

Causal Model for Creative Leadership Development of
Administrators in Provincial Administrative Organizations,
in Thailand

โมเดลเชิงสาเหตุรูปแบบการพัฒนาภาวะผู้นำเชิงสร้างสรรค์ของ
ผู้บริหารองค์การบริหารส่วนจังหวัด ในประเทศไทย

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Article History

Received: June 2, 2022

Revised: November 29, 2023

Accepted: December 14, 2023

Abstract

This study was aimed at confirming the causal model for creative leadership development of administrators in provincial administrative organizations. The quantitative research method was applied to study. Questionnaire was conducted with 380 administrators in provincial administrative organizations. Random sampling was used from the entire population, and a Confirmatory Factor Analysis was conducted. The results showed that the analysis of the causal model for creative leadership development of administrators in provincial administrative organizations correlated with the empirical data, based on the parameters of the indicators used to verify the validity of the

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model, namely, $\chi^2 = 20.13$, $df = 15$, $\chi^2/df = 1.342$, $p\text{-value} = 0.167$, $CFI = 1.00$, $GFI = 0.99$, $AGFI = 0.96$, $RMSEA = 0.030$, and $SRMR = 0.017$. The model, according to the theory, correlated with the empirical data. That is to say, the development of creative leadership should be considered based on 2 major factors: creative leadership, and success of the creative leadership. The result of the study led to recommendations that the key element in the development of creative leadership in an agency or different organizations, especially the provincial administrative organizations, should principally incorporate creativity and enhancing motivation to achieve organizational goals among personnel.

Keywords: Causal Model, Creative Leadership, Creative Leadership Model

บทคัดย่อ

การศึกษานี้มุ่งยืนยันโมเดลเชิงสาเหตุรูปแบบการพัฒนาภาวะผู้นำเชิงสร้างสรรค์ของผู้บริหารองค์การบริหารส่วนจังหวัด ประเทศไทย ใช้ระเบียบวิธีวิจัยปริมาณ ด้วยการตอบแบบสอบถามจากผู้บริหารองค์การบริหารส่วนจังหวัด 380 คน โดยการสุ่มกลุ่มตัวอย่างอย่างง่ายจากประชากรทั้งหมด และทำการวิเคราะห์องค์ประกอบเชิงยืนยัน ผลการศึกษาพบว่า การวิเคราะห์โมเดลเชิงสาเหตุรูปแบบการพัฒนาภาวะผู้นำเชิงสร้างสรรค์ขององค์การบริหารส่วนจังหวัด สอดคล้องกลมกลืนกับข้อมูลเชิงประจักษ์ พิจารณาจากค่าดัชนีที่ใช้ตรวจสอบความตรงของโมเดล ได้แก่ $\chi^2 = 20.13$, $df = 15$, $\chi^2/df = 1.342$, $p\text{-value} = 0.167$, $CFI = 1.00$, $GFI = 0.99$, $AGFI = 0.96$, $RMSEA = 0.030$, and $SRMR = 0.017$ ซึ่งโมเดลตามทฤษฎีมีความสอดคล้องกับข้อมูลเชิงประจักษ์ว่าการพัฒนาภาวะผู้นำเชิงสร้างสรรค์ ควรพิจารณาผ่าน 2 องค์ประกอบ คือ ปัจจัยภาวะผู้นำเชิงสร้างสรรค์ และความสำเร็จของภาวะผู้นำเชิงสร้างสรรค์ โดยผลการศึกษาสามารถสร้างข้อเสนอแนะว่าปัจจัยสำคัญในการพัฒนาภาวะผู้นำเชิงสร้างสรรค์ในองค์การบริหารส่วนจังหวัด ของประเทศไทย ต้องประกอบด้วยความคิดสร้างสรรค์ และการเสริมสร้างแรงจูงใจ ใฝ่สัมฤทธิ์ให้กับบุคลากรในองค์กร

คำสำคัญ: โมเดลเชิงสาเหตุ ภาวะผู้นำเชิงสร้างสรรค์ รูปแบบภาวะผู้นำเชิงสร้างสรรค์

Introduction

Due to considerable changes in the economic, social, and political circles, as well as the development in information technologies and communications that occur as a result of globalization; various organizations find the necessity in organizational adjustment, particularly in the

development and promotion of human resources. The purpose is for adequate competencies of personnel for the socio-economic competition that emerges in parallel with educational reform that covers the qualities of the new-era Thai people and the development of the new-age administrative system (Office of the Education Council, 2008). Human resource, as we all know, is the essential element behind the success or failure of the organizational administration (Theppawan, 2011), and the success or failure depends on the capacity of the organization leader or the administrators who are decision-makers and are able to create the driving force that leads the organization to attain its goal with efficiency and effectiveness (Massie & Douglas, 1981).

A leader is the person who is able to lead others towards the determined goal, using the potentiality of leadership that exists to set the direction for the followers toward that goal. Nevertheless, the efficiency of organizational administration and management must be in time with the changes in the highly competitive societies. Under the complicated situation with no direction, every organization needs a highly competent leader who possesses suitable characteristics and power to drive the organization forward for good changes, or creative leadership, which can create differences in the organizational administration and management (Kelley, Littman, & Peters, 2001; Nwachukwu & Hieu, 2020; Patiphan, 2012; Phodaphon, 2013). Creative leadership means the leader places the importance on jobs and team learning, cooperation in problem solution, seeing the future together, considering the possibility and analyzing information together. Creative operation is also continually enhanced among organization members (Phongsriwat, 2006). It can thus be said that the creative leadership skill is an important tool for leaders in order to create the good working atmosphere and provide organizational facilities (Zacko-Smith, Puccio, & Mance, 2010). The skill can be applied in both governmental and private organizations.

The provincial administrative organizations in Thailand are local organizations with the duties and responsibilities to provide public services to people in different localities. The administrative organization is responsible for developmental work and implementation of various jobs as a whole at the provincial level, including education, public health, garbage management, etc. However, the organizations have recently faced problems in operations, unclear assignments of roles and duties (Samrit, 2015), problems related to satisfaction towards the services, and problems from corruptions in the Thai official system (Pannasil, Phosing, & Kenaphoom, 2016). The actions brought arising questions towards the images of the governmental departments including the provincial administrative organizations related to transparency of work and the necessity for the organization

existence. The leader who has the authority and the key role in leading the organization in a good direction thus needs to possess creative leadership in order to totally understand the problems and to be cognizant of the changes so that decision can be abruptly made under the urgent situation that will result in holistic problem solution.

From the above-discussed circumstances, the operations of organizations are mostly under the hand of the leaders. Thus, this article was aimed at analyzing the creative leadership of the administrators in provincial administrative organizations in Thailand in order to understand the appropriate leadership. As the creative leadership can help employees work efficiently, ultimately the organization achieving its goals. The results would be an important condition that leads to improved images of provincial administrative organizations from the characteristics of creative leaders. The findings from this study could also be used in upgrading the development of organizational leaders to be able to work in accordance with the expectations and requirements of the public. Such leaders would lead the organization towards the goal under the fast changing situation of the present-world society.

Objectives of the Study

This study was aimed at confirming the causal model for the development of creative leadership of administrators in the provincial administrative organizations in Thailand.

Literature Review

Literature review and review of related research were conducted along with the analysis of the Formative Leadership Theory. Ash and Persall (2000) explained the term “Leader” on the basis of the belief that “In an organization there can be many leaders, whose roles as the leader are demonstrated in various styles. The leadership roles therefore, are not limited and specific to administrators only, but the duty of administrators is also to create a chance for learning for the personnel so that they can develop themselves to become productive Leaders. Therefore, the Formative Leadership Theory looks at personnel as leaders (Teacher as Leaders), having the administrator as the Leader of Leaders. In other words, leaders in this concept take an important role in enhancing personnel learning.

The definition of creative leadership can be classified into 2 categories (Patiphan, Podaphol, & Seriwat, 2013): (1) The term is defined according to the characteristic of the creation or leading as

the capacity to lead the others through a process or method towards the new future where creativity is initiated, which has not been anticipated or has been overlooked by others. There are, in this regard, imaginative reactions that have undergone careful and detailed contemplations, under different challenging situations and issues. A person with creative leadership must build an environment for others to become creative, too (Basadur, 2004; Coste, 2009). (2) The term is defined by coordination capacity with various individuals whose opinions can be different or similar in order to achieve creativity, by encouraging, promoting, and supporting new processes until there is a balance between emergent and gradual changes that may already happen or have not yet happened, but ultimately leading to the determined goal (Harris, 2009).

From the revision, it can be said that creative leadership means the leadership behavior of a leader of a local administrative organization that comprises special capacity in motivating and leading others with vision, imagination, and flexibility. These qualities are carried out with new approaches that are both challenging and creative. A creative leader is able to contact and coordinate with different individuals by encouraging, promoting and supporting them until there is a balance that leads to the predetermined goal. A creative leader also initiates ideas and is efficient and flexible in thinking.

Creative leadership comprises the components that bring success and are related to inspiration or motivation in leading organizational personnel to the goal, under intellect, vision, imagination, and inherent reliability. Such leadership requires trust in systematic administration and operations with vision, aiming at the successful future. At the same time, flexibility in the thinking and action is requisite, with readiness and capacity in problem solution (Bennis, 2002; Chernin, 2001; Danner, 2008; Guntern, 2004; Parker & Begnaud, 2004).

It can thus be said that a person who can develop himself or herself to become a leader with creative leadership necessitates a high level of the facilitation skill and the following important working principles: team inquiry; team learning; collaborative problem solving; imaging future possibilities; examining shared beliefs; asking questions; compilation, analysis and interpretation of information; and stimulating personnel to creatively discuss about on-the-job learning (Phongsriwat, 2006). There must also be the planning skill, organization management skill, participation, and control (Jai-asa, 2012); a means to set the policy that emphasizes cooperation at an organizational level and between organizations that leads to improvement of efficiency in provision of public services more than formerly done (Khruathai & Changrian, 2011).

Having suitable characteristics is a crucial factor that affects the success of creative leadership, according to Ash and Persall (2000), dividing it into 5 aspects: (1) teamwork, meaning that the ability of leader to guide team towards working together to achieve common goals is essential; (2) creating organizational trust, means the leaders exhibit good behavior, visionary and reliable, which enable them to build trust among their personnel and within the organization as a whole; (3) positive working attitudes means working with awareness towards goals, solving problems, and preparing adequately for various situations; (4) enhancing motivation towards achievement involves stimulating employees to meet the working standards; and (5) efficiency in organization communication, means having clear and comprehensive communication within the organization.

The definition and properties of creative leadership discussed above clearly reflect the importance of personnel in provincial administrative organizations. The revision of literature and research led to the setting of the conceptual framework for confirmation of the creative leadership model for the provincial administrative organizations in Thailand. Thus, researchers have reviewed the mentioned aspects to develop the conceptual framework and variables in the study. Creative leadership encompasses creativity, strategic vision, achievement-based resource administration, strategic time management, the art of relationship building and integration of innovation and technology. Furthermore, the study has defined variables related to the success of creative leadership, which are divided into 5 dimensions: promoting team work, creating organizational trust, having a positive working attitude, enhancing motivation towards achievement and efficiency of organizational communication, as illustrated in Figure 1.

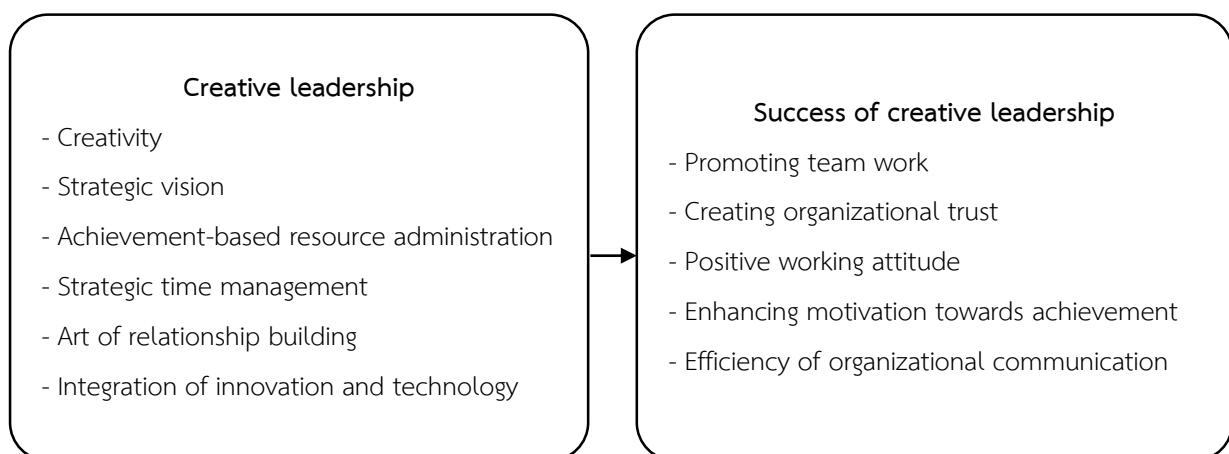


Figure 1 Research conceptual framework

Methodology

The study was conducted using the Quantitative Research method to obtain the opinions towards appropriate creative leadership and confirm the creative leadership model for development of the administrators in provincial administrative organizations. The sample group was composed of 5 administrators working in each of the 76 provincial administrative organizations in the positions of president, permanent secretary, director of the planning and budgeting division, director of the financing division, and director of the engineering office, totaling 380 informants. This study, therefore, employed random sampling from the entire population. Questionnaire was used as the research tool to collect the data. The questionnaire had been verified for its content validity, in which the IOC of each item was from 0.50 upward. It had been tried out with 30 administrators who were not in the sample group. The Cronbach Alpha coefficient was 0.76. This conforms to the reliability coefficient value criterion, which stipulates a minimum value of 0.70 (Cronbach, 1990). The suitability of the variables used for analysis can be assessed by examining the correlation coefficients among the observed variables. The test results indicate that there are no variable pairs with a correlation exceeding 0.85. The correlations range between 0.007 and 0.845, thereby avoiding issues with multicollinearity (Kline, 2005). The data obtained underwent the Univariate Analysis. The descriptive statistics, comprising numbers and percentages, was used in the discussion, along with the Confirmatory Factor Analysis.

This study also examined the construct validity of creative leadership tools and variables, as well as the success of creative leadership. The alpha coefficients were found to be 0.899 and 0.915, respectively, surpassing the threshold of 0.70 (Hair, Black, Babin, Anderson, & Tatham, 2006), indicating relatively high reliability for the indicator variables. Therefore, it can be concluded that the observed variables and latent variables of the confirmatory components in the overall model all exhibit high discriminant validity, as illustrated in Figure 2 and 3.

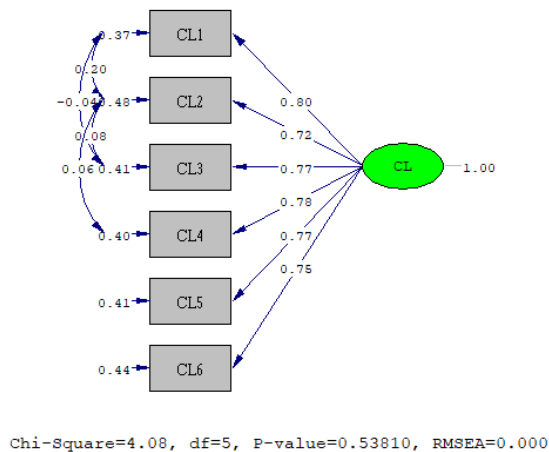


Figure 2 Model for measuring factors of creative leadership

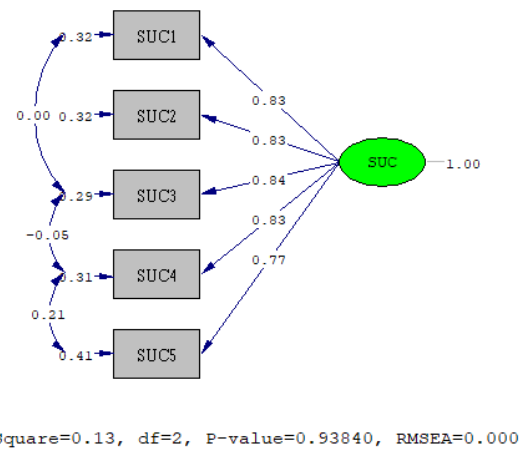


Figure 3 Model for measuring factors of success of creative leadership

Results of the Study

The analyses were performed in three parts, and the results are presented accordingly as follows:

1. Characteristics of the variables

The study of the creative leadership model for administrators in the provincial administrative organizations in Thailand was conducted from the information in the questionnaire administered with 380 personnel working in the administrative positions in the administrative organizations. The statistical value of the observable variable in the art of creating relationship (CL5) was the highest, i.e., 2.65; followed by the variables in achievement-based resource administration (CL3) and strategic time management (CL4), which were 2.58, equally. The next were strategic vision (CL2), creativity (CL1), and integration of innovation and technology (CL6), the mean values of which were 2.54, 2.52, and 2.39, respectively. As for the observable variable in the success of creative leadership, it was found that the positive working attitude (SUC3) showed the highest mean value of 4.57, followed by creating organization trust (SUC2) at 4.55, efficiency of organization communication (SUC5) at 4.48, promoting team working (SUC1) at 4.41, and enhancing motivation towards achievement (SUC4) at 4.37. (Table 1)

Table 1 Number and percentage of general information of informants

Variable signs	Names of variables	Mean	S.D.	Max.	Min
CL1	Creativity	2.52	0.49	3.00	1.20
CL2	Strategic vision	2.54	0.45	3.00	1.00
CL3	Achievement-based resource administration	2.58	0.44	3.00	1.50
CL4	Strategic time management	2.58	0.43	3.00	1.25
CL5	Art of creating relationship	2.65	0.41	3.00	1.25
CL6	Integration of innovation and technology	2.39	0.55	3.00	0.50
SUC1	Promoting team working	4.41	0.46	5.00	3.20
SUC2	Building organization trust	4.55	0.40	5.00	3.40
SUC3	Positive working attitude	4.57	0.40	5.00	3.40
SUC4	Enhancing motivation towards achievement	4.37	0.48	5.00	3.00
SUC5	Efficiency of organizational communication	4.48	0.46	5.00	3.00

2. Correlation analysis of observable variables

Analysis of correlation of observable variables was part of the testing of the congruence of the assumption model with the empirical data obtained from the study. The correlation among 11 observable variables was studied to obtain their relationships, directions, and correlation size by means of Pearson's Product Moment Correlation. The study showed that the values of correlation coefficients at the statistical level of 0.01 of 55 pairs of the observable variables in the same group were from 0.412 to 0.845. When the Bartlett's Test of Sphericity was performed to test if the correlation matrix was the identity matrix or not, it was found that the value was 3094.837 ($p < 0.01$), which indicated that the correlation matrix significantly differed from the identity matrix at 0.01 level. This agreed with the analysis of Kaiser-Meyer-Olkin (KMO), which was 0.907. Any value close to 1 denoted that the variables had high correlation values and were appropriate to be used in the confirmatory factor analysis. (Table 2)

Table 2 KMO and Bartlett's test values obtained from testing the appropriateness of the factors

Kaiser-Meryer-Olkin	Bartlett's Test of sphericity		
	Chi-square	df	Prob
0.907	3094.837	55	0.00

3. The creative leadership model for administrators in provincial administrative organizations

The analysis of the creative leadership model was performed by firstly verifying the structural validity of the model based on the Confirmatory Factor Analysis Method (CFA). Next, the causal analysis was conducted on the creative leadership model for provincial administrative organizations in order to analyze the confirmatory factors of the measuring model for the latent variables between the 11 observable variables based on the following 2 factors: creative leadership (CL) and success of creative leadership (SUC). It was found that the correlation according to the assumption agreed with the empirical data. (Figure 4)

The causal analysis of the creative leadership development model for the administrators of provincial administrative organizations showed the congruence of the model with the empirical data. This was based on the indicators used to verify the validity of the model, namely, $\chi^2 = 20.13$, $df = 15$, $\chi^2/df = 1.342$, $p\text{-value} = 0.167$, $CFI = 1.00$, $GFI = 0.99$, $AGFI = 0.96$, $RMSEA = 0.030$, and $SRMR = 0.017$. The principle assumption was thus accepted, which indicated that the theoretical model corresponded to the empirical data, or the model was valid, for the verification showed that the model agreed with the empirical data. Next, the weight parameters of the observable variables in the measuring model were estimated (Table 3).

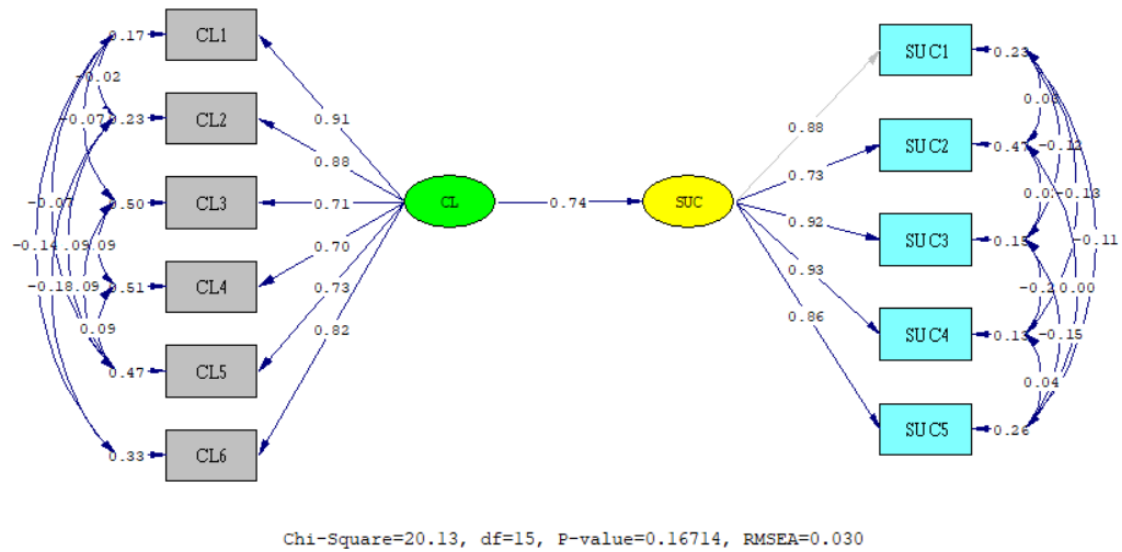


Figure 4 Causal model for creative leadership development of provincial administrative organizations

The coefficients of the factor weights of all observable variables in the structural equation were taken into account. It was found that the factor weights of all observable variables were significantly positive, from 0.29 to 0.45 at the statistical level of 0.01, with the prediction coefficients (R^2) from 0.49 to 0.87, and the coefficients of factor scores from -0.50 to 1.37. For creative leadership (CL), the variable with the greatest weight was creativity (CL1), showing the standard factor weight of 0.91, and the co-variation with creative leadership at 83%. In relation with success of creative leadership (SUC), the variable of enhancing motivation towards achievement (SUC4) had the highest weight of 0.93 and the co-variation with the success of creative leadership was at 87%.

Table 3 The factor weights of variables in the causal model for creative leadership development of provincial administrative organizations (confirmation of the assumption)

Latent variables	Observable variables	Factor weights (b)	Standard factor weights (β)	SE	t	R ²	Coefficients of factor scores
CL	CL1	0.45	0.91	0.02	19.72**	0.83	0.69
	CL2	0.39	0.88	0.02	19.11**	0.77	0.75
	CL3	0.31	0.71	0.02	15.15**	0.50	0.09
	CL4	0.30	0.70	0.02	15.20**	0.49	-0.07
	CL5	0.30	0.73	0.02	15.10**	0.53	0.26
	CL6	0.45	0.82	0.03	17.39**	0.67	0.58
SUC	SUC1	0.40	0.88	-	-	0.77	0.65
	SUC2	0.29	0.73	0.02	13.54**	0.53	-0.50
	SUC3	0.37	0.92	0.02	15.88**	0.85	1.37
	SUC4	0.44	0.93	0.03	15.31**	0.87	1.14
	SUC5	0.40	0.86	0.03	13.81**	0.74	0.06

** With statistical significance at 0.01

* With statistical significance at 0.05

The causal influence within the causal model of the creative leadership development for provincial administrative organizations could be analytically interpreted that creative leadership (CL) influenced success of creative leadership (SUC). The overall influence was 0.74, all being direct influence at 0.74 and was statistically significant at the level of 0.01. The finding could be used to build the Structural Equation Model (SEM) as follows:

$$\begin{aligned} \text{SUC} &= 0.74 * (\text{CPT}), R^2 = 0.56 \\ &(0.05) \\ &13.89 \end{aligned}$$

From the above equation, it could be explained, at as high as 55% , that the success of creative leadership is the function of creative leadership factors. (Table 4)

Table 4 The size of direct, indirect and overall influences of the causal model of creative leadership development for provincial administrative organizations

Effect variables	R ²	Influences	Causal variables
			CL
SUC	0.55	DE	0.74**
		IE	-
		TE	0.74**

** With statistical significance at the level of 0.01

* With statistical significance at the level of 0.05

Conclusion and Discussion

The study of the causal model of creative leadership development for provincial administrative organizations in Thailand demonstrated the following results. The causal model showed congruence with the empirical data, covering 2 factors, namely, (1) creative leadership, of which creativity of leaders was the important factor contributing to success; and (2) success of creative leadership, of which enhancing motivation towards achievement was the most important, similar to having positive working attitude and enhancing motivation towards achievement. This finding agreed with concept of creative leadership of Ash and Persall (2000), who proposed that a creative leader should have high abilities in teamwork, collaborative problem solving, and maintaining a positive attitude by transforming attitudes from “command and control” approach to stimulating and providing mental support for initiative ideas and new innovations. This is one of the way to motivate and inspire employees effectively. When considering the success of creative leadership based on the analysis of causal influence within the model, it was found that creative leadership factors could explain the success of creative leadership at 55.0%.

The findings reflected that the characteristics of creative leadership (strategic vision, achievement- based resource management, strategic time management of resource creative leadership, building relationships artfully, and capacity in integrating innovation and technology) lead to success of creative leaders in Thailand provincial administrative organizations. A study by Meechai

(2021) similarly found that the major approach to develop creative leadership in university administrators is supporting of imaginative response that leads to creativity, including trust. In this regard, administrators build inspiration among personnel using new approaches in order to achieve the organizational goal.

Likewise, a study by Ramsiri, Swaengsakdi, and Thepsaeng (2018) proposed 5 major factors of creative leadership of school administrators under local administrative organizations, namely, creativity, team working, inspiration building, problem solution, and emphasizing customers. A research study by Wichaiwong, Phosing and Yupas (2021) also showed the following characteristics of creative leaders: team working, building trust in the organization, promoting positive working attitudes, enhancing motivation towards achievement, and efficiency in organization communication. The creative leadership model from this study also correlated with the creative leadership defined by Danner (2008), who pointed out that creative leadership requires flexibility and trust in the overall method and process. Moreover, it involves support for participation and enhancement of creativity among team workers. Davar (1996), in addition, explained that creative leaders have the capacity in leading oneself and others, listening to problems and suggestions from colleagues, influencing and encouraging others to work towards the goal, and having courage to make creative decision. Yukl (2006), similarly presented the study outcome that team working skill is the important skill that assists in the administrator's success of the organization. Including a research study by Commong (2022), it was explained that being a good example has both direct and comprehensive influence on the creative leadership.

This study agreed with the work by Nwachukwu and Hieu (2020), who explained that different organizations require creative leaders who possess creative capacities and creative thinking skill that enable them to adjust and respond to the complexity of the ever-changing business environment. As discovered by Kaewhan and Koomkhinam (2021), it was found that the creative leadership of the school administrators affecting teacher competency. This included having a vision, creativity and teamwork. Therefore, it can be concluded that the factors of creative leadership played a crucial role in helping leaders achieve success in management to better attain organizational goals.

Recommendations

The findings from this study could be introduced as the basis for policy setting and setting of creative leadership development model for leaders and personnel in various organizations,

especially provincial administrative organizations. This will improve the quality and potentiality levels of officers to carry out their work in the organization according to the set goals under the changing situation and intensive competition in the present day society. The important factors include promoting leaders to possess creative thinking and emphasizing enhancing motivation towards achievement within the context of local administrative organizations and organizational culture. At the same time, the results can also serve as a case study in teaching economics or explaining the theoretical concepts in the field of public administration. Additionally, the findings can be used as guidelines for further research studies in causal model for creative leadership development, with an emphasis on the design of an efficient developmental program that enhances creative leadership for leaders in different organizations. Studies should also be extended to cover other organizations and departments in the governmental and private sectors in order to more clearly compare creative leadership types that lead to organization success.

References

- Ash, R. C., & Persall, J. M. (2000). The principal as chief learning officer: Developing teacher leaders. *NASSP Bulletin*, 84(616), 15-22.
- Basadur, M. (2004). Leading other to think innovatively together: Creative leadership. *The Leadership Quarterly*, 15(1), 103-121.
- Bennis, W. (2002). *Creative leadership*. Bangkok: Chulalongkorn University.
- Chernin, P. (2001). Creative leadership: The strength of ideas the power of the imagination. *Vital Speeches of the Day*, 68(8), 245-249.
- Commong, S. (2022). The factors affecting the creative leadership of school administrators under the office of Khonkhean private schools promotion commission. *Journal of Buddhist Philosophy Evolved*, 6(2), 518-528.
- Coste, T. G. (2009). Creative leadership & women. Retrieved March 9, 2022, from <http://www.pptearch.net/details-creative-leadership-amp-women-349420.html>
- Cronbach, L. J. (1990). *Essentials of psychological testing* (5th ed.). New York: Harper & Row.
- Danner, S. E. (2008). *Creative leadership in art education: Perspectives of an art educator* (Master's thesis, Ohio University).
- Davar, R. S. (1996). Creative leadership: The people-oriented task approach. *Indian Journal of Industrial Relations*, 31(3), 421-424.

- Gunter, G. (2004). *The challenge of creative leadership*. New York: Maya Angelou Press.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis* (6th ed.). New Jersey: Person Prentice Hall.
- Harris, A. (2009). Creative leadership: Developing future leaders. *Management in Education*, 23(1), 9-11.
- Jai-asa, N. (2012). *Individual opinions towards the administration process in Chantaburi provincial administrative organization* (Master's thesis, Burapa University).
- Kaewhan, T., & Koomkhinam, T. (2021). Creative leadership of school administrators affecting teacher competency under the secondary educational service area Nong Khai. *Journal of Modern Learning Development*, 6(4), 164-175.
- Kelley, T., Littman, J., & Peters, T. (2001). *The art of innovation (lessons in creativity from IDEO, America's leading design firm)*. New York: Doubleday.
- Khruathai, P., & Changrian, C. (2011). *Evaluation of efficiency in public services of local administrative organizations: A case study in Utaradit and Pitsanulok*. Bangkok: Office of Health Promotion Funding.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (2nd ed.). New York: Guilford.
- Massie, J. L., & Douglas, J. (1981). *Management: A contemporary introduction* (3rd ed.). New Jersey: Prentice-Hall.
- Meechai, C. (2021). A study of the relationships between creative leadership and effectiveness of the universities. *Educational Management and Innovation Journal*, 4(3), 81-98.
- Nwachukwu, C. E., & Hieu, V. M. (2020). Creative leadership and creativity: An overview. In *Proceedings of the 36th International Business Information Management Association (IBIMA)* (pp.6680-6687). Granada, Spain: International Business Information Management Association (IBIMA).
- Office of the Education Council. (2008). *Educational development direction framework during the development plan National Economy and Society Issue 10 (2007-2011) Consistent with the national education plan (20022016): Summary* (2nd ed.). Bangkok: Chulalongkorn University Printing House.
- Parker, J. P., & Begnaud, L. G. (2004). *Developing creative leadership*. Portsmouth, NH: Teacher Ideas Press.

- Patiphan, K. (2012). *A structural equation model of creative leadership for vocational college administrators* (Doctoral dissertation, Khon Kaen University).
- Patiphan, K., Podaphol, C., & Seriwat, W. (2013). *Creative leadership: Worthwhile trait for everyone in the future*. Khon Kaen: Khlung Nanawittaya.
- Pannasil, P., Phosing, P., & Kenaphoom, S. (2016). Corruption in the Thai Bureaucracy: The guidelines on prevention and solution. *Journal of MCU Peace Studies*, 4(2), 326-340.
- Phodaphon, J. (2013). *Creative leadership of sub-district municipalities administrators in Roi-ed province* (Master's thesis, Makut Rajawittaya University Lan Chang Campus).
- Phongsriwat, S. (2006). *Leadership: Theory and practice, sciences and arts towards perfect leaders* (2nd ed.). Bangkok: Wirat Education.
- Ramsiri, P., Swaengsakdi, T., & Thepsaeng, S. (2018). A development of creative leadership model of education institute administrators under local administrative organization. *SWU Educational Administration Journals*, 15(28), 12-25.
- Samrit, N. (2015). Perceptions of functions of provincial administration organization. *Local Administration Journal*, 8(3), 1-9.
- Theppawan, P. (2011). *Strategic human resource management*. Bangkok: SE-Education Public Company Limited.
- Wichaiwong, T., Phosing, P., & Yupas, Y. (2021). The desired characteristics of a creative leader for developing the provincial administrative organizations. *Humanities & Social Sciences*, 38(1), 83-106.
- Yukl, G. A. (2006). *Leadership in organization* (6th ed.). New Jersey: Pearson Prentice-Hall.
- Zacko-Smith, J. D., Puccio, G. J., & Mance, M. (2010). Creative leadership: Welcome to the 21st century. *Academic Exchange Quarterly*, 14(4), 133-138.