Development of Administrators' Creative Leadership Structural Equation Model Under the Department of Local Administration Promotion

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Abstract

This study was planned to examine the factors and indicators of administrators' creative leadership for the Department of Local Administration Promotion in Thailand. The researchers employed a mixed-mode design using checklist and questionnaire as research instruments. They conceptualized creative leadership factors and indicators by analyzing documents and past studies to develop a creative leadership structural equation model. The assessment model was then tested the goodness of fit of the identified factors and indicators for creative leadership with the empirical data. The findings indicated that a total of 13 indicators resulting from the four factors in a creative leadership model of administrators were found in line with the empirical data.

Keywords: *Creative Leadership Model, Department of Local Administration Promotion, Factors, Indicators.*

INTRODUCTION

Creative leadership in educational administration is vital for fostering an innovative and adaptive learning environment (Kalkan et al., 2020). Therefore, there is a basic expectation of educational administrators to create an educational institute identity that could respond to the necessities of the age, being a team, being productive and increasing the consciousness of humanity, and also the education vision of Thailand's Ministry of Basic Education (Ministry of Education, 2015). Suwannasri and Piampuechana (2021) defined creative leadership in educational administration involves the ability to inspire innovation, manage change effectively, and foster a collaborative and dynamic learning environment.

According to Kalkan et al. (2020), creative leadership for educational administrators include several key aspects such as be flexible and adaptable, have a vision to lead the organization, solve problems creatively, be creative, and create cooperation towards goals. Creative leadership is a responsive leadership as educational administrators are being adaptive and flexible in response to changing educational landscapes, student needs, and technological advancements (Somprach & Tang, 2018). Consequently, creative educational administrators emphasized the importance of ongoing professional development and continuous improvement in educational practices. Besides, creative educational administrators are able to create a clear and inspiring vision for the school or educational institute that aligns with future trends and educational advancements. As a result, creative educational administrators have their strategic planning in order to implement long-term strategic plans that incorporate innovative practices and technologies to enhance teaching and learning (Prasertcharoensuk & Tang, 2017).

Furthermore, Ariratana et al. (2019) stated that creative educational administrators encourage solving problems creatively among their staff and students so that they have the opportunities of experimentation, risk-taking, and exploration of new ideas. However, creative educational administrators should provide resources, training, and support for teachers and staff to implement creative and innovative teaching methods as a way to support for creative initiatives. Moreover, educational administrators should lead by example such

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as modelling creativity and inspiring others (Kamsi et al., 2024). According to Kamsi et al. (2024), educational administrators should demonstrate creativity and innovation in leadership practices and decision-making processes. They have to inspire and motivate their staff and students to embrace creative thinking and pursue excellence. On top of that, creative educational administrators are practicing team building and shared leadership in their administration. For example, educational administrators are building strong, collaborative teams that work together to solve problems and develop new educational strategies. They also empower teachers and staff by involving them in decision-making processes and encouraging shared leadership roles (Somprach et al., 2017) to create cooperation towards goals.

According to the literature review, this study was designed to develop a creative leadership structural equation model for educational administrators in the Department of Local Administration Promotion in Thailand. Following this line of reasoning, educational administrators could develop a creative leadership model that fosters innovation enhances teaching and learning and prepares students for the challenges of the future by understanding and addressing these factors, namely achievement motivation, innovative culture, effective communication, and teamwork.

MATERIALS AND METHODS

Research Design

The researchers employed a mixed mode research design, combining both qualitative and quantitative research approaches within a single study in order to provide a comprehensive analysis of the research problems (Larvakas, 2008). Specifically, exploratory sequential design was used to collect qualitative data and analyzed first, followed by quantitative data to test the conceptual factors and their indicators of creative leadership with empirical data. This study was comprised of two stages. In the first stage, the researchers conceptualized creative leadership factors and their indicators. This was followed by conducting a survey to test the structural construction between experimental examination and the hypothetical theory of quantitative relationships relating experimental data in the final stage. The relationships were epitomized by path coefficients or deterioration between the creative leadership factors and their indicators. Figure 1 shows the research process.
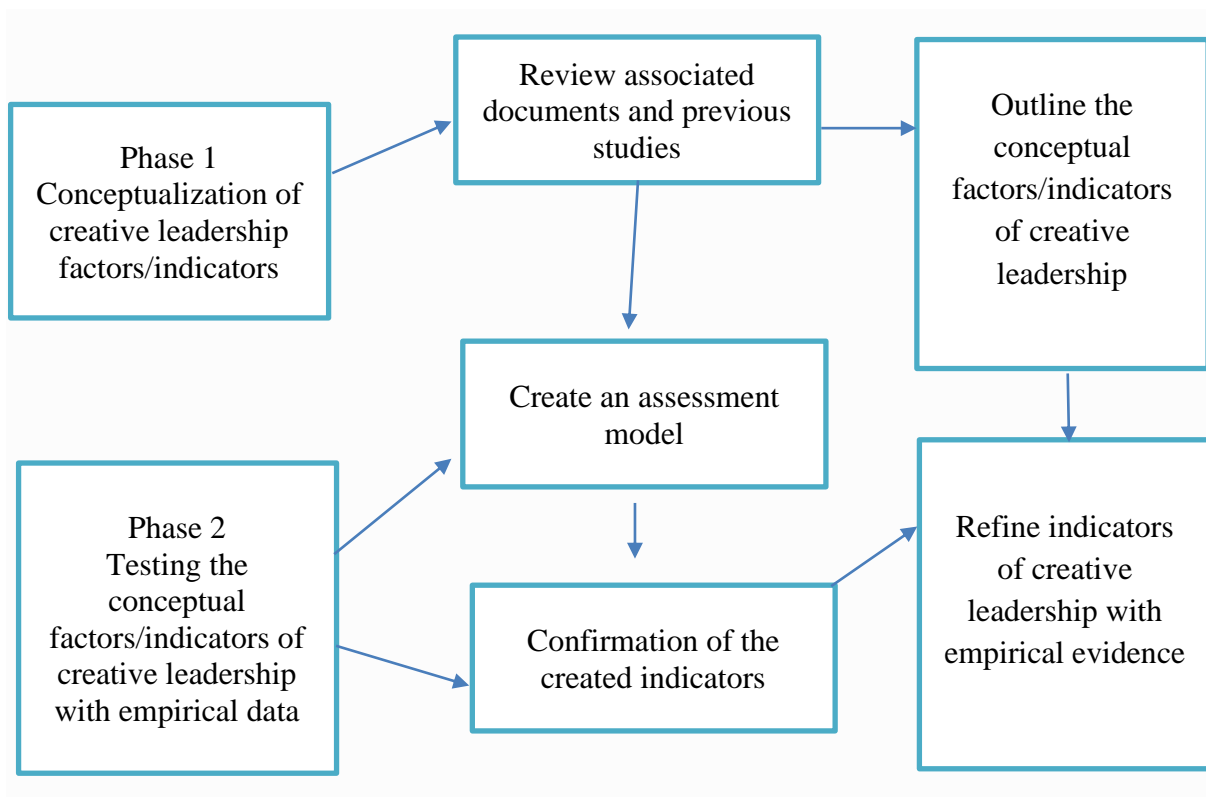
Figure 1. Research Framework

Population and Samples

The population of this study was administrators and teachers from a total of 1,746 educational institutes under the Department of Local Administration Promotion throughout Thailand, namely Subdistrict Administrative Organizations, Municipalities, and Provincial Administrative Organizations (Open Governmental Data Center, 2021). A multi-stage sampling was conducted to divide the population into clusters and then taking a random sample of these clusters. Within each selected cluster, a further random sample was taken, and this process could be repeated across multiple stages. This approach was useful for this study because a population is too large and dispersed to conduct simple random sampling effectively (Gay et al., 2011).

The advantages of using multi-stage sampling are to reduce travel and administrative costs by narrowing down the population step-by-step, thus it is cost effective and efficient. The researchers employed Becker and Ismail's (2016) rule of thumb to formulate an adequate sample size (N). The identified sample size is recognized as the presence of classified practice in reaching an adequate probability for the requisite results such as model convergence, statistical precision, and statistical power for particular confirmatory factor analysis (CFA) with empirical data. This was followed by determining the ratio of parameter and samples as 64:1 to fulfill the sample criteria (Hair et al., 2013). A total of 1,280 respondents consisting of 640 school administrators and 640 teachers. from 640 secondary schools as required sample size. Table 1 demonstrates the distribution of population and sample groups of this study.

Table 1: Distribution of Population and Sample Groups

Region	Population/Samples According to Local Affiliation						Total Institutes	Total Samples
	Subdistrict Administrative Organization		Municipality		Provincial Administrative Organization			
Central	13	5	222	82	45	16	103	206
North	92	34	285	104	24	9	147	294
Northeast	40	15	298	109	216	78	202	404
South	31	11	214	79	27	10	100	200
Eastern	9	3	93	35	36	13	51	102
Western	9	3	87	32	4	2	37	74
Total	**194**	**71**	**1199**	**441**	**352**	**128**	**640**	**1280**

Research Instrument

The researchers employed two kinds of instruments, namely checklist and closed ended questionnaire as two resources of data collection. A checklist was used in the first stage as an instrument to identify factors and their indicators by reviewing past studies as a systematic and effective approach. A checklist assists the researchers to ensure that all relevant aspects were considered and consistently evaluated across different studies. After the researchers conducted a comprehensive review of existing literature related to creative leadership, the researchers listed potential factors (broad categories or constructs) and indicators (specific measures or variables) that were relevant to the purpose of study. The researchers organized the checklist into sections based on the identified factors. Each section should include space to list and evaluate specific indicators. This includes columns for details such as the source of the information definitions, and any relevant notes.

In the final stage, the researchers utilized an online survey questionnaire consisting of 62 closed questions as a method to collect quantitative data. The closed question structure was employed by limiting responses that fit into pre-determined sets of factors and indicators from the findings of the first stage. A continuous five-point Likert scale was used to evaluate the strength of perception. This questionnaire was comprised of six sections and intended to collect information pertaining to respondents' perceptions of creative leadership. Section A collects respondents' demographic backgrounds, namely gender, working experience, highest academic degree, position, and department. Section B to E was specifically designed to gauge data about creative leadership (17 items) consisted of four factors, namely achievement motivation (15 items), innovative culture (nine items), effective communication (seven items), and teamwork (nine items) with a total of 57 items.

Data Analysis

Qualitative data from past studies review were analyzed using content analysis (Gay et al., 2011). However Structural Equation Modelling (SEM) was used to analyze quantitative data. The SEM is an appropriate method to analyze the structural relationship between measured variables and latent constructs because it syndicates factor loading examination and path analysis or multiple regression examination (Hair et al., 2013). On top of that, SEM could estimate the multiple and interrelated dependence in a single analysis, namely endogenous and exogenous variables. In this study, the endogenous variable refers to the creative leadership and exogenous variables were the conceptualized factors and indicators from the first stage. As a result, the researchers utilized SEM to assess how meticulously a hypothetical model fits empirical data to examine the structural equation model. The structural equation model signifies the hypothesis that denotes how identified factors and indicators combine together in corresponding to the hypothesis. Hence, the researchers utilized a Confirmatory Factor Analysis (CFA) to test the structural equation model for its goodness of fit.

Goodness of fit used to test how well a statistical model or hypothesis fits the observed data. It was a measure used in this study to assess the adequacy of a model in explaining the data it was designed to analyze

(McDonald & Ho, 2002). Therefore, goodness of fit tests includes χ² (Chi-Square), df (Degrees of Freedom), χ² /df, CFI (Comparative Fit Index), TLI (Tucker Lewis Index), RMSEA (Root Mean Square Error of Approximation), and SRMR (Standardized Root Mean Square Residual). The goodness of fit tests is used to determine if a sample of data fits a particular distribution. χ² is a measure of how well the observed data fit the model. A lower χ² value indicates better fit but it is influenced by sample size, so it is often interpreted alongside other fit indices. While df indicates the number of free parameters estimated in the model, it is used in calculating the χ² /df ratio, which helps to assess model fit. In other word, the χ² /df ratio provides a normalized measure of model fit, where a value closer to 1 indicates a better fit. Both CFI and TLI tests are used to compare the fit of the hypothesized model with that of a baseline model (usually a null model) hence values closer to 1 (ideally above 0.95) indicate a good fit. On the other hand, RMSEA measures the discrepancy between the model implied covariance matrix and the observed covariance matrix thus values below 0.08 (sometimes 0.05) suggest a good fit. Finally, SRMR assesses the average discrepancy between the observed and predicted correlations. This means that lower values (ideally below 0.08) indicate better fit.

FINDINGS AND DISCUSSION

The findings of this study are performed in accordance with the study purpose as stated above. The preliminary findings from the first stage are the essential factors and their indicators based on the conceptualization of creative leadership for educational administrators. Then, the researchers continued to evaluate the validity of the observable variables using factor loading to test the goodness of fit of the creative leadership factors and indicators with the empirical data.

Identification of Factors and Indicators for Creative Leadership

The findings from documental examination of previous studies, theories, and concepts revealed that there are four essential factors of creative leadership: (i) Achievement motivation; (ii) innovative culture; (iii) effective communication, and (iv) teamwork. The findings of the first stage are displayed in Table 3 below. The researchers interpreted the mean score for understanding the central tendency of a dataset for each factor of creative leadership was assessed according to Boomchom's (2014) identification as shown in Table 2.

Table 2: Interpretation of Practical Level of Each Factor and Its Indicators of Creative Leadership for Administrators

Interval of Mean Value	Interpretation
4.51 to 5.00	Highest
3.51 to 4.50	High
2.51 to 3.50	Moderate
1.51 to 2.50	Low
1.00 to 1.50	Lowest

The findings of the practical level for each factor to promote creative leadership for educational institute indicated that innovative culture factor (mean score = 4.67, *SD*= 0.41) was the most important factor of creative leadership. This was followed by teamwork factor (mean score = 4.666, *SD* = 0.36), and achievement motivation (mean score = 4.62, *SD* = 0.47). However, the least important factor was found as effective communication (mean score = 4.58, *SD* = 0.52). Table 3 depicts the details of each factor of creative leadership ranking in order from the most important to the least important factor. Moreover, findings also showed that there were 13 creative leadership indicators which derived from the four essential factors with regards to fit the Thai context, as illustrated in Table 3.

Table 3: The Results of Mean Scores (x̄) and Standard Deviation (*SD*) for Essential Factors and Indicators of Administrators' Creative Leadership

Variables	Practical Level			Ranking
	x̄	***SD***	**Interpret**	
Creative Leadership (CL)	**4.62**	**0.47**	**Highest**	
Be flexible and adaptable (CL1)	4.61	0.47	Highest	4
Have a vision to lead the organization (CL2)	4.60	0.48	Highest	5
Solve problems creatively (CL3)	4.65	0.43	Highest	2
Be creative (CL4)	4.62	0.46	Highest	3
Create cooperation towards goals (CL5)	4.67	0.44	Highest	1
Achievement Motivation (AM)	**4.62**	**0.47**	**Highest**	**3**

Responsibility (AM1)	4.56	0.54	Highest	4
Knowing how to plan (AM2)	4.63	0.44	Highest	3
Enthusiasm (AM3)	4.65	0.45	Highest	1
Risk-taking (AM4)	4.65	0.47	Highest	2
Innovative Culture (IC)	**4.67**	**0.41**	**Highest**	**1**
Open minded (IC1)	4.67	0.42	Highest	2
Create a creative atmosphere (IC2)	4.70	0.34	Highest	1
Support innovation (IC3)	4.63	0.47	Highest	3
Effective Communication (EC)	**4.58**	**0.52**	**Highest**	**4**
Clarity in communication (EC1)	4.53	0.49	Highest	3
Suitability for the environment (EC2)	4.58	0.49	Highest	2
Choosing a communication channel (EC3)	4.62	0.58	Highest	1
Teamwork (TW)	**4.66**	**0.36**	**Highest**	**2**
Participation in work (TW1)	4.69	0.42	Highest	1
Human relations (TW2)	4.67	0.40	Highest	2
Respect each other (TW3)	4.64	0.36	Highest	3

Demographic Data of Respondents

A total of 1280 distributed questionnaires were successfully collected from 640 Department of Local Administration Promotion in Thailand, giving a response rate of 100 percent. The majority of respondents are females (59.06%). The demographic data showed that researchers obtained a comprehensive and representative sample in terms of their work experience as a good practice when conducting surveys to gather quantitative data. An equal distribution of respondents in terms of their work experience such as 294 (22.97%) of respondents' work experience was less than five years; 256 (20.00%) of respondents' work experience was between five to 10 years; 457 (35.70%) of respondents' work experience was between 11 to 20 years, and 273 (21.33%) of respondents' work experience was more than 20 years.

In addition, a total of 646 (50.47%) and 634 (49.53%) of respondents who are holding their job position as administrators and teachers, respectively. The majority of them are possessing a master's degree as the highest academic level (1052, 82.19%). This was followed by 190 (14.84%) of respondents have bachelor's degree. Only 38, 2.97%) of respondents were awarded a doctoral degree as the highest academic level. However, the majority of respondents are working at Municipality department (613, 47.89%) and Provincial Administrative Organization (592, 46.25%), making up a total of 94.14 percent of respondents. Only 75 (5.86%) of respondents are working at Subdistrict Administrative Organization. This demographic data of respondents assists the researchers to capture diverse perspectives and insights across different demographic groups. Table 4 demonstrates the demographic data of respondents.

Table 4: Profile of Respondents and Research Institutes

Background	Frequency (N= 1280)	Percentage (%)
Gender:		
-Male	524	40.94
-Female	756	59.06
Total	**1280**	**100**
Work experience		
-<5 years	294	22.97
-5 to 10 years	256	20.00
11 to 20 years	457	35.70
>20 years	273	21.33
Total	**1,280**	**100**
Position		
-Administrators	646	50.47
-Teachers	634	49.53
Total	**1,280**	**100**
Academic qualification		
-Bachelor's degree	190	14.84
-Master's degree	1,052	82.19
-Doctoral degree	38	2.97
Total	**1,280**	**100**
Department of institute		
-Municipality	613	47.89
-Subdistrict Administrative Organization	75	5.86

-Provincial Administrative Organization	592	46.25
Total	**1280**	**100**

Intercorrelation between Creative Leadership Indicators

A creative leadership model was then developed by the researchers which representing the identified four factors and 13 indicators through arranging them in a logical manner to reflect their interrelationships. Hence, this model would provide a comprehensive and structured overview of the ethical considerations relevant to creative leadership within the researchers' selected scope. The findings of Pearson correlation coefficients were used to assess the linear relationships between pairs of 13 indicators.

Table 5 elucidates the findings of intercorrelation between the 13 indicators of creative leadership indicating that there were positive correlations for all relationships between pairs of 13 indicators. This implies that as one indicator increases, the other tends to increase too. In addition, the magnitude of the correlation coefficients ranged from 0.227 to 0.747 revealing the strengths of the relationships from weak to strong, with values closer to 1 representing a stronger correlation and all the relationships are statistically significant at 0.01 level. Consequently, findings also showed that the relationship between open minded indicator (IC1) and responsibility indicator (AM1) (r = .747; r<.01) was the highest magnitude of the correlation coefficient. However, the lowest magnitude of the correlation coefficient was choosing a communication channel indicator (EC3) and open-minded indicator (IC1) (r = .227; p<0.01), as illustrated in Table 5.

Table 5: Intercorrelations Results of Identifying Indicators of Creative Leadership

	CL1	CL2	CL3	CL4	CL5	AM1	AM2	AM3	AM4	IC1	IC2	IC3	EC1	EC2	EC3	TW1	TW2	TW3
CL1	1.00	.645**	.577**	.641**	.662**	.701**	.463**	.599**	.500**	.702**	.471**	.610**	.577**	.599**	.374**	.541**	.476**	.391**
CL2		1.00	.577**	.649**	.643**	.642**	.544**	.553**	.508**	.608**	.488**	.575**	.497**	.542**	.370**	.618**	.501**	.389**
CL3			1.00	.682**	.557**	.585**	.579**	.542**	.553**	.630**	.454**	.532**	.506**	.552**	.343**	.582**	.462**	.340**
CL4				1.00	.575**	.673**	.507**	.583**	.568**	.685**	.398**	.592**	.508**	.655**	.376**	.476**	.451**	.356**
CL5					1.00	.670**	.534**	.618**	.599**	.625**	.528**	.620**	.610**	.565**	.357**	.631**	.554**	.409**
AM1						1.00	.562**	.723**	.528**	.747**	.551**	.578**	.575**	.668**	,402**	.640**	.552**	.441**
AM2							1.00	.564**	.500**	.549**	.388**	.602**	.452**	.493**	.267**	.591**	.325**	.297**
AM3								1.00	.653**	.709**	.495**	.636**	.659**	.715**	.367**	.594**	.491**	.409**
AM4									1.00	.569**	.453**	.542**	.614**	.519**	.309**	.493**	.413**	.423**
IC1										1.00	.587**	.604**	.670**	.622**	.227**	.529**	.560**	.373**
IC2											1.00	.706**	.522**	.586**	.477**	.473**	.602**	.433**
IC3												1.00	.427**	.254**	.313**	.343**	.325**	.550**
EC1													1.00	.553**	.702**	.641**	.537**	.468**
EC2														1.00	.625**	.590**	.663**	.448**
EC3															1.00	.657**	.598**	.420**
TW1																1.00	.616**	.486**
TW2																	1.00	.592**
TW3																		1.00

**Correlation coefficient is significant at the 0.01 level (2-tailed

The Goodness of Fit of the Creative Leadership Factors and Indicators with the Empirical Data

The researchers projected to undertake estimates of the parameters of the creative leadership model, the validity of the identified factors and their factor loading of the creative leadership practices. In particular, factor loading means the 'relative importance of the identified indicators that collectively form a specifically identified indicator in the creative leadership model of educational administrators in the Department of Local Administration Promotion that had been considered. The co-variance with the creative leadership indicators ranged from 28.00 to 80.30 percent. As shown in the following Table 6, the factor loading of all the creative leadership indicators are ranged from 0.564 to 0.896 and is statistically significant at 0.01. The factor with the highest factor loading value was development of open-minded indicator ($\beta = 0.896$). This was followed by responsibility ($\beta = 0.891$), suitability for the environment ($\beta = 0.859$), participation in work setting ($\beta = 0.844$), enthusiasm ($\beta = 0.813$), support innovation ($\beta = 0.784$), clarity in communication ($\beta = 0.737$), human relations ($\beta = 0.721$), risk-taking ($\beta = 0.705$), knowing how to plan ($\beta = 0.685$), and create a creative atmosphere ($\beta = 0.631$) . The indicator that has the least capacity factor loading value was choose a communication channel ($\beta = 0.529$). Consequently, the researchers concluded that all the identified indicators are found to be important constructs of creative leadership for educational administrators of the Department Local Administration Promotion in Thailand.

Table 6: The Results of CFA for Essential Indicators of Creative Leadership of Administrators

Latent / Observable Indicators	Factor Loading			R²
	β	S.E.	t	
Creative Leadership (CL)				
Be flexible and adaptable (CL1)	0.799	0.012	66.065	0.639
Have a vision to lead the organization (CL2)	0.772	0.014	56.979	0.595
Solve problems creatively (CL3)	0.736	0.016	46.142	0.542
Be creative (CL4)	0.793	0.014	57.982	0.628
Create cooperation towards goals (CL5)	0.838	0.012	72.341	0.703
Achievement Motivation (AM)				
Responsibility (AM1)	0.891	0.010	91.893	0.795
Knowing how to plan (AM2)	0.685	0.018	38.454	0.470
Enthusiasm (AM3)	0.813	0.011	72.683	0.661
Risk-taking (AM4)	0.705	0.018	39.520	0.498
Innovative Culture (IC)				
Open-minded (IC1)	0.896	0.011	84.435	0.803
Create a creative atmosphere (IC2)	0.631	0.018	34.569	0.398
Support innovation (IC3)	0.784	0.013	58.641	0.614
Effective Communication (EC)				
Clarity in communication (EC1)	0.737	0.015	47.978	0.543
Suitability for the environment (EC2)	0.859	0.011	75.028	0.737
Choose a communication channel (EC3)	0.529	0.022	24.237	0.280
Teamwork (TW)				
Participation in work (TW1)	0.844	0.014	60.859	0.713
Human relations (TW2)	0.721	0.016	44.114	0.520
Respect each other (TW3)	0.564	0.024	23.765	0.318
Chi-square = 61.229 df = 45 P-value = 0.0539 χ²/df = 1.361 CFI = 0.999 TLI = 0.997 RMSEA = 0.017 SRMR = 0.010				

According to Ullman (2001), the assessment model whether is acceptable or not in structural equation modelling (SEM) depending on the fit indices. The goodness of fit finding showed that the creative leadership model fits between the obtained values of collected data and the expected values as follow, $\chi^2 = 61.229$, df = 45, $\chi^2/df = 1.361$, CFI = 0.999, TLI = 0.997, RMSEA = 0.017, and SRMR = 0.010. These tests were employed to determine how associated real values are fitting to the expected values in the creative leadership model. The researchers referred to the following specialists' rules of thumb and their recommended cut-off values for evaluating fit indices in SEM as elucidated in Table 7.

Table 7: Interpretation of Goodness of Fit for Creative Leadership Model

Goodness of Fit Indexes	Real Values	Rules of Thumb or Cut-off Values	Specialist	Interpretation
χ^2/df	1.361	<2 <5	Ullman (2001) Schumacker and Lomax (2004)	Pass
CFI	0.999	≥ 0.95	Hu and Bentler (1999)	Pass
TLI	0.997	≥ 0.95	Hu and Bentler (1999)	Pass
RMSEA	0.017	<0.06 <0.07	Hu and Bentler (1999) Steiger (2007)	Pass
SRMR	0.010	<0.05	Byrne (1998)	Pass

CONCLUSION

The main finding of this study was projected a creative leadership model and verified its goodness of fit. A total of four factors and 13 indicators were identified can influence the effectiveness of a creative leadership model for educational administrators. The four factors are achievement motivation, innovative culture, effective communication, and teamwork. Achievement motivation was found as one of the crucial factors in promoting creative leadership among educational administrators. This implies an educational administrator's drive to achieve goals, seek success, and demonstrate competence. Therefore, it can significantly influence an educational administrator's ability such as responsibility, knowing how to plan, enthusiasm, and risk-taking to lead creatively and foster an innovative school environment (Kamsi et al., 2024).

Besides, an innovative culture within an educational institute is essential for fostering creative leadership and driving continuous improvement. An innovative culture encourages experimentation, embraces new ideas, and supports collaborative problem-solving. The finding showed that the most significant indicator of creative leadership model was open-minded ($\beta = 0.896$) as one of the indicators derived from innovative culture. This implies that an educational administrator has to encourage teachers and students to propose and experiment with new concepts and approaches. As a result, an educational administrator is being adaptable and willing to adjust policies and practices in response to innovative initiatives (Ariratana et al., 2019). The researchers would like to suggest for educational administrators to embed all the three indicators of innovative culture, namely open-minded, create a creative atmosphere, and support innovation into the fabric of the institute in order to cultivate a culture that not only supports but actively promotes innovation and creativity, ultimately leading to improved outcomes for students and the entire school community.

Nevertheless, effective communication was found as a vital factor for educational administrators to successfully lead their institutes, foster an innovative culture, and promote creative leadership. It involves the clear and efficient exchange of information, ideas, and feedback among all stakeholders within the educational community. However, finding indicated that choosing a communication channel ($\beta = 0.529$) was found to be the least capacity indicators among the 13 indicators, contributing only 28 percent of impact towards creative leadership practices. Following this line of reasoning, the researchers would like to suggest that educational administrators need to establish clear channels of communication, namely formal channels and informal channels. They can use formal channels such as meetings, emails, and newsletters to disseminate important information. At the same time, educational administrators encourage informal communication through open-door policies, casual conservations, and social events.

Finally, teamwork was found as an essential factor of effective leadership and innovation within educational institutes. For educational administrators, fostering teamwork among teachers, students, and stakeholders can lead to a more collaborative, supportive, and productive environment. This implies that educational administrators are suggested to develop a Teamwork Framework, regularly monitoring and evaluating teamwork initiatives to assess their effectiveness and make necessary adjustments. On top of that, educational administrators should celebrate team successes and milestones to build a sense of accomplishment and

motivation. Educational administrators should address any challenges or barriers to teamwork to ensure a cohesive and collaborative environment proactively.

In conclusion, educational administrators must practice the four key factors and 13 indicators of creative leadership structural equation model to encourage creativity and make it widespread at educational institutes. Therefore, educational administrators have to encourage creative individuals, feeding creative organizational atmosphere, giving time and psychological support to creative individuals, producing thought sources, and giving intrinsic and extrinsic rewards.

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