the total return to the maximum by participating in credit derivatives transaction while reducing the level of supervision efforts. The optimal condition is

$$\left| \partial \left( \int_{0}^{L} x dF(x,a) - c(a) - e^{r_{l}t} \right) / \partial a \right| = \left| \partial \left( \theta \int_{0}^{L} b(L-x) dF(x,a) \right) / \partial a \right|$$

The b in the right side of this function is a function of a. Taking the above function and the incentive compatibility constraint  $((1-b)\overline{x}_a = c)$  as simultaneous equations, the optimal  $a^*$ ,  $b^*$  can be determined.

This section conducts an in-depth analysis of the transaction mechanism of credit derivatives based on the principal-agent model and concludes that the difference in capital costs is a sufficient and necessary condition for the emergence of credit derivatives transactions. The party with relative low capital cost is the demand side of credit derivatives, and the party with relative high capital cost is the supplier. The difference in capital costs actually represents the difference in the ability to withstand credit risk exposure. Through credit derivatives transaction, transfer and the diversification of risk, both parties can achieve optimal allocation of credit risk between the two. In addition, we also prove that participating in credit derivatives transactions can increase the total revenue of the bank.

# Factors Affecting Credit Derivatives Trading Mechanism: Parameter Analysis

In the previous section, we conduct the research on the mechanism of derivatives transaction and obtain the optimal effort level d and credit derivative protection ratio. Next, we conduct parameter analysis on the main factors affecting the transaction mechanism. To do so, we need to make specific hypothesis about the functional form of the average return on bank loans: Assume  $\overline{x}(a) = L(1 - \alpha e^{-\beta a})$ ,  $\alpha, \beta$  are constants greater than 0. It is easy to prove that  $\overline{x}(a)$  satisfies the function characteristics specified in the hypothesis A7. Considering the case of the inner point solution, the optimal solution form can be simplified to

$$b^* = \theta$$
,  $a^*$  is dependent on  $(1 - \theta)\overline{x}_a = c$  (5)

Here, the expression of  $\theta$  is  $\theta = 1 - e^{(r_l - r_N)t}$ . It measures the difference in capital costs between banks and credit default swaps sellers. Proposition 1 proves that the bank's capital cost is less than capital cost of credit default swap seller is a sufficient and necessary condition for the emergence of credit default swap transaction, which  $r_l < r_N \Leftrightarrow \theta > 0 \Leftrightarrow b^* > 0$ .

According to (5) We further know that the degree of difference  $\theta$  in the cost of funds between the two parties determines the size of the optimal protection ratio. Thus, we can infer that Corollary 2: Given the capital cost of a credit default swap seller, the higher the bank's capital cost is, the lower the proportion of credit protection purchased in the credit default swap transaction is.

Proof: Based on the hypothesis,  $r_I$ ,  $r_N$  represent the capital cost of the bank and the capital cost of the credit protection seller respectively. The condition of the emergence of credit default swap transaction is that the bank capital cost is less than the credit protection seller's capital cost, which

$$r_l < r_N$$
. Under this condition, we can obtain  $\frac{\partial b^*}{\partial r_l} = \frac{\partial \theta}{\partial r_l} = -e^{(r_l - r_N)t} r_l < 0$ .

If we regard the bank's implementation of the loan loss reserve system and retaining a certain percentage of capital as a kind of "self-insurance" for the loss caused by credit risk, the high capital cost of the bank means that the additional protection revenues obtained by choosing to purchase protection instead of "self-insurance" are lower. Combined with proposition 1, we can know that when  $r_I$  gradually rises and closes to  $r_N$ , the bank's comparative advantage gradually disappears, and the difference in risk-taking ability between the two parties is gradually reduced, so that the bank's willingness to purchase credit default swaps and transfer and disperse risks will decline. When  $r_I = r_N$ , according to proposition 1, credit default swap transaction won't happen.

As with the analysis of Proposition 1, if we further examine the factors that determine the cost of bank capital, we can find that due to many market and institutional factors, as well as the impact of bank capital structure factors, banks have different capital costs, which indirectly affects the decision of the optimal contract for a credit default swap transaction. For example, the intensification of deposit competition will lead to an increase in the cost of deposit financing and an increase in the cost of bank funds, so that the bank will choose a lower protection ratio in credit default swap transactions.

# **Conclusions and Suggestions**

As a new derivative financial instrument to avoid credit risk, credit derivatives separate credit risk from other risk types while preserving assets, and provide risk transfer mechanism, so that credit risk management has the same hedging method as market management, which changes the characteristics of credit risk management radically.

The rapid expansion of credit derivatives in terms of transaction size and market influence indicates that market traders have great demand for this product. Credit derivatives play an irreplaceable role in credit risk management. By constructing the principal-agent model of credit derivatives trading, this paper studies the transaction mechanism and role of this product, analyzes the root causes of its emergence and development, and clarifies its positive role. The conclusion of this paper indicates that the difference in the cost of capital between the two parties is the decisive factor of the emergence of the credit derivatives transaction. The transaction can achieve the decentralization, transfer and optimal allocation of credit risk, and improve the bank's revenue level. The key question is whether banks have used these instruments primarily to diversify and thus reduce their risk exposures, or whether banks have undone the diversification by expanding their lending. Research on earlier credit market innovations has found that activities such as loans sales and securitizations have not resulted in overall reductions in bank risk, but rather an expansion of lending. Such an increase is credit supply would be an important consequence of the recent rapid growth of the market for credit derivatives. Credit derivatives represent an important credit market innovation that, in theory, allows banks to originate and fund loans without holding the associated credit risk. More broadly, credit derivatives are the latest in a series of innovations that have facilitated credit risk management and made it easier for banks to diversify their credit risk exposures. Therefore, we should encourage the development of the credit derivatives market and use credit derivatives transactions actively to manage bank credit risks effectively.

# References

- Brandon, Kyle & Fernandez, Frank. ) 2005 . (Financial innovation and Risk Management: An Introduction to Credit Derivatives. *Journal of Applied Finance, Spring*.
- Gautam V. ) 2015 . (Service Quality Perceptions of Customers about Mobile Telecommunication Services: A Case of India. *Journal of Global Marketing*, 28(1), 19-31.
- Gorton, Gary B. & Pennacchi, George G. )1995 . (Banks and Loan Sales-Marketing Nonmarketable Assets. *Journal of Monetary Economics*, 35, 389-411.
- Pennacchi, George G. (1988). Loan Sales and the Cost of Bank Capital. *The Journal of Finance, 43*(2), 375-395.
- Russo Spena T. (2018). Cultural Issues and Supply Chain Sustainability of Multinational Companies.In: Çalıyurt K., Said R. (eds) Sustainability and Social Responsibility of AccountabilityReporting Systems. Accounting, Finance, Sustainability, Governance & Fraud: Theory andApplication. Springer, Singapore.

# APPLICATION OF CHINA'S ENTERPRISE STRATEGIC ALLIANCE ——TAKING JD.COM AS AN EXAMPLE

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# Abstract

Taking JD.com Company as a case, this paper analyzes the application methods and risks of strategic alliances in detail. In the form of alliances, JD.com achieves complementary resources, which can improve production and sales efficiency, highlight advantages, and make up for the disadvantages. This paper finally puts forward theoretical suggestions for the organizational practice of establishing alliances in China by summarizing.

Keywords: Strategic, Alliance, Platform strategy, Risk prevention, JD.com

# Introduction

JD.com is a self-operated retail shopping website in China, formerly known as 360 buy, whose founder is Liu Qiangdong. In 2014, JD.com Group was listed on the NASDAQ Stock Exchange in the United States, becoming China's first large-scale integrated e-commerce platform to go public in the US. In the first quarter of 2015, the market share of self-operated B2C e-commerce market in China. 56.3%. Currently selling home appliances, digital communications, computers, home department stores, clothing, books, food and other commodities. According to the data, as of the end of March 2016, JD.com has 7 supplementary centers, 209 warehouses, 5,987 delivery offices and 2,493 pick-up stations. On September 30, 2017, JD.com operated a total of 405 large warehouses across the country with a total area of approximately 9 million square meters. In the course of its development, JD.com has formed a multi-dimensional "integration + combination" by establiing strategic alliances with other enterprises, thereby integrating resources to enhance its own resources and capabilities, continuously improving its core competitiveness and management efficiency, and becoming one of the largest ecommerce platforms in China. JD.com proved to us that as China's trade freedom increases, companies need strategic alliances to improve their competitiveness. JD.com's strategic alliance is a typical and valuable case. This article will take JD.com's strategic alliance as an example to explore the impact of strategic alliances on enterprises and give advice on strategic alliances.

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#### **Literature Review**

In the embryonic period of China's strategic alliance, Wang Xiaojia gave different interpretations of the formation of strategic alliances from different perspectives in her paper. She believed that the concept of strategic alliance is dynamic, so it can adapt to the complex organizational form of "super competition" requirements. In 2017, the development of strategic alliances has become increasingly mature. In Li Kun's paper, he focused on the strategic alliance in the form of supply chain. He believed that this supply chain model can play the core competence of alliance members, thereby enhancing overall competitiveness, and can overcome the contradiction between time and space and promote alliance innovation. In view of the serious impact of China's retail industry facing the decline in the growth rate of the real economy, Jianhong Luo pointed out a form of enterprise alliance for sharing data, putting forward theoretical suggestions for establishing alliances in China's retail industry. When things mature, innovation is essential. Zhang Xiaomei and Yin Xiaoli thought Innovative strategic alliances can enhance corporate competitiveness.

## **Research Objective**

JD.com's strategic alliance is a typical and valuable case. This paper will take JD.com's strategic alliance as an example to explore the impact of strategic alliance on enterprises, how to better carry out strategic alliance, and give suggestions on developing strategic alliances for enterprises of different sizes.

# Content

Enterprise strategic alliance refers to two or more enterprises with similar operational capabilities and complementary resources. In order to achieve common strategic goals, the cooperation agreement is signed. In cooperation, both parties need to share costs, risks and share resources and benefits. The established alliance form of the enterprise mainly includes joint ventures, technology and R&D and development alliances, brand-name production, marketing alliances, functional agreements, etc. The contents of the alliance also cover all aspects of the national economy.

JD.com has mainly carried out joint venture strategic alliance, technology and R&D alliance, and marketing strategic alliance in its enterprise expansion. First, the joint venture strategic alliance — through the "Jingteng Plan" and other projects. Tencent, Baidu, QiHu 360 and other giant companies joined forces to jointly build an e-commerce platform. These giant companies are comparable to JD's strength, with the same strategic philosophy and goals. The joint venture enables them to invest their respective superior resources in the joint venture, so that they cannot benefit from a single company. Second, the brand-name production alliance — JD.com signed a strategic direct supply agreement with the major West Lake Longjing tea merchants and farmers. On the one hand, it can avoid the middlemen to make the difference. On the other hand, JD.com's internet of things and big data technology make the tea fidelity direct supply process service transparent to consumers and promote consumption. Third,

the marketing strategy alliance — with Beijing Bytes Dance Co., Ltd announced a comprehensive strategic cooperation and jointly launched the "Jingtiao plans." Bytes Dance, as a news website with huge traffic, can bring higher visibility, popularity and turnover to JD. Both parties can also realize more headline numbers by jointly conducting e-commerce cooperation based on interest reading. While today's headlines gain revenue, they can use scale advantages to strengthen the maintenance of intangible assets, thus forming a benign cycle. Liu Qiangdong always believes that the company must be open and win-win, and the company can survive and develop in this era of rapid change. In JD.com's 2017 Annual Report, "To achieve our 'Boundaryless Retail' vision, we are exploring a variety of omnichannel integration opportunities and innovative business models. Leveraging our well-established retail infrastructures, we believe we are well-positioned to create enhanced shopping experience for consumers as well as improved efficiency for our business partners in the ecosystem."

In general, there are four reasons why companies can carry out strategic alliances. The first is the promotion of science and technology. With the development of science and technology, newly developed products often involve a variety of professional fields, and strategic alliances can re-integrate R&D enterprises and circulation enterprises to establish a reliable transformation network. Achieve strategic goals. Only by continuously reaching an alliance can we meet new challenges that are constantly emerging. Second, members of a strategic alliance can share risks with each other. Through strategic alliances, enterprises can not only save original resources through economies of scale, but also exchange necessary resources on the basis of sharing external resources. Moreover, global economic integration leads to fierce international competition, and international companies compete far more than regional enterprises, forcing multinational companies to adopt new and more effective competition strategies. The last reason is the establishment of relationship capital. Relational capital refers to a network of personal relationships between companies and stakeholders. Strategic alliances establish trust between companies and can effectively reduce the opportunistic behavior of alliance members.

In the Internet "river and lake", e-commerce giants are very quick and forward-looking for the exploration of e-commerce. More and more Internet companies are opening their own resources, technologies and capabilities to all aspects of the industry, and retailers are bound to achieve digital transformation of people, goods and fields by opening up data, scenarios and values. In a dynamic and complex business environment, JD.com believes that it is necessary to break the boundaries between retail formats, change old thinking patterns, and find like-minded partners. This is "unbounded retail". This means that the upstream and downstream of the value chain need to be seamlessly connected, and each transaction entity is deeply collaborative. For JD.com, the goal of the strategic alliance is simple: in the cooperation, the brand merchants pay for the advertisement of the media port, and the actual transaction is reached in JD.com. This is essentially to open the channel and achieve a win-win situation.

Specifically, companies can develop strategic alliances through brand alliances, supply and demand alliances, research and development alliances, market sharing alliances, sales alliances, and investment capital alliances. In summary, there are three main ways for companies to develop strategic

alliances. The first is that the two sides need to share knowledge, technology, capital and human capital; the second is that there is a need for ambiguity between the boundaries of the enterprise and there is no clear hierarchical relationship or cooperation boundary; the third is that the strategic alliance is mainly through contractual connection, the enterprise The relationship between the market has the characteristics of market mechanism and administrative management. The enterprises mainly solve problems through negotiation or resolve conflicts.

Taking JD.com as an example, JD.com has signed a strategic supply agreement with the major West Lake Longjing tea merchants and farmers to form a supply and demand alliance; through the "Jingteng Plan" and other projects, it has teamed up with giant companies such as Tencent, Baidu and QiHu 360. Establish an e-commerce platform, set up a sales alliance; invest in Yonghui Supermarket, invest in the UK's e-commerce website Farfetch to form an investment capital alliance; jointly launch the "Jingtiao plan" with Bytes Dance to help JD to expand sales, make headlines, and form a market sharing alliance. The key point of this series of measures is to adhere to mutual benefit and win-win results, establish a good reputation, and achieve long-term and stable cooperative relations. In the final analysis, the strategic concepts and goals of both parties are consistent.

## 1. Benefit of Strategic Alliance

The stakeholders of the strategic alliance mainly include employees, enterprises and society of the various enterprises in the alliance. Strategic alliances can expand corporate sales, help companies to promote new products, expand enterprise economies of scale, reduce waste of people and property, reduce losses caused by competition, and enhance corporate competitiveness.

JD.com has benefited a lot from strategic alliances. Based on the above, JD.com has cooperated with giant companies such as Tencent, Baidu and QiHu 360 through the "Jingteng Plan" and other projects to jointly build an e-commerce platform, expand sales and share risks, and rely on the giants outside the industry. The strength has consolidated its position and strength in the e-commerce platform; through the strategic direct supply agreement with the major West Lake Longjing tea merchants and farmers, reducing unnecessary costs, while JD.com's things technology and big data technology make sure the direct supply process service is completely transparent to consumers, optimize the consumer's shopping experience and expand sales; and Beijing Byte Dance Co., Ltd. announced a comprehensive strategic cooperation, jointly launched the "Jingtiao Plan", innovating and achieving a brand-new sales model that not only increases the visibility of the company, but also expands sales and profits from it, improving the competitiveness of the company.

JD.com has different ideas for different stakeholders. In order to retain the old talents and attract new talents, Liu Qiangdong proposed three conditions for the JD.com Human Resources Department: first, not to dismiss the employee; second, promise not to reduce the salary; third, all the remaining employees to sign the award and retain the reward. Because most of the employees involved do not care whether the salary changes, what he really cares about is how his future development will be. Taking them into consideration from the perspective of employees can improve employee recognition and loyalty to the company. For partners, JD.com insists on mutual benefit and win-win, rejects monopoly, and forms an alliance of interests. This will not only strengthen the cooperation and enable it to continue for a long time, but also attract more powerful enterprises to cooperate with JD. In the competition, word of mouth is the best advertisement. For the society, JD.com adheres to green development, establishes "JD.com tea pollution-free base", assumes its social responsibility as a large enterprise, and does not take profits at the expense of polluting the environment and damaging the health of ordinary people.

# 2. Risk of Strategic Alliance

The difficulties and challenges encountered by JD.com in carrying out strategic alliances can be described as "internal and external troubles." "External troubles" are the pressure brought by external competitors. When JD.com's efficient and low-cost operation chain quickly extended, it inevitably collided with the traditional retail system, affecting many people's jobs, and was defined as an unwelcome "spoiler". As the most important development area for the public in the new era, everyone wants to come to the "Internet". As a leading company in the industry, Alibaba and Suning respectively turned the e-commerce innovation step towards interest-based information reading, online red live broadcast, video website, and enriched and upgraded the e-commerce shopping experience. The strong competitor caused JD.com great pressure. "Internal worry" is a problem in internal management after the merger of the company. The first is cultural conflict. The most typical is the merger of Tencent ecommerce and JD.com, whether the two sides can achieve cultural integration. The cultural conflict between the two companies is very fierce. Tencent is a typical Internet company. It is culture-oriented, paying attention to freedom, caution and craftsmanship. It is committed to pursuing the improvement of user experience. JD.com is an e-commerce platform, of which the primary goal is to improve production quality. Second, Tencent is a company with good salary and benefits. The stock price of Tencent is also very high. The willingness of employees to come to JD.com is not high. The third is account management. Under normal circumstances, all enterprises in the alliance will have their own account system, which involves the data and account integration issues between the two parties. Under one account system, there will be strong accounts and weak accounts, which will lead to the game between strong and weak accounts.

## **Summary and Discussions**

In strategic alliances, enterprises are one of the most important stakeholders. Large enterprises are in the leading position in the alliance, and they are the main leading members of the alliance. They have absolute control and summoning power in the alliance. The incentive to enter the alliance is mainly the desire for higher market share. Compared with large enterprises, SMEs have the advantages of rapid market response and flexibility. Alliance units need such market-savvy members to understand the

market changes, and to connect universities and research institutions to develop and meet the market development trend. SMEs should be avoided as a part of the alliance's products or services in the development field.

For large and medium-sized enterprises, using modern information technology to improve the overall efficiency of the supply chain, playing a leading role of distributors to strengthen supply chain alliance management, strengthening cooperation awareness and establishing a fair and reasonable interest distribution mechanism can build and occupy the dominant position in the strategic network. . In order to maximize the advantages of enterprise resources and capabilities in strategic alliances, enterprises should first exert economies of scale. Small enterprises are difficult to share fixed investment compared with large enterprises, and the average production cost is higher. If small enterprises jointly establish alliances, synergistic effects can be produced to compete with large enterprises in production costs; Secondly, play the complementary role of resources, different enterprises hold different core resources, and the complementary advantages between alliance enterprises can optimize the profitability of all enterprises; additionally, it's necessary to overcome industrial barriers. Some new markets are occupied by several oligopolistic enterprises, and it is difficult for individual enterprises to enter the market and carry out price wars. However, entering the market in the form of alliances can overcome the production threat of oligopolistic enterprises. Last but not least, the division of labor in the industry can make the enterprises of the vertical industry chain professionally divide one part of the value chain and reduce the intermediate links of the transaction.

For small and micro enterprises, the proportion of the alliance as a whole is generally small. On the one hand, it is limited by the scale. It is not dominant in the enterprises that compete in the same industry. On the other hand, the risk of transformation of results after entering the alliance may not be able to bear. In order to cope with the contradictions and disputes in the strategic alliance, small and micro enterprises should consider the overall situation, maximize the benefits of both parties, minimize losses, and do not lose the opportunity to cooperate with large enterprises due to the loss of small profits. At the same time, because of the limitations of capital and strength, small and micro enterprises should better understand and avoid disadvantages. Lastly, small and micro enterprises can make concessions to promote harmony, but they cannot lose the principle.

# References

- Li, K. (2017). Circulation-led supply chain strategic alliance and value chain innovation. *Business Economics Research*, (4), 22-24.
- Luo, J. & He, Y. (2018). In view of the serious impact of China's retail industry facing the decline in the growth rate of the real economyZz. *Business Economics Research*, (4), 96-99.
- Wang, X. (2005). The theoretical basis of the formation of corporate strategic alliance and its application in China. *Journal of the Party School of Shanxi Provincial Committee of the Communist Party of China*, (4), 68-69.

- Yin, X. & Lin, R. (2018). The Strategy of Enterprise Core Competitiveness Improvement from the Perspective of Strategic Alliance. *Management*, (8), 111-113.
- Zhang, X. & Xing, C. (2018). Research on Classification of Enterprises Entering Industrial Technology Innovation Strategic Alliance Based on Motivation Theory. *Science and Technology Management Research*, 38(17), 167-174.



# AN OVERVIEW OF HRM MANAGEMENT CAPABILITY EVALUATION ——BASED ON STRAGETIC HRM

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#### Abstract

With the development of ideas of administration in Modern Corporation, HRM becomes increasingly important so that the evaluation of it is vitally important. This paper reviews the concept, the method and the importance of HRM in order to find the methods to evaluate the HRM of companies in China to improve the organizational performance. The study found that, currently, most of the human resource of domestic enterprises still remain at the level of traditional HRM, which are still simple personnel management. On one hand, these simple personnel managements are basically similar and do not have large technical difficulties, which cannot increase the competitive advantage for enterprises; on the other hand, traditional HRM cannot fully stimulate the vitality of human capital and thus positively affect corporate performance. Therefore, from a strategic point of view, the key problem that domestic HRM must break through is that we should combine human resource with other aspects of the enterprise to improve HRM activities from flexibility, implementation and effectiveness.

Keywords: Strategic HRM, Organizational performance, Evaluation of HRM

# Introduction

Under the market economy system, the sustainable development of enterprises above designated size can effectively promote the overall development of the national economy. Due to the continuous changes in the external environment, as the company's first resource, the improvement of human resources capabilities cannot be accomplished overnight. Therefore, whether the above-scale enterprises have fully and efficiently allocated human resources and whether the investment in human resources management has achieved the expected results, and whether It is necessary for the human resources management department to evaluate the planning and implementation as a basis for continuous improvement. In recent years, China's enterprise innovation performance has improved, but the ability to create new technologies is weak, and more than half of advanced technologies are still dependent on introduction. Human resource management system of enterprises has an important

Corresponding author: Meiling Shi E-mail: lovesml@126.com influence on employee innovation behaviors, so it is of great practical significance to explore the HRM capability evaluation system and its relationship with innovation performance.

Through reviewing the evaluation methods of HRM capability based on strategic human resource management, the paper aims at: 1.Understanding the concept and thought of strategic HRM, and finding out the shortcomings in the current HRM activities in China; 2.Understanding the main methods of HRM at the present stage, so as to find a proper method to evaluate HRM in China.

# **Literature Review**

In the early period, human resources management paid more attention to personnel management, mainly including recruitment, training, salary management and so on. However, Modern human resources management mostly focuses on strategic management. It pays attention to the development of human ability, creativity and intelligence potential. It requires enterprises to find out the problems actively under the fast changing environment, understand how to use information technology to find countermeasures and put forward innovative ideas. Therefore, what is strategic human resources management, how it affects enterprise performance, and how to evaluate human resources management is the focus of this paper.

# 1. Strategic Human Resources Management

So far, there is still no clear and widely accepted definition of SHRM. Wright McMahan (1992) believes that strategic HRM is a systematic and dynamic management process, integrating employees with the enterprise to achieve a high degree of unity. The core of the integrating is reflected consistency in the strategic objectives of the organization and employees. Schuler's (1992) put forward the "Black Box" theory for the relationship between SHRH and enterprise performance. Different from the first two, Ichniowski (1997), Lepak (2002), Ramostorres (2017) found that found that SHRM practice, which is matched up with organizational objectives, would have a positive impact on the mission of task completion. It can be seen that from the study above that western scholars were mainly in the stage of exploring, analyzing and summarizing SHRM from the early 1990s to about 2000. The strategic HRM has shown a diversified development trend and entered a new development stage from HRM mode structure to observation perspective by 2010.

The research of Chinese scholars on SHRM is later than that of western scholars. Zhao Shuming is the first person that introducing strategic human resources management to China. He firstly applied the concept of "strategy" in HRM in his article On Strategic HRM in China Industrial Economics. Zhang and Liu (2005) have summarized the definitions of SHRM by different scholars. At the same time, they believe that SHRM can promote HRM to a strategic level, which means that HRM must be closely linked with the other business activities. Shi and Zhang (2006) compare SHRM with traditional human resources management. They believe that it is necessary to restructure and distribute the elements in the

process of traditional human resources management, thus forming a set of new, systematic, scientific and more competitive SHRM system. With the connotation of SHRM in China has been further extended, Meng (2008) integrates situation theory with SHRM, bringing SHRM into the specific situation and observing the formation and operation of SHRM. Scholar Xie (2008) reviewed and compared SHRM from the perspective of universality and contingency. Hu (2017) suggested that HRM should be highly consistent with organizational strategy and change with the trend.

Although there is no general consensus on the definition of SHRM, most of the scholars still agree that HRM should match the organizational objectives under the concept of SHRM, this is where SHRM differs most from traditional HRM. However, the human resources management is still at the level of traditional human resources management in our country, which means that HRM is simply implemented as personnel management. SHRM regard human as resource, and the traditional human resource management regard human as the cost, and the SHRM attaches great importance to the development and coordination of employees, while the traditional human resource management attaches great importance to the administration of them. Therefore, it is the key direction for domestic enterprises to change the concept of HRM and improve HRM to the strategic level.

## 2. HRM and Organizational Performance

Scholars abroad generally believe that HRM has a positive impact on enterprise performance. Through the literature review, Becker, Brian (1996) found that the process of human resource decisionmaking can indeed affect the value creation which is mostly positive. Huselid and Jackson (1997) carry out analysis of enterprise performance and its impact factors such as the effectiveness of HRM or competence level of managers. At the same time, they predict that large enterprises in the United States can achieve potential benefits by improving the efficiency of human resources management. Ngo, Lau, and Foley (2008) proved that SHRM has a positive impact on corporate financial performance and business performance. Wright, Gardner (2005) found that enterprise human resources practice is affected by the performance in the previous stage but will further affect the further performance. That is to say, human resource practice and enterprise performance are mutually affected. Ashok Som (2008) try to explore the impact of innovative human resources management on Indian enterprises under the background of Indian economic liberalization. They have found that recruitment function, training function and performance incentive function have a great positive impact on Indian enterprise performance through empirical study of 69 typical enterprises.

From above analysis reflected that the theory is mainly based on the enterprise environment and basis abroad while HRM in China, where the environment here is more complex because China's the state of system, the level of economic development, the economic structure and culture are different from those in other countries. So the discussion on HRM practice and organizational performance by scholars in domestic needs to consider the Chinese context.

Most Chinese scholars carry out empirical analysis in questionnaire in the early stage and believe that HRM has a certain impact on enterprise performance. For example, Liu and Liu (2008) believe that

the enterprise performance depends on the input of human capital and is affected by the consistency of HRM strategy and organizational strategy by means of factor analysis and regression analysis. Liang and Shi (2009) compared the enterprise HRM capacity and enterprise performance on this basis, thus proving that improvement of HRM level has a significant impact on the enterprise performance and corporate financial security. However, some scholars have doubted this and believed that the empirical research at the present stage is biased. For example, Shi (2009) has put forward the "black box" theory of HRM and organizational performance which means

Scholars extend their researches to international enterprises and start-ups with the improvement of research level and the expansion of research ideas. Zhao and Gao (2011) found that the consistency of human resources management strategy and organizational strategy will affect the enterprise performance. Xing and Wang (2014) found that HRM cannot directly affect the enterprise performance, but form independent innovation ability through the guiding enterprises, thus improving enterprise performance. At the same time, it is pointed out that HRM may not necessarily bring positive influence on enterprise performance, which is also affected by the enterprise external environment. Liu and Wu (2014) further extend consequence relation theory of HRM and enterprise performance, refining the research scope to the manufacturing industry in the Pearl River Delta region. It has been proved that HRM and enterprise performance have cause-and-effect relationship and complement each other.

At the same time, it has also been proposed that HRM can indirectly affect the enterprise performance by other scholars. For example, based on the previous study of HRM practice, intellectual capital and enterprise performance, Zhang and He (2018) have found that HRM practice can directly have a positive effect on intellectual capital.

In addition, the research on the relationship between HRM and organizational performance is further refined. Scholars Li and Yuan (2013) have found that the potential drivers of HRM's positive impacts on organizational performance are employee training programs, performance pay and so on. It separated HRM from the macroscopic concept and attached great importance to the specific function of HRM. Huang and Jiang (2016) found that HRM execution and HRM policy were independent mutually and had impacts on organizational performance, especially HRM execution, whose influence on organizational performance cannot be ignored. While Sun and Zhao (2017) confirmed that HRM had positive effects on organizational performance.

Although there still exist great differences between domestic and foreign scholars on the impact between HRM and organizational performance, like some scholars believe that the improvement of HRM can directly have a positive impact on enterprise performance; some believe that HRM can only indirectly affect enterprise performance, and even some believe that the impact on enterprise performance is unpredictable. Therefore, it is necessary to grasp the process and result of HRM through HRM evaluation and thus affect organizational performance.

# 3. The Connotation and Method of HRM Evaluation

As its name implies, HRM evaluation considers the activities of HRM of enterprises. Through analyzing the relationship between the input and output of HRM activities and the relationship between HRM behavior and organizational performance, we can judge whether the HRM of an enterprise is scientific and reasonable. Jin (2010) found that HRM evaluation is generally promoted by senior managers, human resources managers, employees and line managers.

Based on the above summary of HRM for organizational performance, we can find that human resource have an impact on organizational performance. HRM evaluation is the direct analysis of HRM and there is no doubt that its evaluation method and effect can influence organizational performance indirectly.

The current research status of HRM evaluation at home and abroad can be discussed from both qualitative and quantitative aspects. The qualitative research mainly focuses on the evaluation indicators of human resources management. The research on HRM evaluation indicators can be divided into two categories; one is horizontal, which means the HRM evaluation indicators are subordinate to the human resources indicators in the comprehensive index system of enterprises. Such indicators mainly reflect the supportive degree of human resource for the survival and development of enterprises. The other type is vertical, which is especially the evaluation of HRM.

The representative evaluation indicators of HRM at home and abroad mainly include the index system of HRM work of the American HRM Academy in 1994 and the "key indicators of human resources" in the United States.

In China, there are Professor Zhao Shuming's "Human Resource Index" indicators and Zhang Guochu's organization of HRM quantitative measurement and evaluation indicators. Professor Zhao (1999) has summarized thirteen methods for HRM system evaluation. Zhao and Yu (2007) collated, classified and introduced the evaluation methods of HRM at home and abroad. Through summarizing their views, they thought that HRM evaluation needed to adapt to local conditions and HRM evaluation methods should be in line with China's actual situation. In 2003, scholar Zhao (2003) conducted a further study on HRM evaluation, starting with the effectiveness of HRM and evaluated it. From the perspective of systematics, scholars have constructed three dimensions of "coordination", "efficiency" and "effect" to evaluate the contribution of enterprise goals. Scholars believe that the process of HRM should be dynamic, only from these three perspectives can we fully guarantee the adaptability, enforceability and effectiveness of human resource. Almost from this time, scholars begun to try to establish a complete HRM evaluation system. Scholar Hu (2007) transferred the output of HRM to the effectiveness of HRM, namely the degree to which HRM activities can reach the target. He summed up the HRM evaluation system established by domestic scholars and applied the method of combining qualitative and quantitative research. He regarded the strategic orientation and result orientation as the designing direction of research path and emphasized the dynamic nature of the internal and external environment of HRM. He thought that the correlation among HRM evaluation indicators should be strengthened, and more innovative analytical methods should be applied to HRM evaluation. Domestic

scholar Li (2009) also started his views from the perspective of HRM efficiency, he believed that the content of evaluating the quality of HRM process should be retained. The connection between HRM and corporate strategic objectives should be strengthened so that the effectiveness of strategic HRM can be presented more roundly.

The scholars above constructed the evaluation index system of HRM from a dynamic perspective. Scholar Lu (2007) analyzed the comprehensive evaluation model of HRM from a static perspective. From the macroscopic and microscopic perspectives, scholars have comprehensively evaluated the structure, function and combination of human resources management, which is very comprehensive and meticulous. Similar to the study of Lu and Fan (2011) and Xu (2014). Based on the theory of strategic HRM, Fan (2011) believed that it should be measured from matching of HRM and strategy and the three dimensions of HRM in flexibility, implementation and effectiveness. The scholar Xu's review is more detailed, which uses fuzzy mathematic ways to establish a more complete HRM evaluation system.

As mentioned above by Hu Yue, HRM evaluation needs to incorporate more innovative forms of analysis. For example, both Pan (2008) and Liu (2003) applied fuzzy mathematics into evaluating the performance of HRM; Zhang (2009) applied linguistic variables and TOPSIS into HRM evaluation; Cao (2010) found the way of score card of human resource from HRM theory and established an evaluation index system for HRM effectiveness.

Although the evaluation methods of HRM are endless, most of the evaluations of HRM still focus on the HRM function, which analyze the effectiveness of enterprise HRM from different effects and angles. Therefore, in the process of constructing the HRM evaluation system in the future, on one hand, we can combine the effects of HRM function, and on the other hand, we can also seek to analyze other effects besides HRM function to make HRM evaluation more comprehensive and reasonable.

## Discussions

From the domestic and foreign scholars' emphasis on strategic HRM, it is not difficult to find that the focus of HRM is to combine human resource strategy with corporate strategy. Enterprises should manage human resource with the goal of maximizing organizational performance. However, we find that, currently, most of the human resource of domestic enterprises still remain at the level of traditional HRM, which are still simple personnel management. On one hand, these simple personnel managements are basically similar and do not have large technical difficulties, which cannot increase the competitive advantage for enterprises; on the other hand, traditional HRM cannot fully stimulate the vitality of human capital and thus positively affect corporate performance. Therefore, from a strategic point of view, the key problem that domestic HRM must break through is that we should combine human resource with other aspects of the enterprise to improve HRM activities from flexibility, implementation and effectiveness. In the future, what we need to grasp is which evaluation indicators to choose, which methods for evaluation to apply, what kind of evaluation system to establish, and how to design the specific evaluation process.

# References

- Cao, X. & Lin, M. (2010). Research on evaluation index system of human resources management effectiveness based on human resources scorecard. *Human resources development in China*, (11), 35-38.
- Fan, M. & Zhang, N. (2011). Strategic Human Resource Management Evaluation Model Research. Business Research, (8), 68-71.
- Feng, J., Wang, H., Wu, K. & Liu, S. (2014). The relationship between human resources management and enterprise performance - based on the longitudinal study of manufacturing enterprises in the Pearl River Delta. *Human resources development in China*, (23), 47-54.
- Goyal, N. (1996). The impact of human resource management on organizational performance. *Academy* of Management Journal, 39(4), 779-801.
- Hu, X. (2017). The Theory and Development of Strategic Human Resource Management. *Review of Strategic Human Resource Management. News and Writing*, (3), 125.
- Hu, Y, Chang, Y. & Pu, X. (2007). Review of the research on the measurement model of human resource management effectiveness in Chinese enterprises. *Business Research*, (3), 62-65.
- Huang, B. (2016). The relationship between human resource management policies and implementation and organizational performance: a discovery of confrontational interaction. *Foreign economy and management*, 38(5), 58-68.
- Huselid, M. A. & Schuler, J. R. S. (1997). Technical and strategic human resource management effectiveness as determinants of firm performance. *The Academy of Management Journal*, 40(1), 171-188.
- Ichniowski, C., Shaw, K. & Prennushi, G. (1997). The effects of human resource management practices on productivity: a study of steel finishing lines. *American Economic Review*, 87(3), 291-313.
- Jin, X. (2010). *Research and application of enterprise human resource management evaluation index system.* Doctoral dissertation, East China University of Political Science and Law.
- Lepak, D. P. & Snell, S. A. (2002). Examining the human resource architecture: the relationships among human capital, employment, and human resource configurations. *Journal of Management*, 28(4), 517-543.
- Li, H. (2009). Study on the Evaluation Index System of Strategic Human Resource Management Effectiveness. *Journal of Guangdong University of Finance and Economics*, 24(6), 19-22.
- Li, Y. & Yuan, L. (2013). Research on the impact of strategic human resource management on corporate performance. *Statistical study*, *30*(10), 92-96.
- Liang, S. & Shi, B. (2009). Human Resource Management, Human Resource Management Evaluation and Corporate Performance. *Soft Science*, *23*(11), 102-106.

- Liu, S. & Liu, H. (2008). Research on the relationship between investment human resource management system and enterprise performance. *Journal of Management Engineering*, 22(4), 8-18.
- Liu, X. & Zhang, D. (2003). Application of Fuzzy Mathematics in Human Resource Management Performance Evaluation. *Business Research*, (5), 1-5.
- Lu, R. (2007). Research on Comprehensive Evaluation Model of Human Resource Management. Journal of Sichuan Normal University (Social Science Edition), 34(3), 69-73.
- Meng, F. (2008). Situational Landscape Study of Strategic Human Resource Management. *Science and Technology Management*, 29(5), 191-194.
- Ngo, H. Y., Lau, C. M. & Foley, S. (2010). Strategic human resource management, firm performance, and employee relations climate in china. *Human Resource Management*, 47(1), 73-90.
- Pan Zhongbao & Wei Mingxia. (2008). Research on Fuzzy Comprehensive Evaluation of Human Resource Management Performance. *Research on Science and Technology Management*, 184(6), 422-423.
- Ramostorres, S. (2017). The impact of human resources management practices. *Social Science Electronic Publishing*, 7(77), 2222-6990.
- Schuler, R. S., Dowling, P. J., Smart, J. P. & Huber, V. L. (1992). Human Resource Management in Australia (2nd Ed.). Sydney: Harper Educational.
- Shi, Y. & Li, N. (2009). Review of domestic human resource management practice and enterprise performance research. *Science and technology management research*, 29(9), 308-311.
- Shilei & Zhang, H. (2006). Characteristics, content and practice of strategic human resources management. *Journal of Sichuan University (Philosophy and Social Sciences Edition)*, (1), 14-18.
- Som & Ashok. (2008). Innovative human resource management and corporate performance in the context of economic liberalization in India. *The International Journal of Human Resource Management*, 19(7), 1278-1297.
- Sun, X. & Zhao, S. (2017). Research on the influence of Hrm competence and its importance on strategic human resource management and enterprise performance. *Nanjing Social Science*, (1), 39-45.
- Wright, P. M. & Mcmahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management*, 18(2), 295-320.
- Wright, P. M., Gardner, T. M., Moynihan, L. M. & Allen, M. R. (2005). The relationship between hr practices and firm performance: examining causal order. *Personnel Psychology*, 58(2), 38.
- Xie, L. (2008). Retrospect and comparison of the general view and contingency view of strategic human resources management - Research Based on the view of behavior. *Science and technology management research*, 28(5), 213-215.
- Xing, Z, Wang, Y., Li, L., Xing, Z., Wu, X. & Shen, Y. (2014). Analysis of the factors affecting the performance of listed companies on GEM in China: Based on multi-case studies. *Management*

*Review*, 26(1), 66-77.

- Xu, Y. (2014). Research on the construction of enterprise human resource management evaluation *system*. Doctoral dissertation, Shanxi University.
- Zhang, W. & He, Q. (2018). Human Resource Management Practice, Intellectual Capital Orientation and Enterprise Performance. *Friends of Accounting*, (6), 81-84.
- Zhang, Z. & Liu, N. (2005). Strategic human resources management and its theoretical basis. *Financial and economic issues*, (1), 75-81.
- Zhang, Z., Liu, P. & Guan, Z. (2009). A new method of human resources evaluation based on linguistic variables and topsis. *Quantitative economic, technological and economic research*, (11), 141-151.
- Zhao, H. & Yan, J. (2003). Enterprise human resource management evaluation system and its conceptual model. *Economist*, (6), 129-130.
- Zhao, H. & Yu, J. (2001). Review on the evaluation methods of human resource management in enterprises. *Science and technology management*, 22(11), 71-74.
- Zhao, S. (1996). On Strategic Human Resource Management. China's Industrial Economy, (4), 17-23.
- Zhao, S. (1999). International comparative study of human resource management and development in *enterprises*. Beijing: People's Publishing House.
- Zhao, S., Gao, S. & Geng, C. (2011). Research on the relationship between strategic international human resources management and corporate performance-based on empirical evidence of multinational enterprises in China. *Nankai Management Review*, 14(1), 28-35.
- Zhu, F. & Zhao, K. (2013). Research on Strategic Human Resources Management in China: A Review of Twenty Years. *Human Resources Development in China*, (19), 21-28.

# INCREASING INNOVATION AND CREATIVITY IN CHINESE HIGHER EDUCATION

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# Abstract

For sustainable reform to lead social change in China, there is need for creative and innovative human resources, especially in the youth generations such as university level students. Therefore, a recommendation for Chinese higher education should be to increase students' creativity and innovation. Through a synthesis of literature, this article presents seven effective teaching methods to enhance innovation and creative thinking. They include; visualization, technology, active learning, interdisciplinary collaboration, project-based or problem-based learning, evidence-based learning and group discussion. This article will recommend teaching methods that are best suitable for Chinese students. As Confucian culture is the core culture value in Chinese teaching methods, they typically value teacher-centered methods. However, learner-centered methods are popular nowadays. Nonetheless, learner-centered values derive from a democracy-style culture, therefore, Chinese HEIs leaders are challenged to adapt between teacher-centered and learner-centered methods and to create conditions to promote learned-centered methods. This article synthesizes problems and limitations in teaching innovation and creativity, including university and community climate, administrative overload, insufficient technological facilities, and scripted curriculum. This article concludes with suggestions for Chinese higher education to increase students' creativity and innovation in the future by developing a framework to support adult learning, and by improving teachers' professional development to be creative and innovative, next by developing creative and innovative programs for student development, and lastly by provoking educational policy-makers to develop policies to support creativity and innovation.

Keywords: Innovation, Creativity, Chinese higher education, Learner-centered

# Introduction

Education has changed the world in the 21st century. Creativity and innovation are some of the core learning skills in the 21st century. Creativity and innovation are needed to equip students for the future. Therefore, educational institutions are required to employ creative and innovative teaching

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method for students. In addition, students are required to participate creatively and innovatively in their learning environment. (Chang & Engels, 2014).

Innovation and creativity are often regarded as interrelated. Generally speaking, innovation is a product of creativity. Creativity includes imagination and originality, and was articulated to include three elements such as expertise, motivation, creative thinking skills (Baer, 2012). Creativity is seen as a potential ability and education affords aplatform to train the potential ability in students, because it leads student innovation in their learning process, and changes their future. (Tang & Werner, 2017).

For many Chinese students, there are several barriers to innovation and creativity in their learning process, the key barrier is China's education system hampers the initiative of youth generations for creativity (Bush & Qiang, 2000). The Chinese education system mainly employs standardized-evaluation, criteria-evaluation to Chinese students, such as teacher-centered classroom, lack of participating after-school-activity (Bush & Qiang, 2000).

Chinese students in higher education, in general, employ two learning styles. One is passive learning and the other is rote learning in their learning experience (Chen, 2007). Chinese HEIs utilize examination-valued to set teaching methods, therefore Chinese HEIs are more focused on students' learning outcome than students' ability to creativity and innovation. (Gieve & Clark, 2005).

Although education has been reformed, and evidence shows that learning can enhance innovation and creativity, there are still reports of education killing students' creativity and innovation, because some of schools have strong penalization in the school culture and higher standardized-order learning culture (Chen, 2007).

Some have said that people who know less create less, or people who know more create more. Nonetheless, the Nobel Prize, a famous awards in research field, has shown that creative people who may have less formal education than others, can create important works of innovation and creativity (Kennedy, 2002).

In China reforms cover all areas such as social, economic, political, environment, technological. Many emerging industrial and manufacturing related, technological and computer-based, are increasingly evidence of creativity and innovation in China (Gieve & Clark, 2005). In promoting social change in Chinese society to enhance economic development, students in universities are seen as important future human resources and they should be trained to be innovative to support the needs social change in the country. Chinese students need to be creative because China, as a regional, international and global leader, will play an important role in shaping the 21st century (Tang &Werner, 2017).

## **Teaching Methods that Enhance Innovation and Creative Thinking**

Some effective teaching methods that can enhance innovation and creativity involve students learning process, teachers as facilitators to enrich students' experience and student development in the classroom (Skyrme, 2007). Some of these methods will be discussed in the following section.

Visualization: as teachers want to train students to possess creative thinking, they need to care

about and involve students in the design of the learning environment. This includes making visualreflection in the classroom. Students can put together their own creative thinking on reflective boards and let their ideas be peered review and encouraged among other students. Students in higher education institutions can employ the same methods build students' creative thinking (Mehdizadeh & Scott, 2005).

Technology: as one of required skills of the 21st century, students in HEIs need to know how to use technology. Therefore, training students to possess the ability to manage computers, digital devices, software applications and video-conferencing devices are just some of the digital tools they need to know. Teachers should employ technology to make their classrooms more attractive and to increase student involvement through setting internet-based classrooms and building learning communities on social media (Zeng, 2006).

Active learning: Active learning can be accomplished by extending student discussions, sharing, thinking, and listening more by making their learning experience proactive. Also by including a maximum of student learning initiatives in class. In this way, creative thinking can be sustainably developed across formal education (Asch & Weinstein, 2014).

Interdisciplinary collaboration: because the world is a very complex system, students need to possess the ability to think about problems in real world situation in a systematic and diverse way. Schools and universities should expand students' ability to think according to multiple perspectives by using interdisciplinary curriculum and methods. Many top of universities are offering not only general education, but more and more are offering interdisciplinary studies and programs to teach students from various contexts and perspectives such as history, politics and other disciplines (Tang & Werner, 2017).

Problem-based or project-based learning: teachers choose problems or projects from real-world experience and use collaborative teaching methods to educate students how to solve problems and have effective decision-making skills. This increases students' learning initiatives and teachers act as facilitators and are required to have a higher level of knowledge to improve the students (Beghetto, 2010).

Evidence-based learning: this involves collection of students' data so teachers are able to analyze students' performance, achievement, and outcomes. Teachers can follow up on the analysis and findings to adapt their instruction strategies. In this way, students creativity initiatives will be maximized, culturally improved with a balance of individualism and collectivism as well (Baruah & Paulus, 2016).

Group discussion: when students proactively express their creative thinking to teachers, to parents, to their peers, and to other audiences who are concerned with student development, it will demonstrate to them the ability of the student. Discussion actively stimulates student involvement, proactive thinking, self-knowledge, self-reflection, self-evaluation, searching common goals, and their interpersonal skills. Therefore, students will have proactive and creative initiatives to stimulate their learning and develop creativity and innovation. This works both in schools and universities. Nevertheless, effective teaching has many other formats. Whatever the kind of effective teaching, the

core value is as a tool to increase students' creative thinking in their learning experience (Anderson, Potočnik & Zhou, 2014).

#### **Teaching Methods that are the Best Suitable for Chinese Students**

In China, Confucian culture is the core ideology. Teaching methods in China are influenced by Confucian culture. The ideology affirms pedagogical core values of teacher-centeredness and teacher-authority. However, to increase creative thinking is mostly reserved for adult learning method where the core value is more learner-centered, learner-centered learning methods were created in democracy culture, so to use these methods requires cultural borrowing (McInerney, 2005).

Learning methods in the 21st are inclined to adult learning and learner-centered method and to stimulate student creative and innovative initiatives by learning experience. Therefore, adult learning and learned-centered teaching methods can be seen as products of cultural borrowing by China's special social context (Hofstede, 2001). To fit with Confucian culture, to reduce cultural shock in teaching, and to increase teaching to have appropriate capacities to derive cultural sensitivity in classroom (Gieve & Clark, 2005). Nowadays, China is still going through sustainable development. Chinese society has and will meet many complex problems stemming from the social system. Therefore, as China's future human resource reservations (Chen, 2007), universities in China should equip students with multiple perspectives, multiple solutions and open-mindedness. This drives students to have passion for creative thinking in their communities or societies. This stimulates students to be proactive, creative and innovative. These learning initiatives need an open-minded learning environment and learned-centered approaches to strengthen students in China's HEI's (Zeng, 2006). Chinese teachers need to change their perspectives about students, especially those in HEI's. These students need to have and appropriate selfconcept, need to plan their own learning according to their experience. They are ready for learning and want self-direction in their learning experience. Additionally, they have clear motivation to learn continuously. Adult learners prefer problem-based learning over content-based learning and they need to build their creative thinking by their self-reflection (Tang & Wermer, 2017). They also need to synthesize the problems, analyze problems from the real world, practice their analysis and findings. As for students in Chinese HEIs, educational leaders should concentrate on implementing practice to change the teachers' mindset, students' mindset, parents' mindset and stakeholders' mindset (Gieve & Clark, 2005).

Increasing Chinese universities students' creativity and innovation, depends the realities of China's society. The key to this is to have a paradigm shift by the teachers' and students' learning awareness shift. University professors need to make teaching paradigms shift first, and then implement adaptation between traditional teaching methods and new teaching methods in the classroom and develop new teaching practices (Richards, 2004). Professors can do this by implementing problem-based or project-based learning methods in small sized classrooms and conducting collaborative learning group discussions. Most importantly, professors need to improve their computer and digital

skills and employ these skills and give chances for students to connect learning and technology (Skyrme, 2007). This includes training students to have good level of information literacy, media literacy and guiding students on how to select information and access information. This can involve creating learning communities on China's social media such Wechat, Tencent and also extend to extracurricular activities to stimulate initiatives about creative thinking and continue learning after class. However, for professors who work in Chinese universities (Zeng, 2006), they have to depend on examine-oriented education, therefore, they can employ integrated students assessment in their classroom, or at least try to optimize students' creative thinking in the classroom (Baer, 2012).

## Problems or Limitations in Teaching Innovation and Creativity

Increasing creativity and innovation in higher education is not easy and is faced with many problems and limitations such as the community and university climate. Close mindedness, discipline, and teaching pressure due to organizational culture are just some reaons. These problems slow down the process as an open-minded, democratic and academic freedom are needed (Baruah & Paulus, 2016). Additionally, pressure from too many administrative duties such as too many meetings makes this change difficult. If professors are overloaded with meetings in their work, they will have no energy to focus on building students' creative thinking building and development. But if they are overloaded, other responsibilities will consume their energy (Beghetto, 2010). An additional problem is that the technological facilities are not sufficient to support teaching and learning. Even now around the world, many universities do not have enough technological devices for students, teachers, staff, and administrators, due to the limitations of their countries' economic capacities. In some some of parts, educational leaders have not upgraded their technology to support creative and innovative education (Chang & Engels, 2014). Finally, too much scripted curriculum is also a problem. Curriculum should be flexible and relevant. If curriculum is too scripted, too many descriptions for curriculum, it will stifle students creativity and innovative thinking (Tang & Werner, 2017).

#### Conclusions

Higher education institutions need to be the drivers of social change. Only then, can students in HEIs be creative and innovative. Chinese students tend to demonstrate weak creativity and low innovation, something that has been perpetuated over many hundreds of years since the development of China's education system. The system does not support and encourage students' passions to be creative and innovative. This is due to the Confucian culture that does not support innovated pedagogies and learner-centered methods.

Nonetheless, China is a strong economy and emerging as a powerful force in the globalized world. The need for China to train its human resources to be creative and innovative is important for its sustainable future. China's higher education system can be the tool for this to be happened by, increasing its students' creativity and innovation by being a model to support adult learning, and learner-centered

approaches. Educational administrators in HEIs in China, need to develop appropriate teaching and learning methods to stimulate university students to be creative and innovative and they should focus on improving teachers' professional development to make this change. Curriculum and instruction reform should be flexible, individualized, personalized and there should be the development of creative and innovative programs to foster student development and provoke educational policy-makers to develop policies to back creativity and innovation up. These things will not happen overnight and the key is culturally adapting education innovation to fit the needs of the country and to keep pace with its development.

### References

- Bush, T. & Qiang, H. (2000). Leadership and culture in Chinese education. Asian pacific Journal of Education, 20(2), 58-67.
- Chan, S. (1999). The Chinese learner a question of style. Education & Training, 41(6/7), 294-304.
- Chen, S. (2007). *Learning strategies in a multicultural environment*. Beijing, Beijing Language and Culture University Press.
- Gieve, S. & Clark, R. (2005). The Chinese approach to learning: Cultural trait or situated Response? *System*, *33*(2), 261-276.
- Ho, I., Salili, F., Biggs, J. & Hau, K. T. (1999). The relationship among causal attributions, learning strategies and level of achievement: A Hong Kong case study. *Asia Pacific Journal of Education*, 19(1), 44-58.
- Hofstede, G. (2001). *Culture's consequences: comparing values, behaviors, institutions, and organizations across nations (2<sup>nd</sup> ed.)*. Thousand Oaks, Calif.: Sage Publications.
- Kennedy, P. (2002). Learning cultures and learning styles: Myth-understandings about adult (Hong Kong) Chinese learners. *International Journal of Lifelong Education*, 21(5), 430-445.
- McInerney, D. M. (2005). The motivation profiles and perceptions of schooling of Asian students in Australia: Perspective based on personal investment theory, Paper presented at the 2005 International Conference of Korean. Society of Education Psychology, Seoul, Korea.
- Mehdizadeh, N. & Scott, G. (2005). Adjustment problems of Iranian international students in

Scotland. International Education Journal, 6(4), 484-493.

- Richards, C. (2004). From old to new learning: Global imperative, exemplary Asian dilemmas and ICT as a key to cultural change in education. *Globalization*. *Societies and Education*, 2(3), 337-353.
- Skyrme, G. (2007). Entering the University: the differentiated experience of two Chinese international students in a New Zealand University. *Studies in Higher Education*, *32*(3), 357-372.
- Zeng, M. (2006). The adaptation of Mainland Chinese research postgraduates to the Universities of Hong Kong. Unpublished Ph.D. thesis, The University of Hong Kong, Hong Kong.
- Anderson, N., Potočnik, K. & Zhou, J. (2014). Innovation and creativity in organizations: A state-ofthe-science review, prospective commentary, and guiding framework. *Journal of Management*.

40(5), 1297–1333.

- Asch, D. A. & Weinstein, D. F. (2014). Innovation in medical education. New England Journal of Medicine, 371(9), 794–795.
- Baer, M. (2012). Putting creativity to work: The implementation of creative ideas in Organizations. *Academy of Management Journal*, 55(5), 1102–1119.
- Baruah, J. & Paulus, P. B. (2016). The role of time and category relatedness in electronic Brainstorming. *Small Group Research*, 47(3), 333–342.
- Beghetto, R. A. (2010). Creativity in the classroom. In J. C. Kaufman & R. J. Sternberg (Eds.), *Cambridge handbook of creativity* (pp. 447–463). New York, NY: Cambridge University Press.
- Bell, S. T., Villado, A. J., Lukasik, M. A., Belau, L. & Briggs, A. L. (2011). Getting specific about demographic diversity variable and team performance relationships: A meta-analysis. *Journal of Management*, 37(3), 709–743.
- Chang, Z. & Engels, N. (2014). Organization culture and instructional innovation in higher education: perceptions and reactions of teachers and students. *Educational Management Administration & Leadership*, 42(1), 36-158.
- Tang, M. & Werner, C., H. (2017). An interdisciplinary and intercultural approach to creativity and innovation: evaluation of the EMCI ERASMUS intensive program. *Thinking Skills and Creativity*, 24, 268-278.

# PARADOXICAL LEADERSHIP AND EMPLOYEE VOICE: THE MODERATING OF PROACTIVE PERSONALITY

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### Abstract

Zhang et al. (2015) first proposed the concept of paradoxical leadership in the top journal AMJ based on China's YIN-YANG philosophy and developed a measurement scale. Paradoxical leadership refers to leaders' seemingly contradictory yet interrelated behaviors to meet both organizational and employee needs at the same or different time periods. Studies have confirmed that paradoxical leadership have a significant positive impact on employee initiative and innovation. This study continues to broaden this field. According to the literature, leadership style is an important predictor of employee voice behavior. Therefore, this study attempts to explore the relationship between paradoxical leadership and employee behavior. This paper conducts the first empirical analysis based on 250 questionnaires in the Chinese context, and preliminarily discusses the relationship between the two. The results show that paradoxical leadership has a significant positive impact on employee voice behavior through perceived insider status. The relationship between paradoxical leadership and employee voice behavior is affected by proactive personality. That is, the stronger the proactive personality, the weaker the influence of paradoxical leadership on employee voice behavior. The conclusion of this study not only enriches the research results of paradoxical leadership mechanism, but also provides practical reference for enterprises to effectively stimulate employee voice behavior.

**Keywords:** Paradoxical leadership, Employee voice behavior, Perceived insider status, Proactive personality

### Introduction

In the context of global competition, technological revolution and changing social needs, the business environment faced by organizations is becoming more and more complex. Therefore, organizations need to seek a dynamic balance between stability and change. In this process, management paradoxes such as efficiency and flexibility, centralization and decentralization, profit and social responsibility, individualism and collectivism should be solved. At this time, paradox has gradually become an important theoretical perspective to support and lead contemporary organizations.

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Faced with the paradox of dualistic management, we should adopt flexible flat organizational structure at the organizational level to enhance the ability to respond to the market quickly; cultivate paradoxical leadership style at the management level to meet both organizational and individual needs of employees; encourage employees to learn constantly at the individual level and offer suggestions and participate as much as possible for the organization. Organizational decision making. Especially, when the post-90s who advocate self-worth constantly enter the workplace and become an important part of the organization, how to respect their thinking habits and play their value and maintain the order of the organization, break through the restrictions of rules and regulations on their subjective initiative to maximize their contribution to the organization is the current situation. A difficult problem faced by managers.

Management is an art. The organizational situation in management practice is unpredictable. According to the situational leadership theory and contingency theory, no single type of leadership can be applied to all situations. Just like the gray management proposed by Mr. Ren Zhengfei of Huawei, that is, management is not an either-or but a so-called gray balance between black and white. Different from the traditional single type of leadership, paradoxical leadership can give consideration to both sides of contradiction, make comprehensive use of the paradoxical thinking of "both-and" to play the synergistic role of contradictory thinking and integrated thinking, and strive to achieve black-white balance in management, which is a kind of compound leadership style close to practice. Paradoxical leadership and dual leadership are two new leadership styles in theoretical circles, both of which can deal with the management paradox in organizational activities. However, the former is based on the unity of opposites and Yin-Yang philosophy, emphasizing the paradox cognition based on managers' subjective, regarding both sides of the contradiction as an antagonistic but interrelated whole to achieve the balance of contradictory behavior (Zhang et al., 2015); the latter is based on the dual theory and contingency theory, emphasizing the change of situation. Flexible use of two reverse leadership styles. In a word, dual leadership is only limited between two reverse leadership styles, and paradoxical leadership has no limitations in leadership behavior. As long as the two sides of contradiction are interrelated and can play a synergistic role, they can be integrated into a whole, which shows that paradoxical leadership is more suitable for management practice.

Leadership style as an important factor affecting employee voice behavior has been widely recognized by academia, but as a new paradox of leadership style, the impact of leadership and employee voice behavior has rarely been studied. This paper mainly solves three problems. Firstly, as a new type of leadership style, this paper explores the influence of paradoxical leadership on employee voice behavior, which helps to enrich the theoretical system of paradoxical leadership. Secondly, from the perspective of planned behavior, this paper explains the mechanism between paradoxical leadership and employee voice behavior by introducing perceived insider status, which provides a new perspective for interpreting employee voice behavior. Thirdly, this paper confirms that proactive personality can negatively regulate the relationship between paradoxical leadership and employee voice behavior,

which helps to expand the promotion measures of employee voice behavior.

# **Theoretical Background and Research Hypothesis**

### 1. Relationship between Paradoxical Leadership and Employee Voice Behavior

Employee voice behavior has been a hot topic in recent years. Existing research has proved that employee voice behavior has a positive role in promoting individual and team performance, reducing turnover rate and improving interpersonal relationships among colleagues. Therefore, it is of great value to choose voice behavior as the research object in this study. Advice behavior refers to employees' initiative to put forward opinions or suggestions to the organization in order to improve the status quo of the organization. It has three characteristics: active extra-role behavior, purpose to improve the status quo of the organization and risk. Through literature review, we find that leadership style is an important predictor of employee voice behavior. So does paradoxical leadership, as a new member of leadership style theory, have a significant impact on employee voice behavior? In view of the three characteristics of employee voice behavior, we first discuss whether paradoxical leadership can promote employees to contribute to the organization initiatively; secondly, we analyze why paradoxical leadership can lead employees to focus on organizational development and think creatively about good strategies for organizational improvement; finally, we explain how paradoxical leadership can dispel employees' doubts about voice behavior and reduce their risk perception.

This study suggests that paradoxical leadership can effectively promote employee voice behavior. Firstly, according to the principle of reciprocity of social exchange theory, employee's implementation of advocacy in favor of organization is an instinctive "reward" response. This kind of extra-role behavior is not "futility" which is explicitly stipulated by the organization and is not included in the organizational performance appraisal system. The fundamental reason is that employees feel leaders' respect for their values and concern for their interests. Paradoxical leadership pays attention to the needs of the organization while taking into account the personal demands of employees, differentiates the distribution of work and flexibly changes the way of communication according to the personality of employees, so as to help employees play their strengths and realize their own value, and stimulate their inner sense of belonging; Paradoxical leadership actively tries to decentralize less important matters. Allow subordinates to handle the details of their duties by themselves, show strong support and trust, and stimulate employee's sense of ownership; Paradoxical leadership respects the value of others, acknowledges that they need to learn from others, and chooses the right time to empower employees to share their leadership role is conducive to expanding employee's potential. Success in one's career stimulates employees' sense of achievement. In short, paradoxical leadership makes employees subconsciously feel that they belong to the organization. The development status of this organization is closely related to their own interests. Employees can achieve their own value and career improvement in this organization. Therefore, paradoxical leadership can motivate employees to take the initiative to make suggestions for the development of the organization. Secondly, based on the theory of social learning, we find that Leaders' behavior and words have an obvious exemplary role for subordinates. Especially in the context of "People follow the example of their superiors" in China, Leaders' values have a significant impact on organizational behavior norms as part of corporate culture. Paradoxical leadership can effectively respond to the dual needs of organizations and employees through integrated thinking from a global perspective. This complex cognitive model can inspire subordinates to broaden the thinking depth of problem solving, trigger employees' imitative behavior, and thus help employees to give full play to their subjective initiative to think more. Constructive countermeasures to improve the status of the organization. Finally, in dealing with the risk and benefit comparison of employees' opinions, paradoxical leaders treat subordinates in a mild way to maintain their dignity and allow subordinates to make mistakes, which to a large extent stimulates subordinates' psychological security and encourages subordinates to boldly try not to take too much account of the consequences of failure. Keep and encourage employees to persevere in organizational behavior, such as advice.

To sum up, the following assumptions are proposed:

H1: Paradoxical leadership is positively correlated with employee voice behavior.

### 2. Mediating Role of Perceived Insider Status

According to the theory of planned behavior, individuals first produce behavioral intentions and then implement specific behaviors when they perceive external stimuli. Therefore, the research considers choosing a psychological cognitive variable as the mediator between paradoxical leadership and employee voice behavior. Perceived insider status is a concept evolved from social exchange theory. The result of social exchange between leaders and employees is to produce high-quality leadershipmember exchange relationship and low-quality leadership-member exchange relationship. Employees with high-quality leadership-member exchange relationship are more likely to have low-quality leadership-member exchange relationship than those with low-quality leadership-member exchange relationship. Employees can show more favorable behaviors such as voice behavior and mutual help behavior, which will bring more rewards and resources for employees, and further improve the leadership-member exchange relationship. This cycle solidifies the phenomenon of differentiated treatment among employees, resulting in the recognition of "insiders" and "outsiders". This characteristic of perceived insider status often plays a mediating role between leadership style and employee behavior. Therefore, this study attempts to use perceived insider status as a mediating variable to analyze the relationship between paradoxical leadership and employee advice.

On the one hand, paradoxical leadership can enhance perceived insider status. Perceived insider status to the subjective perception of personal space and acceptance in an organization. It refers to the self-definition of an employee to determine whether he belongs to an "insider", emphasizing the sense of belonging of the employee. Paradoxical leadership delegates appropriate autonomous decision-making power to subordinates and recognizes the value of others to allow them to share leadership roles, so that subordinates believe that they have the opportunity to display their talents and their contributions will be recognized by the organization, that is, there is a lot of personal space; Paradoxical leadership

safeguards subordinates' dignity and treats subordinates fairly. Assigning tasks on the basis of approaching people and considering the individual needs of subordinates makes subordinates feel respected and concerned by the leaders, that is, they are accepted and "insiders" of the organization. In short, this open, supportive and inclusive atmosphere created by paradoxical leadership makes subordinates feel a strong sense of belonging. Therefore, this research advocates that paradoxical leadership can enhance employees' internal identity perception.

On the other hand, perceived insider status can promote employee voice behavior. Employees with high insider identity sense have strong sense of belonging in the organization, which will produce "sense of ownership" and put forward more constructive suggestions or ideas to improve the competitiveness of the organization. Existing studies have shown that employees with high perceived insider status exhibit more extra role behaviors (Hui et al., 2014; Li et al., 2017). Insiders in organizations often get more resources, such as training and promotion. According to the theory of resource preservation, individuals with more resources tend to get more resources through the operation of these resources. Employees with high insider identity will make contributions by positive behavior organizations such as suggestions in order to cultivate the value-added spiral of resources, in order to maintain the identity of "insider" and obtain more resources. In addition, consistent conclusions can be drawn from the perspective of self-perception. Internal identity perception is the self-definition of employees' identity in the organization. In order to avoid cognitive imbalance, employees with high internal identity perception tend to do things that conform to their "internal identity", that is, to exert the spirit of ownership to do things beneficial to the organization, such as making suggestions.

To sum up, the following assumptions are proposed:

H2: Perceived insider status plays a mediating role between paradoxical leadership and employee voice behavior.

### 3. The Regulatory Role of Proactive Personality

Based on the above analysis, this research advocates that paradoxical leadership plays a positive role in promoting employee voice behavior. But according to the principle of interaction between people and environment, not every employee has the same performance in the same environment, which is related to the personal characteristics of employees. Previous studies have shown that individual traits of employees can significantly influence the relationship between leadership style and employees' behavior. For example, Zhou & Long (2012) found that traditionality plays a moderating role between psychological ownership and counseling behavior in the relationship between transformational leadership and subordinates' counseling behavior. The higher the traditionality of employees, the more the heart of employees. The influence of managerial ownership on employee's voice behavior is weaker; Duan & Ling (2011) pointed out that the moderate thinking significantly affected employee's voice behavior in Chinese context. Therefore, this research considers choosing an individual cognitive factor as a moderator between paradoxical leadership and employee voice behavior.

In the face of stressful situations, there are significant cognitive differences between individuals.

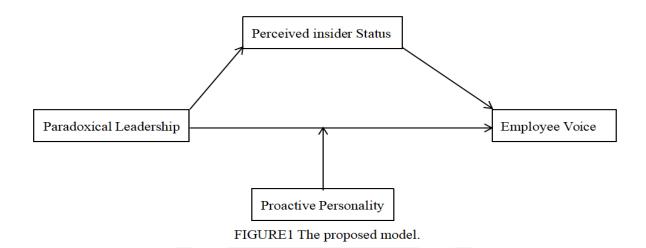
Some people always show a positive attitude, take the initiative to analyze the situation, find opportunities to overcome difficulties and solve problems, and believe that they have the ability to change the environment. Others will only resign themselves to the fate and passively adapt to the environment and do nothing. Proactive personality refers to whether an individual can discover opportunities and then take the initiative to create a favorable environment for himself. It describes a stable individual trait. This personality trait will not change with the change of environment. Simply put, whether organized or not, employees with high proactive personality will take active action to try to optimize their performance and improve their performance level; employees with low proactive personality are more sensitive to the environment, their behavior decisions are more affected by the environment, and their behavior changes with the environment. Change to change. When they are in a disadvantageous environment, they will accept the reality passively. When they are in a favorable environment, they will take actions that meet the expectations of the organization. When employees with low proactive personality face leadership styles that are not conducive to voice, such as authoritarian leadership, they tend to remain silent and carry out leadership decisions. Paradoxical leadership sends positive signals of openness, tolerance and support to subordinates. Employees with low proactive personality perceive an atmosphere of encouragement and support for voice in organizations. In order to cater to this kind of leadership style and improve Leaders' impression of themselves, they will show more voice behavior, that is, whether leadership style encourages voice has a great impact on employees with low proactive personality. However, employees with high proactive personality are not constrained by the environment. According to self-validation theory, individuals tend to seek signals consistent with self-concept. They expect external information to verify their existing knowledge and avoid themselves falling into confusion of thinking consciousness. Whether faced with authoritarian leadership or paradoxical leadership, employees with high proactive personality believe that they can find obstacles to the development of the organization and the content of their advice is beneficial to the organization, so the frequency of initiative will not be greatly affected. Formally, due to this stable trait, which is not constrained by the environment, we find that individuals' high proactive personality traits often play a buffer role in the process of promoting subordinates' extrarole behavior by positive management style.

To sum up, the following assumptions are proposed:

H3: Proactive personality plays a negative moderating role between paradoxical leadership and employee voice behavior. The lower the employee's proactive personality, the stronger the role of paradoxical leadership in promoting employee voice behavior.

### 4. Theoretical Model Construction

Through theoretical analysis, this research puts forward the following viewpoints: Paradoxical leadership can positively influence employee voice behavior through perceived insider status, and proactive personality plays a negative moderating role between Paradoxical leadership and employee voice behavior. Based on this, this study constructs the following model as shown in Figure 1.



### Methods

This paper theoretically analyses the influence of paradoxical leadership on employee voice behavior through literature analysis, explores whether perceived insider status can act as a path between paradoxical leadership and employee voice behavior, and explains the moderating role of proactive personality between paradoxical leadership and employee voice behavior.

In addition, this study has attempted to empirically study the above theoretical models with 250 questionnaires in the context of China. According to the empirical results of the first questionnaire, paradoxical leadership is positively correlated with employee voice behavior (r = 0.361, P < 0.01), which preliminarily validates the hypothesis H1 of this study. Perceived insider status is positively correlated with paradoxical leadership (r = 0.452, P < 0.01), and perceived insider status is positively correlated with employee voice behavior (r = 0.321, P < 0.01), preliminarily validated the hypothesis H2 of this study. There was a significant negative correlation between the interaction items of paradoxical leadership and proactive personality and employee voice behavior (beta=-0.437, P < 0.001), which preliminarily verified the hypothesis H3 of this study.

### **Results and Discussions**

Based on the above analysis, this paper finally draws the following conclusions: (1) Paradoxical leadership positively affects employee voice behavior; (2) perceived insider status plays a mediating role between paradoxical leadership and employee voice behavior; (3) proactive personality negatively regulates the relationship between paradoxical leadership and employee voice, the lower the employee's proactive personality is, the stronger the positive influence of paradoxical leadership on employee's voice behavior is.

Enlightenment to management practice: Firstly, it is directly reflected in the human resource management of the organization. On the one hand, when training management candidates, enterprises should regard paradoxical leadership as a measure. Specifically, whether managers can take into account

both organizational and personal needs in complex situations, whether they can flexibly play the synergy of the two under the condition of adherence to organizational goals, whether they can respect the personality of employees, find the value of employees and appropriately empower them, so as to establish good leadership-member interaction. Changing relationships creates a supportive, inclusive and open organizational atmosphere. On the other hand, when recruiting new employees, the level of self-awareness and proactive personality of job seekers should be included in the recruitment criteria, and whether job seekers consider themselves valuable and capable, and whether they will play their subjective initiative to actively analyze problems, discover opportunities and then adopt them in time when facing difficulties. Take action to change the passive situation.

Secondly, it can be used for reference to improve the daily management level. Existing empirical studies have shown that paradoxical leadership can effectively promote subordinates' proficiency, adaptability and initiative, improve employees' and team's innovation performance, stimulate employees' initiative behavior, and promote employees' voice behavior. Simply speaking, paradoxical leadership can effectively predict positive employees' behavior. Moreover, the traditional leadership style is only one of the single styles, such as "caring for people" and "caring for tasks", which can not deal with the contradictions between organizations and employees very well and is not practical; while the paradoxical leadership which takes into account the dual needs of both organizations and employees is a realistic leadership type and strengthens the paradoxical leadership. Research can effectively improve the level of organizational management. Especially in the situation of up-and-down effect in China, leadership system has become a part of corporate culture and even a bottleneck in the development of enterprises, so strengthening leadership training is of great significance to organizations.

Finally, the organization should take a variety of measures to stimulate employees' voice behavior. Mr. Ren Zhengfei, founder of Huawei Company, once put forward that in this era of increasingly fierce competition and flattening organizational structure, the competition of enterprises is "the war of captain" (the competition of grass-roots managers), which means that it is more and more important to give full play to the initiative of grass-roots employees. Previous studies have shown that employee voice behavior can not only improve organizational performance, but also improve employee satisfaction and reduce turnover rate. Therefore, organizations should actively take measures to stimulate voice behavior. Firstly, employee voice behavior should be included in the performance appraisal system. For example, the organization should reward the validated and reasonable suggestions. Employee voice behavior originally belongs to non-role behavior and has nothing to do with company rewards and punishments, which will reduce the enthusiasm of employees and is not conducive to employee voice. Secondly, setting competitive salary level, increasing diversity of employees' work and appropriate empowerment will improve the level of organizational self-esteem of employees, and then stimulate employees to provide constructive ideas for improving organizational competitiveness. Thirdly, establish a good leadership-member exchange relationship, including communication with subordinates as much as possible, paying attention to subordinates' personal interests, respecting

subordinates' personality, and finding and recognizing subordinates' value.

### References

- Aryee, C. S. (2007). Delegation and employee work outcomes: an examination of the cultural context of mediating processes in china. *The Academy of Management Journal*, *50*(1), 226-238.
- Crant, J. M. & Wang, K. J. (2011). Dispositional antecedents of demonstration and usefulness of voice behavior. *Journal of Business and Psychology*, 26(3), 285-297.
- Duan, J. Y. & Ling, B. (2011). The influence of the structure of employee voice behavior and the mean thinking in Chinese context. *Journal of psychology*, *43*(10), 1185-1197.
- Dyne, L. V., Ang, S. & Botero, I. C. (2003). Conceptualizing employee silence and employee voice as multidimensional constructs. *Journal of Management Studies*, 40(6), 34.
- Fuller, B. & Marler, L. E. (2009). Change driven by nature: a meta-analytic review of the proactive personality literature. *Journal of Vocational Behavior*, 75(3), 329-345.
- Hui, C., Lee, C. & Wang, H. (2015). Organizational inducements and employee citizenship behavior: the mediating role of perceived insider status and the moderating role of collectivism. *Human Resource Management*, 54(3), 439-456.
- Kim, T. Y. & Jie, W. (2013). Proactive socialization behavior in china: the mediating role of perceived insider status and the moderating role of supervisors' traditionality. *Journal of Organizational Behavior*, 34(3), 389-406.
- Kim, T. Y., Hon, A. H. Y. & Crant, J. M. (2009). Proactive personality, employee creativity, and newcomer outcomes: a longitudinal study. *Journal of Business and Psychology*, 24(1), 93-103.
- Knapp, J. R., Smith, B. R. & Sprinkle, T. A. (2014). Clarifying the relational ties of organizational belonging: understanding the roles of perceived insider status, psychological ownership, and organizational identification. *Journal of Leadership & Organizational Studies*, 21(3), 273-285.
- Lepine, D. J. A. (1998). Helping and voice extra-role behaviors: evidence of construct and predictive validity. *The Academy of Management Journal*, *41*(1), 108-119.
- Lepine, J. A. & Van Dyne, L. (2001). Voice and cooperative behavior as contrasting forms of contextual performance: evidence of differential relationships with big five personality characteristics and cognitive ability. *Journal of Applied Psychology*, 86(2), 326-336.
- Liang, J. C., Farh, C. I. & Farh, J. L. (2012). Psychological antecedents of promotive and prohibitive voice: a two-wave examination. *Academy of Management Journal*, *55*(1), 71-92.
- Masterson, S. S. & Stamper, C. L. (2003). Perceived organizational membership: an aggregate framework representing the employee–organization relationship. *Journal of Organizational Behavior*, 24(5), 473-490.
- Masterson, S. S. S. (2002). Insider or outsider? how employee perceptions of insider status affect their work behavior. *Journal of Organizational Behavior*, 23(8), 875-894.
- Milliken, M. F. J. (2000). Organizational silence: a barrier to change and development in a pluralistic

world. The Academy of Management Review, 25(4), 706-725.

- Morrison, E. W., Wheeler-Smith, S. L. & Kamdar, D. (2011). Speaking up in groups: a cross-level study of group voice climate and voice. *Journal of Applied Psychology*, *96*(1), 183-191.
- Schad, J., Lewis, M. W., Raisch, S. & Smith, W. K. (2016). Paradox research in management science: looking back to move forward. *The Academy of Management Annals*, 10(1), 5-64.
- She, Z. & Li, Q. (2017). Paradoxical leader behaviors and follower job performance: examining a moderated mediation model. *Academy of Management Annual Meeting Proceedings*, (1), 13558.
- Smith, W. K. & Lewis, M. W. (2011). Toward a theory of paradox: a dynamic equilibrium model of organizing. Academy of Management Review, 36(2), 381-403.
- Thompson & Jeffery, A. (2005). Proactive personality and job performance: a social capital perspective. *Journal of Applied Psychology*, *90*(5), 1011-1017.
- Zhang, Y., Waldman, D. A., Han, Y. L. & Li, X. B. (2015). Paradoxical leader behaviors in people management: antecedents and consequences. *Academy of Management Journal*, 58(2), 538-566.
- Zhou, H. & Long, L. R. (2012). The influence of transformational leadership on subordinates' remonstrance behavior: the role of organizational psychological ownership and tradition. *Journal of psychology*, 44(3), 388-399.

# INFLUENCE OF CUSTOMER LOYALTY ON CONSUMER SPORTING PRODUCTS

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# Abstract

Sporting apparels is one of the most well-known industries in Malaysia. Sportswear has become a common and popular as it was perceived that it is necessary to become active in sports activities in order to more relaxed lifestyle comfort and versatility. This prompted sports began to expand their business, particularly in Asia, as it has given them higher sales potential for sporting products. Therefore, this paper examines on the factors influencing customer loyalty of sporting products in Malaysia. The result shows that one variable that is design have no significant relationship while the other four variables (brand name, price, product quality and promotion) have significant relationship with customer loyalty. Marketers will benefit from this study whereby they can strategize ways to improve the offering and enhance on the loyalty on sport attire.

Keywords: Customer loyalty, Brand name, Quality, Sports, Malaysia

# Introduction

Today, most young generation consumers like to purchase the famous brand of sport attire (Keller, 2009). This is because it is necessary to become active in sports activities in order to more relaxed lifestyle comfort and versatility. However, in todays' sport attire and casual apparels are highly competitive in public market, there are several brands that are recognized the most in the sport attire industry such as Adidas and Nike (Lim & Aprianingsih, 2015). All around the world, the sportswear is one of the most well-known industries and is the main contributor to the history of fashion design.

Adidas sportswear have increase year-to-year growth in every year which made it very important for sportswear brands to gets the loyalty from their customers. Recently the Adidas sportswear always innovating and extending their brands purpose is become very popular and lucrative that the brands, not just to make better performance for sports, but also making clothes and footwear to be used on daily basis (Kinuthia, Mburugu, Muthomi & Mwihaki, 2012).

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In Malaysia have many sportswear brands are popular to sportswear customers such as Nike, Adidas, Puma, Reebok and other. Sportswear has become a common and popular category among younger generation consumers because they perceive they think that it is necessary to become active in sports activities in order to more relaxed lifestyle comfort and versatility. Besides that, sportswear industry produce the best product such as high quality to increase customer loyalty for their company.

This purpose of this study is identify the factor that affect customers to purchase Adidas's sportswear. Adidas is very popular sports brand for the consumers and one of the largest in all over the world. In the sports products category, Adidas has been ranked as the top three favourite among consumers. Adidas is manufacturing a large variety of sporting equipment, apparels, shoes and many kind of sports products.

## **Literature Review**

# 2.1 Customer Loyalty

Customer loyalty is known as customer's willingness to repurchase the offering and recommending others to use the offering (Hadiza, 2014). Similarly, Geçti and Zengin (2013) suggested that customer loyalty is whereby the act of customer initiating to buy an offering from the same brand repeatedly and furthermore conveying positive words of mouth to others. Loyalty is a phenomenon that received a great deal of interest among marketers (Reddy, Reddy, & Azeem, 2011). Customer loyalty that are the behavioral perspective, the attitudinal perspective and the composite perspective (Odunlami, 2014). Many organizations are spending millions to build profitable customer relationship in order to achieve loyalty among their customers (Pitta, Franzak & Fowler, 2006). As years goes by, loyalty has been an important element in this very competitive industries.

### 2.2 Brand Name

A brand name a key product attribute of a company. It is a complex symbol that has the potential to represent many ideas and attributes associated with the product it represents (Zinkhan & Martin, 1987). Besides, popular brand names can circulate higher recall of product benefits compared to those non-popular brand (Keller, 2009). Again, customers purchase product or service depend on their preferred brand name which will lead to customer loyalty.

H1: Brand name has a positive effect on customer loyalty

### 2.3 Design

Design is termed as appearance of an offering which has a possibility of affecting consumer's opinion towards the offering (Lim & Aprianingsih, 2015). According to Wong & Sidek (2010) stated that design is a created list of clothing approaches has been collected. Customers' evaluation depends on the customers' level of fashion consciousness, so condition of judgment is their opinion of what is

currently fashionable. Good brand name that offer stylish sportswear can highly attract fashion conscious customers (Wong & Sidek, 2010). Generally, awareness of the latest fashion is the knowledge of consumers towards the newer trends and consumer's readiness to spend on these trendy products (Lim & Aprianingsih, 2015).

H2: Design has a positive effect on customer loyalty

## 2.4 Price

Price has been defined as any sum of money charged for an offering that consumers are willing to pay for the satisfaction they gained (Kotler & Armstrong, 2010). Consumers do not always remember actual prices of products. Instead, they will remember the price that are meaningful to them. More often than not, price is the major factor influencing customer loyalty on sportswear. Customers will often take two product to compare and will choose the most reasonable price. Adidas industry have noted this issue and have offered low or reasonable price to sustain in a competitive environment. According to Lee (2012) stated that a reasonable price results in greater customer perceived value. Basically, loyal customers are made more tolerant to price by service loyalty created by long-term service loyalty, therefore loyal customers are discouraged from comparing price with other products by shopping here and there (Renaldo & Atik, 2015). Hence, reasonable price range will leads to higher consumer's perceived value and as a result to a higher purchase intention. Reasonable price such as price promotion has a positive effect on consumer's loyalty.

H3: Price has a positive effect on customer loyalty

# **2.5 Product Quality**

In general, the quality can be defined as degree of customer satisfaction (Sami, 2011). Take for instance, if a product fulfills the customers' needs and expectation, the customers will be happy and consider the products are acceptable and high quality. Based on previous study by Jimecalfa (2011), he noted that product quality is not what the producers put in, it is what the customers get out and willing to pay. Khaled & Khonika (2012) mentioned that quality of an offering will carry its ability to satisfy consumers' needs. In other sense, or 'conformance to requirement'' or "fitness for use" define the product quality.

Depending on the touchable quality of the product sold, customers can switch among repeatedly purchase from single brands or different brands. As material is important in quality of product because it will affects the different performance, hand feel as well as texture factors of the product. Sportswear are included many functional attributes such as quick-dry, lightweight, waterproof, breathable, odor-resistance and antimicrobial and lastly durability.

H4: Product quality has a positive effect on customer loyalty

### **2.6 Promotion**

Promotion is a very important because it will influence every firm to earn profits. According to Kotler & Armstrong, (2010), the promotional efforts will highly effected customers buying decision and their huge amount of sales. Promotion, especially through advertising, is important in establishing ideas or perceptions in the customer minds as well as a particular product category is differentiating brands. A company's marketing strategy is highly dependent on the promotion (Clow, 2010). This can attract brand switchers affected by advertisement and create customer loyalty. Moreover, the advertisement has promoted that effective communication and it can persuade and motivate customers to purchase the product (Pankaj & Pattanayak, 2014).

H5: Product quality has a positive effect on customer loyalty

### Methods

# 3.1 Research Methodology & Data Collection

This study was carried out using a structure questionnaire having 23 measurement items were measured using 5-point Likert scale. The 23 measurements items were adopted from the following: 4 items measured brand name (Pankaj & Pattanayak, 2014), 4 items measured price (Renaldo Wijaya Lim & Atik Aprianingsih, 2015), 4 items measured product quality (Wong & Sidek, 2010), 4 items measured design (Hamza Salim Khraim, 2011), 3 items measured promotions (Pillai, 2013), and 4 items measured customer loyalty. A total sample of 250 was chosen using non-probability purpose sampling method from among the customers who purchase Adidas sports products.

### **3.2 Data Analysis**

Statistical Package for Social Science (SPSS) version 25.0 was used to analyze the respondents' demographic profile. Besides, the Structural Equation Modeling (SEM) technique was employed to test the hypotheses for this study with the use of Smart-PLS Version 3.2.8. Out of the 300 questionnaires distributed, only 250 were found usable and this has contributed to a response rate of 83.33%.

# **Results and Discussion**

The demographic characteristics of respondents shows that majority of the respondents are age between 22-25 years old (51.6%), followed by those age 18 to 21 years old (33.6%) and only 7.2% of respondents with the age above 30.

Meanwhile, for the monthly income of the respondents, majority of the respondents (74.4%) are earning less than RM1000 and only 3.2% of respondents are earning more than RM4001. The result shows that most of them (3.5%) have purchased at least 1 sporting product from Adidas. while 75.8% of respondents have more than 2 sporting products from Adidas.

# **4.1 Measurement Model Results**

Table 1 shows that the loadings of all constructs and composite reliability (CR) values for this study has exceeded the recommended value of 0.5 and 0.7 respectively (Hair et al., 2012). Furthermore, the AVE from this study also recorded the measures of greater than 0.50 as mentioned by Hair et al. (2012) which is 0.557 to 0.699.

# Table 1: Convergent Validity and Item Reliability

Constructs	Questions Items	Loadings	CR	AVE
Brand Name	B1	0.649	0.833	0.557
	B2	0.740		
	B3	0.788		
	B4	0.798		
Design	D1	0.720	0.883	0.655
	D2	0.874		
	D3	0.885		
	D4	0.744		
Price	P1	0.801	0.902	0.698
	P2	0.825		
	P3	0.865		
	PAPANYAI	0.850		
Product Quality	PQ1	0.809	0.880	0.646
	PQ2	0.840		
	PQ3	0.770		
	PQ4	0.796		
Promotion	AD1	0.686	0.869	0.692
	AD2	0.910		
สถา	AD3	0.881	Jani	
Customer Loyalty	Ll	0.816	0.903	0.699
	L2	0.830		
	L3	0.866		
	L4	0.831		

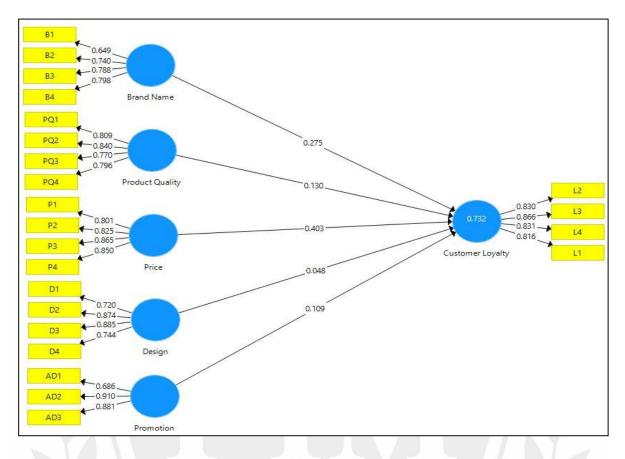


Figure 1 Measurement Model

## **4.2 Structural Model Results**

After computing the path estimates in the structural model by bootstrap analysis, the statistical significance of the path coefficients was determined. Therefore, the bootstrapping procedure for this study at done with 5000 resample employed to produce path coefficient and their corresponding t-values. Table 2 shows design (t=0.662,) has had no significant relationship with customer loyalty. Meanwhile, brand name (t=3.184, p<0.01), price (t=6.128, p<0.01), product quality (t=1.933, p<0.05) and promotion (t=1.994, p<0.05) had no significant relationship with purchase intention.

Hypothesis	Path	Beta Value	Standard Error (STERR)	t – Value	2.5%	97.5%	Decision
H1	Brand Name -> Customer Loyalty	0.275	0.086	3.184**	0.119	0.459	Supported
H2	Design -> Customer	0.048	0.073	0.662	-0.089	0.191	Not supported

	Loyalty						
H3	Price -> Customer Loyalty	0.403	0.066	6.128**	0.269	0.517	Supported
H4	Product Quality -> Customer Loyalty	0.130	0.067	1.933*	-0.009	0.245	Supported
Н5	Promotion -> Customer Loyalty	0.109	0.054	1.994*	-0.003	0.218	Supported

\*\*p<0.01, \*p<0.05, Bootstrapping (n=5000)

### Conclusions

Despite the fact that this study is directed in a very small area, however this can be help the business to implement the new strategy to attract more people that customer loyalty on sport attire and it is also benefit for the similar industry to increase their profit for their business. Marketers can plan the unique and strategies to improvement the products and services and make the customer build the loyalty on sport attire. Future research can be consider in growing the sample size and furthermore extend this research to different nations particularly in rising nations where sports attire products will be an imperative market there. By developing this research into more diverse cultures and geographies, advertisers will have a better understanding customer loyalty on what their prefer sport attire.

### References

- Clow, M. (2010). *Integrated Marketing Communications*. Pearson Education, Inc. publishing as Prentice Hall.
- Geçti, F. & Zengin, H. (2013). The relationship between brand trust, brand affect, attitudinal loyalty and behavioral loyalty: A field study towards sports shoe consumers in Turkey. *International Journal* of Marketing Studies, 5(2), 111.
- Hair, J. F., Sarstedt, M., Ringle, C. M. & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414-433.
- Keller, K. L. )2003(. *Strategic Brand Management: Building, Measuring and Managing Brand Equity.* Prentice Hall: New Jersey.
- Khaled, M. & Khonika, G. (2012). Factors Influencing the Extent of Brand Loyalty of Toilet Soap Users in Bangladesh: A Case Study on Dhaka City. *Global Journal of Management and Business Research*, 12)15 Version 1.0, 25-33.
- Kinuthia, L.N., Mburugu, K.G., Muthomi, H.N., Mwihaki, M. (2012). Factors influencing brand loyalty in sports wear among Keyyan University students: The case of swimmers. *Asian Journal of*

Social Sciences and Humanities, 1(4), 223-231.

- Lee, F. S. J. (2012). The consumer price-perceived quality heuristic on the hotel industry. *Review of Business Research*, 12(1), 96-101.
- Lim, R. W. & Aprianingsih, A. (2015). Factors influencing brand loyalty towards sportswear in Bandung, *Journal of Business and Management*, 4(8), 932-943.
- Odunlami, I. B. (2014). Impact of Customer Satisfaction and Customer Retention on Customer Loyalty: A Case Study of Enterprise Bank in Oyo", *International Journal of Education and Research*, 2(9), 427-450.
- Pankaj K. S. & J. K. Pattanayak, (2014). The Impact of Brand Loyalty on Consumers' Sportswear Brand Purchase, *The IUP Journal of Brand Management*, *11*(4), 40-52
- Pitta, D., Frank, F & Danielle, F. (2006). A strategic approach to building online customer loyalty: integrating customer profitability tiers, *Journal of Consumer Marketing*, 23(7), 421–429.
- Reddy R., Reddy N. & Azeem B. (2011). Influence of store satisfaction, merchandise quality, and service quality on store loyalty. *International Journal of Trade, Economics and Finance*, 351-355.
- Renaldo, W. L. & Atik, A. (2015). Factors influencing brand loyalty towards sportswear in Bandung. Journal of Business and Management, 4(8), 932-943.
- Wong, F. Y. & Sidek, Y. Y. (2010). Influence of Brand Loyalty on Consumer Sportswear. International Journal of Economics and Management, 2(2), 221-236.
- Zinkhan, G. M. & Martin, C. R. (1987). New brand names and inferential beliefs: Some insights on naming new products. *Journal of Business Research*, 15(2), 157–172.

# EXPLORING UTAUT2 MODEL ON CONSUMERS' INTENTION AND ADOPTION OF SMARTWATCH IN BANGKOK THAILAND

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### Abstract

Thailand is considered among a fast growing country in South East Asia on technology usage particularly wearable devices, yet there is still little evidence on user intention and adoption. This study aims principally to explore one of leading wearable device, smartwatch, among Thai consumers in Bangkok metropolitan area. The study adopted UTAUT2 as the main model to understand consumer behavior and usage. Online questionnaires had been distributed and all data had been analyzed using multiple regression technique The results clearly supported Generation Y are among popular users of smartwatch with the main emphasized on functional based such as activity tracking for health. Among antecedent factors used to explore user's intention and adoption, performance expectancy (PE), social influence (SI), hedonic motivation (HE) as well as habit (HAB) were the main determination of Thai consumers to use smartwatch. This study can be used as an initial reference to understand insights of Thai consumers and their intention to use smartwatch.

Keywords: Smartwatch, UTAUT2, User's intention and adoption

### Introduction

Wearable technology is referred as device gadgets that can be worn on human body, example of wearable technology are eyewear, cloth and wristworn devices. Wristworn is considered the most popular technology gadgets and often seen in the market nowadays such as smartwatch. Leading manufacturer like Apple, Samsung or Huawei have continuously launched their smartwatch products to fit people's lifestyle. The world market of smartwatch brand in 2017 has still largely nominated by IPhone whose worldwide sales went up to US\$17.7 million compared to second rank, Samsung, US\$3.6 million and third rank, Garmin, that hold market size of US\$2.7 million respectively (www.statista.com). In addition, numerous market research websites have continued to keep track on purposes of using smartwatch in leading countries such as U.S., U.K., Germany, China and South Korea, all the key purpose was to use it as activity tracking like step counts, heart rate monitor or sleep pattern

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(www.statista.com). It would also be beneficial for smartwatch brands to continue exploring users' behavior and intention to use this gadget in other countries.

Currently, health trend is booming among Thai people, they have paid close attention to their health monitor. Smartwatch thus has become high demand on this purpose. Although Thailand's market share on smartwatch is relatively small comparing to worldwide sales, it is worth observing in order to use as reference country in South East Asia. Revenues on wearable segment in Thailand is expected to worth around US\$36 million and is targeted to grow at the cumulative annual growth rate of 4.8% (CAGR 2019-2023) (www.statista.com). Still there has been a growing demand of using smartwatch particularly within young generation thus it is interesting to analyze smartwatch adoption and intention of using this IT gadget.

### **Research Objective**

To understand and determine factors influencing consumers' intention and use of smartwatch in Thailand

Expected benefits

- 1. The results can demonstrate clear characteristics of smartwatch users' intention and use behavior in Bangkok, Thailand and thus can be used as good reference within the industry.
- 2. Smartwatch brand companies can use the results as case study to compare with users' behavior in other countries when launching marketing campaign
- 3. The study can be the first start to develop further research in trying to understand consumers' behavior on technology acceptance model

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# **Scope of Research**

This quantitative study aims to focus only on smartwatch users or those who have had experience using it within Bangkok metropolitan area. Consumers were classified into 3 categories: generation X representing those who was born between1965-1979, generation Y between1980-1997 and generation Z were those who was born after 1997. Data collection period was conducted in late months of 2018 which could be used as a good reference to understand Thai consumers' characteristics within 1-2 years. Online questionnaires were distributed via survey monkey link, however, only 308 were completed and used.

### **Literature Review**

Several theoretical models which rooted from psychology and sociology have been developed to describe how technology can be accepted and use (Venkatesh et al., 2003). Unified theory of acceptance and use of technology (UTAUT) is considered as predictive model to try to understand behavior intention toward using information technology. The UTAUT was proposed to measure within organizational context and later has been developed to measure on personalized technology (Vankatesh

### et al., 2012). UTAUT2, composing of seven constructs, is listed as follow:

Performance expectancy is defined as how much a degree to which consumers view benefits from using particular technology (Vankatesh et al., 2012). Using smartwatch can lend variety of benefits such as activity tracking, navigating, media player or personal organizer. Number of past empirical studies confirmed a positive significant relationship between performance expectancy and behavioral intention on smartwatch case (Kim & Shin, 2015; Yuan et al., 2015; Wu et al., 2016; Talukder et al., 2018)

### H1 Performance Expectancy positively effects behavior intention to use smartwatch

Effort expectancy referred as "the degree of ease associated with consumers' use of technology" (Vankatesh et al., 2012). Consumers would prefer and increase their intention to use if smartwatch is found to be simple to operate (Kim & Shin, 2015; Krey et al., 2016; Chuah et al., 2016).

# H2 Effort Expectancy positively effects behavior intention to use smartwatch

Social influence referred to the degree to which consumers perceived those influential persons believe they should have a technology (Vankatesh et al., 2003). Social influence is taken from a construct in theory of planned behavior (TPB) by Ajzen (1991). Suggestion and advice from family and friends are considered important for behavioral intention to use smartchwatch. Past studies also find significant influencing factor from social influence to behavior intention (Buenaflor & Kim, 2013; Yang et al., 2016)

## H3 Social influence positively effects behavior intention to use smartwatch

Facilitating conditions, is also similar to perceived behavioral control under TPB, means any support such as training or prior knowledge individual obtained. This factor may proof important for consumers' continue usage (Vankatesh et al., 2012)

### H4 Facilitating condition positively effects behavior intention to use smartwatch

Hedonic motivation was another new variable included in UTAUT2, Vankatesh et al. (2012) add this construct as enjoyment and fun of using a particular technology. Davis et al. (1992) also suggested that perceived enjoyment or hedonic motivation possibly led to use behavior. Smartwatch can create consumer's enjoyment while using the application.

### H5 Hedonic motivation positively effects behavior intention to use smartwatch

Habit, according to Limayem et al. (2007) confirmed that habit had been found to have direct impact to intention to use technology. It was defined as automatic behavior due to learning, however, it was entirely different from usage experience (Vankatesh et al. 2012). After using smartwatch for a certain period, consumers tend to feel addicted to it and would love to continue using in long period.

### H6 Habit positively effects behavior intention to use smartwatch

Price value was a last new construct adding in UTAUT2 model from the original UTAUT. When consumers' cognitive is calculated that technology's benefits exceed its cost, the value would turn positive (Vankatesh et al., 2012). Studies conducted by Yang et al. (2016) and Kim & Shin (2015) found price value significant to the intention to use wearable devices.

H7 Price value positively effects behavior intention to use smartwatch

### **Behavior intention and Use behavior**

Consumers who have high intention to use a particular technology is likely to adopt the technology him or herself (Leong et al., 2013; Vankatesh et al., 2012). Therefore, the more behavior intention a consumer develop, the higher chance s/he is using smartwatch in a long run.

H8 Behavior intention positively correlated to the use behavior of smartwatch

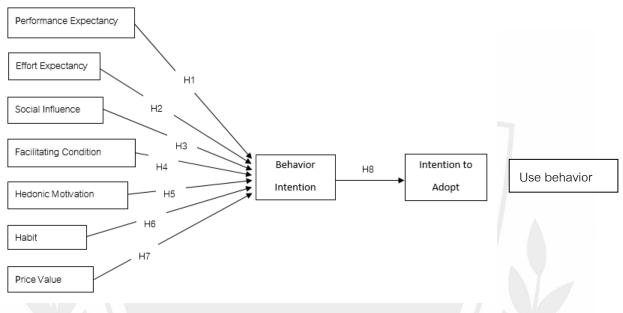


Figure 1 Research model

# Methods

All measurement items were adapted from past studies and from Venkatesh et al. (2013) with all item measuring on a 5-point likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The original questionnaires had been created in English, This study had been slightly modified questionnaire statements to fit with research purposes. 3 experts were invited to evaluate content validity. All questionnaires were translated in Thai language with do backward translation to ensure the translation equivalence. A pilot study was conducted with a group of 25 smartwatch users in order to examine reliability for internal consistency. Cronbach's Alpha was calculated as 0.864 in which the reliability was at the satisfactory level (Hair et al., 2006). Data were collected through online questionnaires during month of October and November 2018 Snowball sampling technique was used as a criteria on data collecting process. We distributed directly to respondents that have currently used or have had experience using smartwatch. Total of 331 respondents were participated, however, there were only 308 questionnaires that were completely and ready for use. The research employed multiple regression technique to test all hypotheses among variables.

### **Data Analysis and Research Results**

Before conducting hypothesis testing, the study needs to examine multicollinearity within

		Performance	Effort	Social	Facilitating	Hedonic	Price Value	Habit
		Expectancy	Expectancy	Influence	Conditions	Hedolile		
Performance Expectancy	Pearson Correlation	1	.430**	.448**	.496**	.609**	.541**	.630**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	307	307	307	307	307	307	307
Effort Expectancy	Pearson Correlation	.430**	1	.240**	.610**	.605**	.443**	.464*
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	Ν	307	307	307	307	307	307	307
Social Influence	Pearson Correlation	.448**	.240**	1	.300**	.358**	.383**	.392**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	307	307	307	307	307	307	307
Facilitating Conditions	Pearson Correlation	.496**	.610**	.300**	1	.701**	.417**	.516**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	307	307	307	307	307	307	307
Hedonic	Pearson Correlation	.609**	.605**	.358**	.751**	1	.540**	.588*
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	Ν	307	307	307	307	307	307	307
Price Value	Pearson Correlation	.541**	.443**	.383**	.417**	.540**	1	.553**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	Ν	307	307	307	307	307	307	307
Habit	Pearson Correlation	.630**	.464**	.392**	.516**	.588**	.553**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	307	307	307	307	307	307	307

variables. Table 1 displayed the table of correlation matrix, all variables did not appeared to have

problematic as all data value was less than 0.75 (Hair et al., 2006) (see table 1).

**Table 1** Correlation matrix

# **Research Results**

# **Descriptive Statistics**

Out of the total respondents, 62.3% were females and 36.7% males in which the majority of them are single. In addition, many of respondents mainly hold either bachelor or master degrees. Figure 1 illustrated smartwatch users which was classified into generation based. Generation X is classified as those who were born between 1965-1979 representing almost 38% of replied users, generation Y is

classified as those who were born between 1980-1997 representing 56% of total respondents and lastly generation Z is classified as those who were born after 1997 onwards representing 6.2% compared to the total respondents. The result tends to agree with the technology trend in Thailand in which generation Y is the leading group of using smartwatch technology.

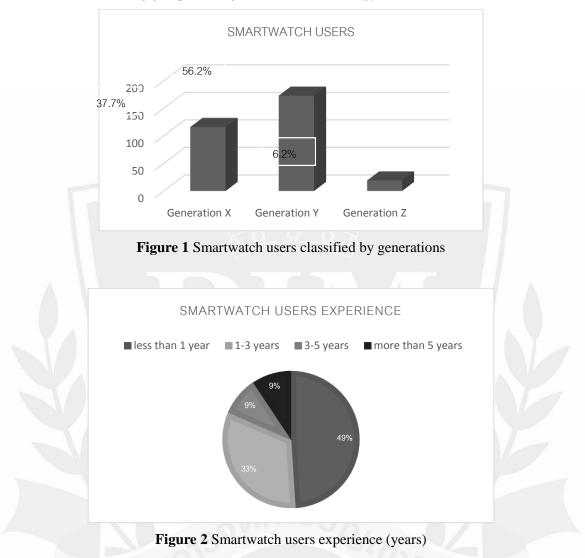


Figure 2 displays users' experience in term of years, it is observed that majority of Thai smartwatch users are still at the early adoption stage in which more than half of total respondents use it less than 1 year. Furthermore, there is quite obvious that the most popular brand among Thai users is Apple 43%, Garmin 13% and Samsung and Xiomi share the same amount of 10%. The U.S. brands still dominate the Thai market, however, China, Xiomi, is another fast growing brand that can penetrate this market very quickly for the past several years (see figure 3).

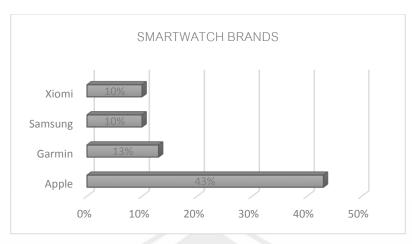


Figure 3 Smartwatch brands based on Thai users

### **Hypothesis Testing**

All variables incorporated under UTAUT2 have been tested together with key demographics such as age, gender, education, income as well as user's experience. Using multiple regression with stepwise method to screen the significant variables to the model. Table 2 demonstrated four different model results which are considered as significant contributors to the behavior intention. Model 4 seems to produce the best result with highest  $R^2$  and adjusted  $R^2$ . Four out of seven variables, performance expectancy, hedonic motivation, habit as well as social influence, under UTAUT2 model are treated as significant constructs to the explain the behavior toward using smartwatch in Thailand. Finally, in this study, we accept hypothesis H1, H3, H5 and H6 and therefor rejecting H2, H4 and H7.

Table 2 Determining UTAUT2 for smartwatch users	intention using	stepwise	multiple regression
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Variables	Model 1	Model 2	Model 3	Model 4
Habit	.647**	.477**	.428**	.413**
Performance Expectancy	50	.360**	.285**	.245**
Hedonic Motivation	291	9	.184**	.173**
Social Influence	NI I		17500	.104*
Constant	1.303**	.566**	.299**	.199**
R <sup>2</sup>	.488	.538	.551	.560
Adj. R <sup>2</sup>	.486	.535	.546	.554
SEE	.571	.544	.537	.532
F 289.252*		176.118**	123.426**	97.775**

\* P<.05, \*\* P<.01

Therefore, the factors under UTAUT2 which contribute to behavior intention can be written in anequation as follow: $Y = .199 + .413X_1 + .245X_2 + .173X_3 + .104X_4 + e$ Where $X_1 = Habit$  $X_2 = Performance Expectancy X_3 = Hedonic Motivation$ 

X4 = Social Influence

### Y = behavior intention

Table 3 shows the outcome between behavior intention and smartwatch adoption. The result clearly presents the positive significant relationship among the two variables. Therefore, we accept hypothesis H8.

Model		Unstandardize	ed Coefficients	Standardized Coefficients	t	Sig.			
		В	Std. Error	Beta					
1	(Constant)	1.325	.114		11.583	.000			
	Behavior Intention	.634	.032	.750	19.789	.000			
Danand	Dependent Variable: Use Polyavier $\mathbf{P}^2 = 562$ Adi $\mathbf{P}^2 = 562$								

Table 3 Correlation result between behavior intention and use behavior of smartwatch

Dependent Variable: Use Behavior,  $R^2 = .563$  Adj.  $R^2 = .562$ 

### Discussions

This research aims to determine factors effecting the use of smartwatch in Thailand by employing UTAUT2 model. Table 2 displays the result of the study whereby the four keys elements in UTAUT2 significantly impact to the consumers' intention. The four constructs are performance expectancy, habit, hedonic motivation as well as social influence. In addition, behavior intention consequently leads to the use behavior of smartwatch in Thailand. This paper is in line with the study from Yuan et al. (2015) that concluded the four factors driving the continued usage of smartwatch; performance expectancy, hedonic motivation, habit and price value. It's worth observing that users in Thailand tends to follow social influence such as family and friends rather than put more weight on price factor. Furthermore, the work by Nascimento et al. (2018) emphasized "habit" as the most important feature for user to continue using smartwatch. Another empirical research conducted by Talukder et al. (2018) also point out performance expectancy, social influence and habit were the significant indicators of intention to use of smartwatch. An earlier work completed by Chu & Park (2016) also pick five constructs in UTAUT to examine the intention to use smartwatch, the result still supported performance expectancy, hedonic motivation, social influence and price value. Table 3 illustrates the correlation between behavior intention and use behavior in which the result positively and significantly among each other. Strong intention leads to use behavior.

### **Conclusions and Recommendations**

### Conclusions

The study is an initial stage to try to understand consumers' behavior and attitudes toward adopting smartwatch in Thailand. Overall majority of users are at the early stage of using this wearable device. Performance expectancy is considered as usual predictable outcome for many empirical studies. Other driving factors such as hedonic motivations, habit and social influence are considered important to the continue using of smartwatch. Recommendations to marketers if they want to build promotional platform or raise consumers' awareness of using smartwatch, not only they need to emphasize on usefulness and benefits of it but also they need to create user's experience, a free trial period (7-10 days) would be nice to induce consumers to feel the needs of wearing it. In addition, Thai people also concern with group norm, by observing from positive social influence, the advertisement should focus on the concept of entertaining and enjoyment to wear it. Social influence is one of important factor and Thai society is easily absorbed and accepted different cultures particularly among the young generation. Nevertheless, it might be too early to draw conclusion on factors influencing Thai consumers to use smartwatch and truly understand the benefits of it. Since this product has been in Thai market less than a decade, consumers may need time to fully understand their genuine intention of adopting and second phase of research is proved to be useful as a comparison.

### Recommendations

Since habit is one of the most influencing factors on consumer adoption of smartwatch, service providers or marketing company should understand the barrier of Thai people to try on new technology as they may afraid of being innovativeness. Once they start to experience the product, they should feel more comfortable and can create good habit of wearing it. Thus for the sake of advertisement of smartwatch in Thailand, the advice must be emphasized on a) creating users' experience b) provide details on functions and performance c) using celebrity or influencing people in Thai society. It is also important to make the users feeling enjoyment and fun when using smartwatch. These are key significant factors to help promote and attract more smartwatch users in Thailand.

### **Limitations and Future Research**

Since the study is only focused on Bangkok area, it is hardly represented consumers' demand and perspective of the majority of Thai people. Major cities such as Chaing mai, Phuket or Khon Kean have not been collected data and there should be number of users who have high purchasing power.

Future research can be suggested to continue collecting data throughout Thailand in major cities as mentioned above. Alternative research can be to conduct a comparative study in neighboring countries in order to gain better understanding or norm of ASEAN consumers.

#### References

- Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211.
- Buenaflor, C. & Kim, H. C. (2013). Six human factors to acceptability of wearable computers. *International Journal of Multimedia and Ubiquitous Engineering*, 8(3), 103-114.
- Cho, I. & Park, H. (2016). The influential factors on the diffusion of smartwatches in Korea. *International Journal of Technology Management*, 72(1/2/3), 230-251.

- Chuah, S. H. W., Rauschnabel, P. A., Krey, N., Nguyen, B., Ramayah, T. & Lade, S. (2016). Wearable technologies: the role of usefulness and visibility in smartwatch adoption. *Computers in Human Behavior*, 65, 276-284.
- Davis, F. D., Bagozzi, R. P. & Warshaw, P. R. (1992). Extrinsic and intrinsic motivation to use computers in the workplace1. *Journal of Applied Social Psychology*, 22(14), 1111-1132.
- Hair, J., Anderson, R., Tatham, R. & Black, W. (2006). *Multivariate Data Analysis* (6<sup>th</sup> ed.). NJ: Prentice Hall.
- Kim, K. J. & Shin, D. H. ((2015. An acceptance model for smart watches: implications for the adoption of future wearable technology. *Internet Research*, *25*(4), 527-.541
- Krey, N., Rauschnabel, P., Chuah, S., Nguyen, B., Hein, D., Rossmann, A. & Lade, S. (2016). Smartwatches: accessory or tool? The driving force of visibility and usefulness. *Mensch und Computer 2016-Tagungsband*.
- Leong, L. Y., Hew, T. S., Tan, G. W. H. & Ooi, K. B. (2013). Predicting the determinants of the NFCenabled mobile credit card acceptance: a neural networks approach. *Expert Systems with Applications*, 40(14), 5604-5620.
- Limayem, M., Hirt, S. G. & Cheung, C. M. (2007). How habit limits the predictive power of intention: the case of information systems continuance. *MIS Quarterly*, *31*(4), 705-737.
- Nascimento, B., Oliveira, T. & Tam, C. (2018). Wearable technology: What explains continuance intention in smartwatches? *Journal of Retailing and Consumer Services*, *43*, 157-169.
- Talukder, M., Bao, Y. & Malik, B. (2018). Acceptance and use predictors of fitness wearable technology and intention to recommend. Industrial Management & Data Systems.
- Venkatesh, V., Morris, M. G., Davis, G. B. & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, 27(3), 425-478.
- Venkatesh, V., Thong, J. Y. & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS Quarterly*, 36(1), 157-178.
- Wu, L. H., Wu, L. C. & Chang, S. C. (2016). Exploring consumers' intention to accept smart watch. *Computers in Human Behavior*, 64, 383-392.
- Yang, H., Yu, J., Zo, H. & Choi, M. (2016). User acceptance of wearable devices: an extended perspective of perceived value. *Telematics and Informatics*, 33(2), 256-269.
- Yuan, S., Kanthawala, S. & Peng, W. (2015). Keep Using My Health Apps: Discover Users' Perception of Health and Fitness. *TELEMEDICINE and e-HEALTH*, 21(9), 735-741.

# THE HIGH PERFORMANCE ORGANIZATION IN THE DIGITAL AGE

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### Abstract

This article aims to investigate nine factors (e.g. organization design, strategic management capability, culture management capability, leadership capability, people capability, digital capability, value proposition capability, improvement and innovation capability, change management capability) and how to transform a high-performance organization (HPO) to remain competitive businesses in the world that is rapidly changing. The study reveals that most of HPO are large size companies that the major weakness is agility. If they want to keep the status as a HPO and leader in theirs industry, they must be pay the effort to finds the effective and appropriate way to transform their organization; vision, strategies, culture, leadership, people skills and mindset, operations and others capability, aligned with a digital paradigm, to be ahead of competition and able to adapt to rapid changing circumstance in digital age. The nine factors for HPO in digital age will be inspire you to decide where and how to transform your organization.

Keywords: High performance Organization, Digital age, Transformation

# Introduction

The successful organizations will have to extract top performance from all of their units with efficiency. Such practice requires collective intelligence which is bred from knowledge, competence and understandings. The ideal organization of the future can be described as a high-performance organization (HPO), which means bringing capability of continuous renewal, of anticipating changes of learning fast. A truly HPO will be adaptive to rapid change. Rather than being mechanical, it will look more like a living organism that can steer its own operation.

In digital age, businesses are facing unprecedented challenges. Leaders confront intense competition, demand for social responsibility, technological changes, new customers' expectation and strategic thinking. These need to be managed to build and sustain a HPO. They also inquire about revenue growth, market share, profitability, and customer satisfaction. High performance companies are role models of the organizational world. They represent real-world versions of a modern managerial ideal: the organization that is consistently outperforms most competitors for extended periods of time.

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Leaders want to know more about HPO so they can apply the lessons to their own companies. The goal is to ensure that their own organizations excel in the marketplace.

Digital transformation has already hit every industry. Several industries are facing a highly impact from these disruptive circumstances such as banking, finance, and printing. HPOs have to overcome the difficulties that challenge their competitors. The key revolution of digital technology in HPO will come from internet of thing, cloud computing, artificial Intelligence, robot, blockchain, cyber security, big data analytic and sovereign identity. The HPO know how and where to invest, and their leaders are committed to guiding the company powerfully into digital future. They are already exploiting their digital advantage to build superior competitive positions in their industries.

HPO is defined as: "an organization that achieves financial and non-financial results that are exceedingly better than those of its peer group over a period of time of five years or more, by focusing in a disciplined way on that which really matters to the organization." (Andre de Waal, 2015: 4-5)

### **High-Performance Organization Benefit**

HPO usually generate 4 to 6 percent higher in revenue growth; 14 to 44 profitability; 1 to 26 ROA, ROE, ROI and ROS; and 4 to 42 total shareholder (Andre de Waal, 2015: 5-6).

# **High-Performance Organization Transformation**

Every organization expected to become a HPO, but how do organization become HPO?, how to building a sustainable HPO ? HPO requires a systematic and integrated approach which will deliver productivity, increasing sales, customer satisfaction, and employee engagement. These nine major factors of HPO must be focused in digital age that a guideline to improve an organization and people capabilities drive financial and operational performance and enable companies to execute their strategy.

### 1. Organization Design

Organizational design can help companies improve execution and achieve strategic goals. A welldesigned structure should emphasize what matter most to an organization, be dynamic, and be oriented around current and future rather than legacy and priorities. When strategy, performance or competitive environment changes, an organization's structure need adjustment. Lean structure allows organization to focus meaningful work, rather than coordination. With a few organization layers, communication and decision making are faster, and senior leaders have a better view of day-to-day operations and customer interactions. Leaders become more ambitious in applying their leadership skills. They have time to lead, coach, and inspire their subordinates.

Nowadays, it is essential to keep restructuring to protect the core business and adapt to new opportunities because employees have to deal with the complexities that come from oscillating between centralization and decentralization, exerting influence without authority, and operating with virtual teams. To thrive in such dynamic environments, an organization needs to apply distinctive design

criteria. Redesign Organization has to evolve through three phases in order to support (i) the focus on product quality to reach a global standard, (ii) increased service needs along with changing business models and (iii) addressing market needs by creating project teams to bring business units closer to the markets. If these three stages do not kick in at the right time, the organization's growth will tend to stall.

Agile Organization is more raised up to consider redesign organization in the top of mind when McKinsey Global Survey- published, a survey of 'Organization Agility' reports in 2015 -the ability to quickly reconfigure strategy, structure, processes, people, and technology toward value-creating and valueprotecting opportunities-is elusive for most. Many respondents say their companies have not yet fully implemented agile ways of working, either company-wide or in the performance units where they work though the advantages are clear. Respondents in agile units report better performance than all others do, and companies in more volatile or uncertain environments are more likely than others to be pursuing agile transformations. In agile organization, leaders provide actionable strategic guidance that they have established a shared vision and purpose and that people in their unit are entrepreneurial. After strategy, agile units most often follow four stable practices related to process and people: entrepreneurial drive, shared and servant leadership, standardized ways of working, and cohesive community. When looking more closely at standardized ways of working, the agile units excel most on two actions: the unit's processes are enabled by shared digital platforms and tools, and processes are standardized, including the use of a common language and common tools. Among the dynamic practices, process-and information transparency, in particular-is a strength for agile units. Within transparency, information on everything from customers to financials is freely available to employees. The second practice, where agile units most differ from others, is in rapid iteration and experimentation. The companies, that had a new products and services, are developed in close interaction with customers. And that ideas and prototypes are field-tested early in the development process, so that units can quickly gather data on possible improvements. HPO must improve agility by redesign organization structure as an agile team, develop leadership, redesign processes and skills set, and transforming culture.

# 2. Strategic Management Capability

The successful digital transformation starts at the top of company. Senior executives can create a compelling vision, communicate, and shared digital vision throughout their organization. Then executive and middle manager will make a vision a reality, redesign processes, staff can start to work differently to meet the vision. HPO would focus one of three perspectives; (1) re-envisioning the customer experience; (2) re-envisioning operational processes; or (3) combining the previous two approaches to re-envision business models (Westerman, Bonnet & Mcaffee, 2014: 100). The approach their take reflect organization' capabilities, customer needs, and the nature of competition in their industry. When they express a vision for digital transformation, they need to craft a vision that builds on their strengths, engages employees, and can evolve overtime. They need to identify the benefits their wants, what the end-point will look like, and how they will engage your customers, employees, and investor. HPO needs to identify some strategic assets that will their win. Start by looking at what asset

and core competence their have, an advantage over your competitors. Next, identify a potential strategic assets and competence will remain strategic in the new world. The vision needs to be transformative through an appropriate strategies management, action planning and execution with disciplinary and engagement across organization, alignment in all parts of working systems, and effective communication and involvement to all executives and staff in clear direction. Crafting a vision for digital transformation is a journey. They need to plant the seed at the top, and engage people all levels to make the vision live and grow.

## 3. Culture Management Capability

HPO leadership allows experiments and mistakes by permitting employees to take risks by being willing to take risks themselves, and seeing mistakes as an opportunity to learn. In this respect, management welcomes and stimulates change by continuously striving for renewal, developing dynamic managerial capabilities to enhance flexibility, and being personally involved in change activities. People in a HPO spend much time on communication, knowledge exchange and learning in order to obtain new ideas to do their work better and make the complete organization performance-driven.

In HPO, people are encouraged to think and act like business owners and focus on generating shareholder value. It's is in everyone's interest to have business that contributes, perform and continue to grow. There has been a deliberate attempt to reduce bureaucracy. Any new ideas are given in a green light and some resource to test them before a major commitment is made. An entrepreneurial spirit and can-do attitude are encouraged. Their culture has been accelerated change across organization in recent years with an investment in valued-based leadership development to help drive transformation. HPO provides structured learning interventions and culture, and individuals are also encouraged to apply for funding for additional opportunities. Conversations about performance focus not just on 'what' employees are doing, but 'how' they are doing. These conversations focus on sense of accountability, and their rewards more consistency with innovation, customer experience, team and organization performance.

Every organization is racing to digitally transform their businesses to better meet the quickly changing demands of their customers. In fact, a recent survey from Couchbase showed that 9 out of 10 digital transformations didn't meet the needs of the business. (Colon, 2018) While there are many problems that can lead to failure, one consistent theme is leadership's inability to foster the cultural elements needed to support a digital strategy. Smart leaders approach building new cultural characteristics differently by focusing on desired behaviors and rewarding the new behaviors appropriately. When behavior shifts, mindsets and values follow, and you'll start to see results and traction with your chosen strategy. For instance, if you want customer experience to improve, you need to focus on it to shift your employees' behaviors appropriately. Leaders need to model, acknowledge and recognize the behavior of asking how each decision being made impacts the customer experience

in every meeting they attend and every conversation they have. If you want customer experience to be the center of every single organizational move, you have to go big and make customer experience a big deal. Conversations across the organization and people's mindsets that the best way to have a valued impact in the organization is to focus on the customer. With every decision they make, they begin to ask how it impacts the customer. The behavior spreads, and a new cultural norm of customer focus takes root.

# 4. Leadership Capability

In a HPO, leadership maintains trust relationships with people on all organizational levels by valuing employees' loyalty, showing people respect, creating and maintaining individual relationships with employees, encouraging trust in others, and treating people fairly. Leader coaches and facilitates employees to achieve better results by being supportive, by protecting them from outside interference, and by being available.

An aligned leadership is effective deep within the organization. Effective leaders think strategically, set pace, allocate resource, build engagement, drive accountability, and deliver results. High-performance teams of leaders drive urgency and direction. HPO identify potential leaders early in their careers and cultivate in them the skills and competencies that will be required in the future. Middle managers oversee the vast majority of employee, translating the strategy and vision endorsed by senior leaders into concrete plan for their teams.

HPO's leader would be focused to develop themselves in four attributes: learning agility, empathy, though decisiveness, and digital literacy, to deal with challenging in digital age. (Hayward, 2018: 30) Research at Columbia University suggests that learning agility is a mindset and corresponding collection of practices that allow leaders to grow, and utilize new strategies that will equip them for future complex problems (Burke, 2016). In digital age, everything moves fast. Leaders must have an ability to move quickly and easily both cognitive and physical attributes. They are learning consistently, increase ability to manage themselves and interactions with others in an effective way, to be trusted, based on emotion intelligence, and being open to feedback. The second attribute is empathy and ability to build trust from their stakeholders. Creating a collaborative environment requires both trust and a high-quality relationship. Customers trend to expect as seamless experience when working with different parts of organization, but internal conflicts, silos and poor relationship between departments mean that this is not delivered to customer. It is leader responsibility to set a workforce environment and to be a role model for changing this situation where is occurs. Thoughtful decisiveness' is the third key to leader ability to be a helpful disruptor. Leader reads the situation and decide on appropriate response. It is supported by learning agility, that reviewing strategies and operation, there are typically many opportunities to action against the flow, to challenge the established norms, to recreate the way to make money or deliver better service to customer. The forth attribute is digital literacy, HPO in a digital age is inextricably

linked with digital ways of working. Leaders required to understanding enough of what going on technically be able to support it effectively and manage resources to focus on deliver better customer experience.

### 5. People Capability

A HPO makes sure it assembles a diverse and complementary management team and workforce. It recruits staff with maximum flexibility to help detect the challenges in operations and markets and take advantage of opportunities.

A HPO continuously works on the development of its workforce by training them to be resilient, innovative and flexible, letting them learn from others by going into partnerships with suppliers and customers. It inspires them to work on their skills so that they can accomplish extraordinary results. It also holds them responsible for their performance so they will be creative in looking for new productive ways to achieve the desired results.

Now, Digital literacy refers to a particular set of competencies that allow people to function and participate fully in digital world. Even though, digital literacy and digital access skill of employee in organization have significantly impact for organization competitive advantage, most of organizations have not taken any action in tackle the lack of digital skill of their employees. HPO focus invest their effort to develop appropriate digital skills for employee on the key areas of digital skills that employee needs to be productive and thrive in digital workplace. Employees who already competent at using the rage of available tools, application and platform can extended their skill in the optimization and innovation facets to help maximize their personal productivity, generate new ideas and way of working, and engage with novel technologies and ways of working. A grate way to help team to ensure up to date and in touch the evolving digital world is to have a digital mentor. Mentoring is typically about career development, learning, and self-development, based on real experience and accumulated wisdom.

In digital age, Mindset of employees increasing more important for achievement. Two major mindsets would be focused are outward mindset and growth mindset. The outward mindset is about altering perspectives to build a more unified business vision. Employees focus on the objectives and results of the organization as a whole, rather than their own personal goals. It inspires employees to be more responsible, considerate, and helpful towards others, and cultivates a culture of collaboration, mutual respect and shared objectives. In a growth mindset, people have an underlying belief that their learning and intelligence can grow with time and experience. When people believe they can get smarter, they realize that their effort has an effect on their success, so they put in extra time, leading to higher achievement. Both of mindsets, support effective thinking, behavior, working environment and get more continuous productivity improvement.

# 6. Digital Capability

Digital capability can help companies grow revenue by reaching out to new customers or engaging with existing customers in new ways, without investing in additional employee or facilities.

HPO with stronger digital capabilities are better at driving revenue with their physical assets. On a basket of measures including revenue per employee and fix asset turnover, their revenue generation efficiency is outperformed average industry performance by 9% and 26% in profit. (Westerman, Bonnet & Mcafee, 2014: 19)

The first step is breakthrough Digital Gridlock. Digital Gridlock is made up of several different kinds of paralysis of working environments, when organization needs to move forward. You can think of your customers as the people waiting on you to get to your destination. Your customers are waiting on your roll out new features and their expectation of digital service are experiences with companies like Facebook, Amazon, Google, Netflix, and Apple. They expect seamless experience and continuous improvement. They will be patient as long as they see progress, but if they sense that you are gridlocked they look elsewhere for these services. There are six areas where paralysis can emerge: (Best, 2018).

- 1. Processes: System and workflows must keep up with technological advances to prevent digital gridlock.
- 2. Technology: As technology advances, it more than affect processes; it also fundamentally changes the way organization do business.
- 3. Security: A lack of preparation for security breaches can leave an organization vulnerable to attacks. This can not only put customer at risk but also lead to legal and financial liability and damaged reputation.
- 4. People: The right people must be in the right positions for an organization to succeed.
- Culture: Poor communication and lack of trust are two major symptoms of cultural paralysis. This prevents organizations from making the changes they need to.
- 6. Strategy: Governance, planning, and execution are at heart of strategy. They will keep your organization moving forward.

Leader in HPO has continuing to ask critical questions, measures and answers in above 6 areas that they can develop a plan to attack gridlock or digital strategy to achieving their goals. It doesn't have to be an all encompass strategy. It can be smaller strategies. Suppose the goal is to improve waiting time in call center. HPO might be to make this happen with a product or service that could extend to the rest of the organization, so they want to make sure that their socialize the goal and get more understanding of its collateral effects on the organization.

# 7. Value Proposition Capability

A HPO continuously strives to enhance customer value proposition by learning what customers experience, understanding their values, building excellent relationships with them, having direct contact with them, engaging them, being responsive to them, and focusing on continuously enhancing customer value.

Transforming the customer experience is at the heart of digital transformation. Digital technology is changing the game of customer interactions, with new rules and possibilities that were unimaginable

only few year back. When do you want to finally hear the voice of customers and escape the narrow lenses of surveys and focus groups? Social media let you. Do you want your customer to continue their engagement with your brand on the move? Mobile phone and website let you. Do you want to know where customers physically are? Geolocalization lets you. Do you want to make better prediction to deliver a truly personalized experience? Big data and customer data analytics let you.

Delivered properly, an engage customer experience creates value both customer and organization. It drives retention and Loyalty. But delivering differentiated customer experience in HPO is a complex task, because they tide customer experience as a key driver for change, integrating new digital channels into existing operation can be organizationally challenging, and these digital interactions force an evolution in culture such as new clock speed, new decision-making methods, and new customer relationship strategies.

In addition, A HPO maintains good and long-term relationships with all stakeholders, shareholders but also employees, suppliers, clients and the society, by networking broadly, being generous to society, and creating mutual beneficial opportunities and win-win relationships. A HPO also grows through partnerships with suppliers and customers, thereby turning the organization into an international network corporation.

# 8. Improvement and Innovation Capability

A HPO adopts a strategy that will set the company apart by developing new options to compensate for dying strategies. After that, the organization will do everything in its power to fulfill this unique strategy. It continuously simplifies, improves and aligns all of its processes to improve its ability to respond to events efficiently and effectively. It eliminates unnecessary procedures, work, and information overload. HPO also measures and reports everything that matters so it rigorously measures progress, consequently monitors goal fulfillment and confronts the breakdowns. It reports these facts not only to management but to everyone in the organization so that all organizational members have the financial and non- financial information needed to drive improvement at their disposal. People in a HPO feel a moral obligation to continuously strive for the best results.

HPO continuously innovates products, processes and services and thus constantly creates new sources of competitive advantage by rapidly developing new products and services to respond to market changes. It also masters its core competencies and is an innovator in them by deciding and sticking to what the company does best. It keeps core competencies inside the firm and outsources non-core competencies.

Design Thinking is a method designer use in ideation and development that also has applications elsewhere. The method describes a human-centered, iterative design process consisting of 5 steps— Empathize, Define, Ideate, Prototype and Test. Design thinking is useful in tackling problems that are ill-defined or unknown. Design Thinking, a solution-based approach to finding what would-be users really need. Design thinking's tools and methods borrow from a variety of disciplines, including ethnography, computer science, psychology and organizational learning. Design teams use Design Thinking to tackle ill-defined or unknown problems because it reframes these types of problems in human-centric ways, allowing the designer to focus on what's most important for users/customers. Organizations such as Apple and AirBnB have wielded it to notable effect.

# 9. Change Management Capability

In digital world, the ability to change in two fundamental ways generates sustained competitive advantage. First, companies need to have a disciplined approach to drive shifts in focus, strategy, direction, structure, and culture. Second, they need to have the ability to adapt to rapidly changing developments in the market. Despite the high rate of failure among change programs, a few organizations are beating the odds. They ensure that the leadership is aligned on the goals and means of change, and they deliberately transfer that alignment to employee layer by layer throughout the organization. During a major change, senior executives receive feedback from deep within the organization, where the fate of change resides, in order to track progress and make adjustment.

# Conclusions

Most of HPO are large size companies that the major weakness is agility. If they want to keep the status as a HPO and leader in theirs industry, they must be pay the effort to finds the effective and appropriate way to transform their organization; vision, strategies, culture, leadership, people skills and mindset, operations and others capability, aligned with a digital paradigm, to be ahead of competition and able to adapt to rapid changing circumstance in digital age. The nine factors for HPO in digital age will be inspire you to decide where and how to transform your organization.

### References

Best, J. (2018). Breaking digital gridlock. New Jersey: John Wiley & Sons.

- Colon, T. (2018). The first step to shift to digital culture. Retrieved from https://www.forbes.com/
- DE Waal, A. A. (2015). What make a High Performance Organization: five validated factors of competitive advantage that apply worldwide. Netherland: Sitesstorm.
- Hayward, S. (2018). *The agile leader: How to create an agile business in digital age*. London, United Kingdom: Kogan Page Limited.
- Hoff, D. F. & Burke, W. W. (2017). *Learning Agility: The Key leader Potential*. Tulsa, OK: Hogan Press.
- Holbeche, L. (2011). *The high performance organization: creating dynamic stability and sustainable success.* NY: Butterworth-Heinermann.
- Skinner, C. (2018). *Digital Human: The fourth revolution of humanity includes everyone*. Cornwall, UK: John Wiley & Sons.
- The Boston Consulting Group. (2011). High Performance Organizations: The secrets of their success.

Retrieved from https://www.bcg.com/publication/

Westerman, G., Bonnet, D. & McAfee (2014). *A leading digital: Turning technology into business transformation*. Boston, MA: Harvard Business Review Press.



# PARENTAL INVOLVEMENT AND LEARNING PROBLEMS AMONG THE HIGH SCHOOL STUDENTS IN INDIA

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### Abstract

The parental involvement helps the high school students' learning process. Learning disabilities are problems that affect the brain's ability to receive process, analyze or store information. The student can find difficult to concentrate or focus on their studies and difficult for students to read, write, spell or solve math problems. Learning disabilities affect people of all ability levels. The purposes of this study were to 1) find out the level of parental involvement and its dimension of higher secondary students with respect the background variables, 2) find out the level of learning problems of higher secondary students with respect to the background variables, 3) find out whether there is any significant difference in the parental involvement and its dimensions of higher secondary students with respect to the background variables and 4) find out whether there is any significant difference in the learning problems of higher secondary students with respect to the background variables. This study was based on the theory of Epstein's six types of parental involvement with a framework of six different types of parental involvement. The data collection was carried out by Parental involvement questionnaires which were distributed to 300 high school students from four higher secondary schools in India. Regarding to the results from the data analysis, it was found out that there were significant differences between boys and girls, nature of the school, parents' educational qualifications, and test anxiety between parental involvements. However, no significant differences between management, nuclear and joint family, occupation of the parents were found. The findings of this research may stimulate parents, teachers and administrators to be more aware of the stress occurred during learning which could considerably affect the students' academic achievement.

Keywords: Parental Involvement, Learning Problems, High School Students

# Introduction

Instruction is the procedure by which individuals get learning aptitudes, propensities, qualities, or dispositions. The word training is likewise used to portray the aftereffects of the instructional procedure. Instruction should enable individuals to wind up valuable individuals from society. It ought to likewise assist them with developing an energy about their social legacy and live all the more fulfilling lives. Training includes both learning and educating. Now and then, individuals learn by educating themselves. However,

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they additionally learn with the assistance of other individuals, for example, guardians or educators.

Training is likewise essential since it enables individuals to get more out of life. It builds their insight and comprehension of the globe. It encourages them procure expertise that make life additionally fascinating and pleasant, for example, the aptitude expected to take an interest in a game, print an image, or play a melodic instrument. Such training turns out to be progressively imperative as individuals acquire and recreation time.

As indicated by the National Policy on Education (1986) "Training is key to our inside and out advancement, material and profound. Training is the high method to get the most extreme profit from the benefits previously made by the monetary and specialized improvement. Instruction should be arranged fastidiously and improvement with extraordinary affectability so as make the best utilization of the person who is a constructive state and a valuable national asset. Instruction ought to give logical temper to whole up training is a one of a kind inclusion in the present and what's to come".

Essential training possesses a huge place in the instructive recreation of a creating nation. It covers standard I to VIII. It is at this phase youngster begins heading off to a formal establishment. The training which he gets there gives the establishment to his physical, mental, passionate, scholarly and social advancement.

Training imported in secondary school classes, i.e., Standard IX and X is the auxiliary instruction. Essential training is proposed to give the base fundamentals to youngsters and optional instruction turns out to be full individuals from a mind boggling present day society. All round advancement of the kid happens at this stage.

These days, for the advancement of instructional improvement in the nation, a uniform example of instructive structure is pursued. In this Pattern, 10 years of general instruction pursued by broadening higher auxiliary training of 2 years and after that 3 years of college training are given. In the advanced speech of all India level, higher optional training implies the instruction which comes after X standard. Higher optional instruction possesses an unmistakable place in our instructive step. It gives the connection between optional and advanced education.

Higher secondary stages of education are an integral part of school education and the stages is characteristics by diversifying into academic and vocational streams. It promotes values such as common cultural heritage, egalitarianism including scientific temper, democracy and secularism.

It promotes equality and international co-operation. It reflects on the critical, socio-economic. Cultural moral and spiritual aspects of better-equipped citizens. It promotes more learning, higher maturity and help in the development of better- equipped citizens. It helps students to develop a realistic self-concept. It orients pupils to the world of work and helps them in making educational and vocational choices. It helps the students for personal adjustment.

By the term 'Parental involvement' the specialist implies contribution by the guardians all ways and means in their tyke's stroll of life. They include in their kid's exercises in different inclusion, for example, imparting, volunteering, learning at home, basic leadership and network association.

Learning inabilities are issues that influence the cerebrum's capacity to get process, investigate, or store

data. These issues can make it troublesome for an understudy to learn as fast as somebody who isn't influenced by learning handicaps. There are numerous sorts of learning inabilities. Most understudies influenced by learning in-capacities have in excess of one kind. Specific sort of Learning handicaps can meddle with a man's capacity to think or center and can make somebody's brain meander excessively. Other learning handicaps can make it troublesome for an understudy to peruse, compose, spell, or take care of math issues. A large number of these exercises happen in independent piece of the cerebrum, and it is up to our psyches to interface them all together. Almost four million school-age youngsters and adolescents have learning inabilities, and in any event 20% of them have a kind of turmoil that make it hard to center. Learning handicaps influence individuals of all capacity levels.

This investigation is affirmed to just higher optional understudies. Just two factors (parental association have been taken for the present interest. Just Dindigul District is chosen for the present day. Just 300 example is taken for the investigation.

### Methods

Research is viewed as the more formal, precise and escalated procedure of carrying on a logical technique for examination, scientific strategy in critical thinking might be a casual use of issue, distinguishing proof, speculation definition, perception, investigation and end. Research might be characterized as the orderly and target examination and recording of controlled perceptions that may prompt the advancement of speculations, standards, or hypotheses, bringing about forecast and perhaps extreme control of occasions.

As such, examine is an orderly endeavor to acquire reply to important inquiries concerning marvels or occasions through the use of logical strategies. It is a goal, fair-minded, experimental and intelligent examination and recording of controlled perceptions that may prompt the improvement of speculations, standards or hypotheses, coming about to some degree in forecasts and control of occasions that might be outcomes or reason for particular wonders.

As indicated by Best (1981) Research is viewed as the more formal, precise, serious procedure of carrying on the logical technique for investigation. It includes a more methodical structure of examination normally in some kind of formal record of strategies and a report of result or ends.

### Hypotheses

- 1. The level of parental involvement in education and its dimension of students with respect to background variables is average.
- 2. The level of learning problems of students with respect to background variables is average.
- 3. There is no significant difference in the parental involvement in education and its dimension of students with respect to background variables.
- 4. There is no significant difference in learning problems of students with respect to background variables is average.

- 5. There is no significant difference among the background variables of students in parental involvement and its dimensions.
- 6. There is no significant difference among the background variables of students in learning problems.
- 7. There is no significant inter-correlation between parental involvement in education and its dimension of students with respect to background variables.
- 8. There is no significant correlation between learning problems and parental involvement its dimension of students.

Survey method is selected for the present study. Survey is a procedure in which data are systematically collected from a population through some form of direct solicitation such as face-to-face interview, questionnaire or schedule.

Best (1986) says, "The survey method gathers data from a relatively large number of case at a particular time" (p.58). Effective use of the survey method depends on the following points.

**Personal data sheet:** It includes 12 items of general information's about the respondents regarding their Name, Name of the school, Sex, Community, Area of the school, Area of the student, Type of the school, Nature of the school, Medium of instruction, Father's Education, Occupation, Income, Mother's Education, Occupation, Income. Out of these 12 items except items 1 and 2 Which are necessarily to be of open type, all other 10 items are prepared in the closed- form type giving a chance of two or three options.

**Parental involvement scale:** This questionnaire has 50 items on the aspects of Parental involvement under six dimensions via, Parenting, Volunteering, Communicating, Decision making, Learning at home, and Community involvement. It measures one's organization of time, the interest of the student, interaction among the parents, teachers and the students, and their interest in their studies, Parental involvement in all values of life, and also how the children mingle with the peer groups. It has been formulated in Tamil and English. Reliability and validity has been established.

A Pilot study was conducted on 100 students in St. Xavier' higher secondary school, in Shenbaganur. The responses were scored and each item was analyzed. The investigator used item-whole correlation to find out the 'r' values. The item having 'r' values between 0.4to 0.6 were retained and other items were rejected. The final tool consists of 60 items only. Thus the tool was standardized.

A tool possesses validity to the extent that it measures what it claims to measure. To check validity of the tool to be used for this study it has been submitted to a panel of experts. Some items are modified and some are changed on the basis of the experts' suggestion. Thus the content validity of the tool has been established.

After getting the approval of the guide, the final tool was administered to some students randomly. These students' responses were scored. The same tool was administered to the same set of the students after 15 days, then both the set of scores were compared and it was found that there was not much difference between the two sets of scores. The co-efficient of reliability was found out as 0.70. Hence the questionnaire

was found to be reliable.

#### Findings

Investigation of information implies contemplating the organized material with the end goal to decide characteristic actualities or importance. It includes separating existing complex components into straightforward parts and assembling the parts in new courses of action with the end goal of understanding.

As indicated by Krishnaswamy (1993) investigation signifies "a basic examination of the gathered and gathering date for concentrate the qualities of the question under the examination and for deciding the examples or connections among the factors relating it".

What's more, to Wilkinson & Bhandarker (1987) "Examination of information includes various firmly related tasks that are performed with the reason for abridging the gathered information and arranging these in such a way, to the point that they will yield reply to the exploration questions or propose Hypothesis or questions if such inquiries, Hypotheses had started the investigation".

As per Wager (1997) "Measurements is an assortment of scientific strategies or process for social affair, sorting out and translating numerical information. Insights is an essential instrument of estimation, assessment and research. It is utilized to portray the numerical information that are assembled. Measurable information portrays assemble conduct or gathering attributes preoccupied from some of people's perception which are consolidated to make a speculation possible".

Subsequently, during the time spent examination, relationship or distinction, isolating or contrasting and unique or new speculation could be exposed to measurable trial of essentialness to decide with what legitimacy can be said to demonstrate any ends.

1. There is significant difference between the parental involvement in education of standard understudies and its measurements viz., volunteering, learning at home, basic leadership, network contribution and altogether parental inclusion regarding territory of the school.

2. There is significant between the learning issues of standard understudies as for sort of school.

3. There is critical distinction between the parental contribution in instruction of standard understudies and its measurements viz., volunteering, learning at home, basic leadership, network association and altogether parental inclusion as for kind of the school.

4. There is significant relationship between the parental involvement and learning problems among standard students and its measurements viz., parenting, communicating, learning at home, community involvement and total parental involvement.

## **Suggestions and Conclusions**

The investigator in his thorough analysis of the parental involvement in education and the learning problems of standard students encountered some challenges which can be investigated in further research.

Comparative study of learning's problem of rural and urban students may be carried out. The present study concentrates only on higher secondary students. It would be extended the students of all the schools level. A comparative study can be done between parent's opinion and their wards opinion regarding studies.

The investigator has taken sample from one district of Tamil Nadu. All the districts of Tamil Nadu state can be taken for analyzing the real contribution of parental involvement on learning problems of the students. The study can also focus on what kind of parental involvement would influence the learning problems of the students the relationship between parental involvement and occupational, educational aspiration can be studied. Studies can be made to assess the prevalence of learning problems at college level students.

This study also revealed that parental involvement and learning problem of higher secondary students are significantly related. Hence the parents should be careful to provide good education and improve their performance. They should be keen in observing the various activities exhibited by the children. This would provide proper insight for parents and teachers to understand the children individually and to encourage and motivate each in developing the academics.

### References

Aggaewal, J. C. (1986). Educational Research. New Delhi: Arya book Depot.

Aggawal, J. C. (1987). Modern Indian Educational and its patterns. New Delhi: Arya book Depot.

- Bhatnagar, S. & Mulluck, M. (2008). *Development of Educational system in India*. R. Lall Book depot, Meerut.
- Indira Singh Nandra. (2008). Teacher in Emerging Indian Society. Ludhiana: Tandon Publication.

Kothari, C. R. (2004). Research Methodology. New Delhi: Wishwa Prakashan.

Kunda, C. L. (2001). Educational psychology. New Delhi: Sterling publishing.

Nagarajan, K. (2007). Educational Challenges in Emerging Society. Chennai: Ram Publishing.

Sharma, R. A. (2008). Fundamentals of Education Psychology, R. Lall book depot, Meerut.

Siyathamalini, J. (2007). *Learning difficulties in Children Teacher Competencies*. New Delhi: Discovery Publishing.