

# A SUCCESSFUL MODEL OF EDUCATIONAL MANAGEMENT UNDER THE COVID-19 PANDEMIC OF LOCAL ADMINISTRATIVE ORGANIZATIONS IN THE 4 SOUTHERN BORDER PROVINCES

KRIS WEERAPALAPHON KAEWKLANG <sup>1</sup>, TANAPOL KORTANA <sup>2</sup>,  
CHOMPOO SAISAMA <sup>3</sup>, and CHAITHANASKORN PHAWITPIRIYAKLITI <sup>4</sup>

<sup>1,2,3,4</sup> Suan Sunadha Rajabhat University, Thailand.

E-Mail: <sup>1</sup>s60484945024@ssru.ac.th, <sup>2</sup>tanapol.ko@ssru.ac.th, <sup>3</sup>chompoo.sa@ssru.ac.th,

<sup>4</sup>Chaithanaskorn.ph@ssru.ac.th

## Abstract

The well-being of local people to be qualified as per the government's policy depends on the efficiency of the local administrative organizations in handling their operations with strategic management in line with people's requirement. During the past COVID-19 pandemic, the educational management of local administrative organizations had faced the problem in the process of distance learning management caused by instructors, educational institutes and students that affected distance learning students' efficiency including lack of cooperation from all concerned. This study therefore aims to 1) examine the level of related variables; government policy, executive potential, innovation, technology, strategic management and success of the educational management under the COVID-19 pandemic of the local administrative organizations in the 4 southern border provinces, 2) study the influence of the aforementioned variables ; government policy, executive potential, innovation, technology, strategic management towards the success of educational management under the COVID-19 pandemic of local administrative organizations in the 4 southern border provinces, and 3) develop the successful model of educational management under the COVID-19 pandemic of local administrative organizations in the 4 southern border provinces. The mixed research methodology was applied for this study between the quantitative and qualitative ones. In view of the quantitative term, the sample group consisted of 480 informants who were the directors of the education divisions of local administrative organizations and educational institution administrators in Pattani, Yala, Narathiwat and Songkhla Provinces. The sampling size was determined based on 20-time criteria of the observed variables with proportional sampling method. Data collection was made through questionnaires and later analyzed by the structural equation modelling. For the qualitative term, an in-depth interview was made with the 20 primary informants of the directors of the education divisions of local administrative organizations and educational institution administrators. The finding revealed that 1) the government policy, executive potential, innovation, technology, strategic management and success of educational management under the COVID-19 pandemic of the local administrative organizations in the 4 southern border provinces were all at high level, 2) the government policy, executive potential, innovation, technology and strategic management influenced the success of the educational management under the COVID-19 pandemic of the local administrative organizations in the 4 southern border provinces at .05 statistical significance level, and 3) the successful model as developed by the researcher was called PIGTS Model ((P = Executive Potential, I = Innovation, G = Government Policy, T = Technology, S = Strategic Management). In addition, the qualitative findings also indicated that to succeed in the educational management under the COVID-19 pandemic of the local administrative organizations in the 4 southern border provinces, the executives of those organizations were required to exercise strategic management appropriately especially adjusting themselves to be consistent with the arising situation and also utilizing the educational network's cooperation to effectively enhance the success of the educational management of the local administrative organizations in the 4 southern border provinces. The research findings can also be further applied as a guideline how to define the policy for educational management to enhance the sustainable success of the educational management under the COVID-19 pandemic of the local administrative organizations in the 4 southern border provinces.

## INTRODUCTION

Coronavirus disease (COVID-19) pandemic cause the obstacles in management (Aunyawong et al, 2021) Success in educational management of local administrative organizations under the pandemic of coronavirus disease (COVID-19) is caused by government policy to support internet learning media for students, teachers and educational personnel, including budget assistance Providing education in such crisis situations facilitates the students, teachers and educational personnel in learning management, causing learners to develop according to educational goals as expected by society. This is consistent with the idea of Lawrence and Wu (2020) who studied the Chinese higher education during the COVID-19 pandemic. Such study found that policy analysis of educational institutions implementing government policies identifies three priorities: care and support, graduate employment and ideological education. Survey data reveals perceived policy effectiveness. It reflects China's top-down government structure and strong support for the federal government's management of the crisis. Although it has an impact on educational policy, evaluation of these policies emphasizes the dynamic response, budget support and learning convenience to study and learn effectively during a crisis.

While, Sahu (2020) studied public policy measures for managing the COVID-19 pandemic crisis from the UAE, it was found that the government had effectively controlled the spread of the virus and reduced the death rate. The UAE government has swiftly implemented policies on coercive control and mitigation based on a centralized decision-making model, strengthening management ability through cooperation, coordination with various agencies, allocation of adequate financial resources, and building confidence in the government. Policy changes for public schools in the Maldives during the COVID-19 pandemic were early responses and timely policy directions for education. Another finding is the effective communication of changes in educational policy for implementation. After the policy change, the government has supported the internet in online teaching to increase the capacity of technology in developing education during the pandemic. Regarding the effectiveness of government policy in responding to the COVID-19 outbreak, it was found that the government had a policy in response to the pandemic by closing schools, which reduced the death rate. Many policies have been established, such as budget assistance for online education, enabling students to learn in times of crisis.

Furthermore, Rouf et al. (2022) who studied online classes for higher education in Bangladesh during the COVID-19 pandemic found that the government has policies to help students and teachers organize online learning. Due to technological limitations, the government has supported and provided budgets for effective learning management. In addition, Mahande et al. (2022) who studied the factors that affects students' performance in web-based learning during the pandemic of COVID-19 found that attitude, anxiety and motivation affects student performance in web-based learning. Motivation plays an important role in influencing effectively web-based learning at the tertiary level with the help of internet teaching media from government policy.

From the educational management of local government organizations during the past period amidst the outbreak of COVID-19, the distance learning process has encountered problems both caused by teachers, educational institutions and students. Such problems affect student performance in distance learning, including the lack of cooperation of those involved. Educational management of local administrative organizations in the southern border provinces therefore aims to develop success in providing higher education in Pattani Province, Yala Province, Narathiwat Province, and Songkhla Province. There are 78 educational institutions under the jurisdiction of local government organizations. The researchers are therefore interested in studying the success model of educational management in the COVID-19 pandemic of local government organizations in the 4 southern border provinces to develop the ability to manage education of local government organizations in the 4 southern border provinces efficiently.

## LITERATURE REVIEW

### **The relationship between government policy and success of educational management**

For providing education during the COVID-19 pandemic, involved parties must adopt government policies to support effective educational management because education is organized under an emergency situation. Everyone must comply with the governing laws which take into account safety and distancing. Online learning is therefore used in such situations. The government sector has established urgent policies to support budgets for education and provide convenience for citizens in using the free internet through the cooperation of agencies involved in communications to support students learning at home. Teachers can manage class at home or at the educational institutions effectively under crisis situations. It makes educational management meets the specified goals and the public accepts. Learners and teachers can develop in the desired direction. This is considered a success in organizing education during the COVID-19 pandemic.

Likewise, Hsueh et al. (2020) represent that the management of the government sector, both in supporting the budget and helping the people during the COVID-19 pandemic will be accepted by the public. People will have confidence at the national and local levels from the efficiency of operations in the public sector. Knowledgeable administrators deciding on effective problem management have a direct positive effect on people's perception of safety from the virus. Therefore, government policy is an important thing that educational institution administrators should adopt to support effective educational management.

Similarly, Rudhumbu et al. (2021) reveal that government policies were used to support online teaching both internet support and a budget for learning management. They will make students and teachers more convenient and cause efficiency in learning measurement results. In the COVID-19 pandemic, government policies can promote infrastructure efficiency, especially the internet in learning online during the COVID-19 pandemic. They will allow online teaching to respond to the crisis. Executives should use their knowledge and abilities, including learning management skills to create efficiency in online learning from government policies in organizing education. According to the context of educational institutions, it was discovered

that government policies can improve the readiness of educational institutions in the COVID-19 pandemic. The government has supported the internet in online teaching for increasing the capacity of technology to develop education during the pandemic.

In addition, Sahu (2020) found that the government has swiftly implemented public policy measures regarding control and mitigate impacts from the COVID-19 pandemic according to a centralized decision-making model on strengthening management ability through cooperation, coordinating with various agencies, allocating of adequate financial resources, and building public confidence.

### **The relationship between executive potential and success of educational management**

In organizing education to be successful and received praise from the public, an important part is the executive potential in providing education that requires knowledge, abilities, skills and experiences to create cooperation with educational networks in developing effective education.

Leadership, vision and decision making under complete and sufficient information are used to organize education during the COVID-19 pandemic to achieve the goals and develop learning for students at all levels. Executive potential is the management ability of leaders in educational institutions that will develop successful education for students. Executives who make appropriate and prompt decisions can create development and efficiency in educational management and leadership in educational management can make education meet the desired goals (Abeygunasekera, 2021).

Therefore, the executive potential is important in order to gain public acceptance of learning management and the development that occurs with students. The executive potential in education management can support teachers to use technology for online teaching during the COVID-19 pandemic. It is a skill for organizing education during the COVID-19 pandemic by strengthening and developing students' digital abilities in using academic libraries. This makes it possible to learn digital books in a new way.

A progressive academic library becomes a strategic vision designed for equity in education because the world is still in a pandemic crisis. Executive potential is the ability of executives to effectively manage online education, both teaching and assessment, in the COVID-19 pandemic situation (Johnsson et al., 2021; Lawrence & Wu, 2021).

### **The relationship between innovation and success of educational management**

For effective educational management under the COVID-19 pandemic, School executives have brought innovative methods and new ideas that make both students and teachers able to manage learning efficiently and safely. For a new way of learning in the online system, including organizing learning activities, searching for student information, measurement and evaluation as well as taking care of students in such situation, educational institutions can use a variety of formats: Onsite, On-Hand, Online, On-Demand and On Air. Educational institution executives can manage them according to the appropriate context under maximum safety, making learning management reach the desired goals and acceptance by the public. Both students and teachers develop their learnings. Educational innovation is a new type of learning

management using e-learning which is used in learning activities and evaluations under the management of potential leaders (Riccomini et al., 2021; Guga, 2018).

Innovation is creating new things in the learning environment to make teachers organize learning in a new online format that can interact and evaluate distance learning effectively by using technology integration that focuses on the learner as the center in the virtual classroom. Teachers can facilitate innovative blended learning in their schools according to the appropriate context (Riccomini et al., 2021).

The speed of innovation affects the quality of education provision, while knowledge management and knowledge sharing processes have a positive effect on the speed and quality of innovation (Mohamed et al., 2021). Social innovation strategies can create a sustainable competitive advantage during the COVID-19 pandemic and relates to social responsibility of educational institutions in participatory quality management (Abeygunasekera, 2021; Hsueh et al., 2021).

### **The relationship between technology and success of education**

Technology increases efficiency in preparing students for online learning to maintain social distance due to the COVID-19 pandemic. The training program introducing students to know teaching technology from different learning methods and applications of online platforms is the most important thing for teachers to make students have more access to technology for learning. In addition, the integration of technology in the teaching and learning process will develop students according to the desired goals.

IT-based technology plays a role in managing the COVID-19 pandemic by using Cloud computing technology to manage the potential performance of web applications which is built on results-driven design (Vahdat, 2022).

Tarei and Kumar (2021) reveal that technology supported in education during the COVID-19 pandemic can cause teachers and students learn more from integration in the use of technology. The government plays a supporting role in access to technology for both students and institutions. Using the e-Learning system to develop learning management during the COVID-19 pandemic makes users convenient and learning effective.

Access to technology plus integration and support of technology give teachers and students the opportunity to study and learn through e-Learning continuously (Guga, 2018; Hsueh et al., 2020).

### **The relationship between management strategy and success of educational management**

Management strategy variables refer to guidelines for effective management of the COVID-19 pandemic of local government organizations by using technology and online systems in educational management. It enables learners to achieve learning outcomes as specified and makes education effective and accepted from public for the learning development of students.

Teachers and educational personnel who have managed online learning well will be a role model for student development, which includes plan on managing school study, educational

system, legal management, school dynamic adjustment and convenience of online system:

- 1) Plan on managing school study means guidelines for organizing education of educational institutions under local administrative organizations that are set as practices for teachers and educational personnel. They, therefore, recognize and act towards the same goal in managing under the COVID-19 pandemic, which is beneficial to student development (Kaur and Lodhia; 2018; Guga, 2018; Hsueh et al., 2020).
- 2) Educational management system means the process of organizing education in educational institutions under local administrative organizations where teachers and personnel including those involved in participation and awareness for effective student development in management in the situation of the COVID-19 pandemic (Tadesse and Muluye, 2020; Riccomini et al., 2021; Rudhumbu et al., 2021).
- 3) Legal management means organizing education in educational institutions under local administrative organizations that is in accordance with the law in the COVID-19 pandemic to develop students to be effective and achieve learning goals (Johnsson et al., 2021; Sahu, 2020; Wanke et al., 2021).
- 4) School dynamic adaptation means methods of organizing education in educational institutions under local administrative organizations that can be adjusted according to the circumstances that arise under the management strategy for developing students to be successful in learning and to be accepted by the public (Sahu, 2020; Wanke et al., 2021).
- 5) Convenience of online system means the management of educational institutions under local administrative organizations in the COVID-19 pandemic by providing care and assistance to students, teachers and educational personnel in using the online learning system conveniently and efficiently (Riccomini et al., 2021; Johnsson et al., 2021; Sahu, 2021).

## METHODOLOGY

This study was a mixed methods research by embedded design (Cresswell, 2003) to get the highlight of both quantitative and qualitative methods to better support the quality of the research (Johnson & Turner, 2003). The population was 798 Local Administrative Organizations in the 4 Southern Border Provinces. In quantitative study, the multi-stage sampling was used to select 480 samples, calculated from 20 times greater than the numbers of observed variables (20x24). The study started from quantitative research by reviewing the literature and related research on variables affecting of success of educational management under COVID -19 pandemic, including government policy, executive potential, innovation, technology, and management strategy. The data was synthesized and summarized into definition of terms. The indicators of variables according to the research concept were determined. The questionnaire was then constructed according to the 5-level Likert's scale (Likert, 1932), with the validity and reliability tests before collecting data and then statistically analyzing data by using structural equation modeling (SEM).

For qualitative research, the researchers concocted in-depth interviews from 20 key informants, including 10 directors of the education division under local administrative organizations and 10 executives of educational institutions under local administrative organizations. The qualitative data was compiled, categorized, analyzed, interpreted and linked to draw conclusions on the results of the quantitative analysis with more depth, detailed, rational explanation.

## RESULTS

The normal distribution of the 21 observed variables studied in the structural equation model was examined, using the chi-square test ( $\chi^2$ ). If it was found to be statistically significant at the .05 level, it means that such variables were non-normally distributed. On the other hand, if it was found to be not statistically significant (P-value > .50), it means that such variables were normally distributed.

**Table 1: Statistical test of empirical variables (n=480)**

Variables	M	S.D.	%CV	Sk	Ku	$\chi^2$	P-value
ITNTC	4.53	.55	12.23	-4.946	-4.972	49.188	.000
BUDSP	4.35	.56	12.85	-1.478	-2.379	7.844	.020
LEADS	4.47	.57	12.82	-4.204	-4.207	35.370	.000
KNOL	4.51	.56	12.55	-4.940	-4.234	42.326	.000
DECMK	4.43	.58	13.12	-3.615	-3.751	27.134	.000
VSEDM	4.13	.62	15.05	-1.488	.709	2.718	.257
SKSTU	4.26	.61	14.29	-2.112	-1.087	5.641	.060
MTLNM	4.47	.59	13.39	-4.887	-3.531	36.349	.000
MESEV	4.59	.55	12.07	-6.750	-2.293	5.823	.000
TAKCR	4.20	.57	13.64	-1.000	.222	1.049	.592
PLTOL	4.29	.56	13.17	-1.248	-2.063	5.813	.055
ITGTT	4.18	.64	15.37	-1.886	-2.489	9.751	.008
TECMN	4.21	.60	14.36	-1.772	-.681	3.604	.165
TECSP	4.29	.57	13.43	-1.537	-2.484	8.535	.014
ACTEC	4.23	.58	13.71	-1.107	-1.667	4.006	.135
PLMSY	4.58	.52	11.47	-5.811	-5.172	6.517	.000
EDUSY	4.39	.56	12.76	-2.524	-4.456	26.230	.000
LGMNG	4.31	.59	13.69	-2.111	-3.465	16.464	.000
DYMAD	4.46	.56	12.60	-3.794	-5.435	43.935	.000
CONOS	4.25	.63	14.80	-2.461	-2.664	13.156	.001
EFFED	4.22	.56	13.47	-.817	-1.038	1.744	.418
GOAL	4.24	.63	15.04	-2.564	-2.214	11.477	.003
TRUPB	4.51	.53	11.89	-4.120	-6.945	65.208	.000
LRGRW	4.48	.54	12.12	-3.757	-6.368	54.673	.000

Note: chi-square ( $\chi^2$ ) with statistical significance (P-value <.05) indicates a non-normal distribution

The construct validity of latent variables was checked using the confirm factor Analysis technique by considering standardized factor loading of greater than 30 to indicate that the empirical variable is a good factor of latent variable. In addition, the reliability of empirical variables was considered from the  $R^2$ . Moreover, construct reliability ( $\rho_c$ ) of latent variables greater than or equal to .60 and average variable extracted ( $\rho_v$ ) greater than or equal to .50 were tested (Diamantopoulos and Siguaw, 2000) as follows.

**Table 2: Factor Loadings (n = 480)**

Variables	Factor Loading ( $\lambda$ )	Error ( $\theta$ )	T	$R^2$
Government policy (GOVPL)				
Internet instruction media support (ITNTC)	.92	.16	-	.84
Budget support (BUDSP)	.49	.76	10.97	.24
Executive Potential (ECPTT)				
Leadership (LEADS)	.52	.33	10.19	.67
Knowledge (KNOL)	.57	.37	11.29	.63
Promptitude in decision making (DECMK)	.82	.33	15.56	.67
Vision in educational management (VSEDM)	.50	.35	9.72	.65
Management skills in COVID -19 situation (SKSTU)	.58	.37	11.46	.63
Innovation (INOVA)				
Management of learning method (MTLNM)	.70	.31	9.89	.69
Measuring/Evaluating process (MESEV)	.74	.35	10.12	.65
Taking care of student (TAKCR)	.46	.37	6.69	.63
Technology (TECHN)				
Platform for online teaching (PLTOL)	.63	.30	13.6	.70
Integration of technology in teaching process (ITGTT)	.66	.36	14.46	.64
Technology in management (TECMN)	.70	.32	15.31	.68
Technology support in learning management (TECSP)	.65	.38	14.04	.62
Access to technology (ACTEC)	.61	.33	13.12	.67
Management strategy (MNGST)				
Plan on managing school study (PLMSY)	.57	.38	11.45	.62
Educational management system (EDUSY)	.79	.37	13.7	.63
Legal management (LGMNG)	.57	.37	11.43	.63
School dynamic adaption (DYMAD)	.81	.34	14.11	.66
Convenience of online system (CONOS)	.44	.31	8.83	.69
Success of educational management under COVID -19 pandemic of local administrative organizations in the 4 southern border provinces (SUCOV)				
Efficient education (EFFED)	.64	.30	9.88	.70
Goal attainment of educational management (GOAL)	.71	.30	10.41	.70
Trust form public (TRUPB)	.42	.30	5.60	.70
Learning and growth (LRGRW)	.43	.32	7.70	.68
$\rho_c = .80$ $\rho_v = .51$				
Chi-Square=0.65, df=1, P-value=0.41921, RMSEA=0.000				



Table 3: Measurement Model (n=480)

Dependent variables	R <sup>2</sup>	Effects	Independent variables				
			Management strategy (MNGST)	Government policy (GOVPL)	Executive potential (ECPTT)	Innovation (INOVA)	Technology (TECHN)
Management strategy (MNGST)	.87	DE	-	.55*(9.71)	.40*(9.63)	.41*(8.63)	.67*(6.82)
		IE	-	-	-	-	-
		TE	-	.55*(9.71)	.40*(9.63)	.41*(8.63)	.67*(6.82)
Success of educational management (SUCOV)	.81	DE	.80*(9.51)	-	-	-	-
		IE	-	.55*(9.71)	.40*(9.63)	.41*(8.63)	.67*(7.00)
		TE	.80*(9.51)	.55*(9.71)	.40*(9.63)	.41*(8.63)	.67*(7.00)

$\chi^2 = 385.72$  df = 202 p-value = .00000,  $\chi^2 / df = 1.90$ , RMSEA = .044, RMR = .017, SRMR = .041, CFI = .99, GFI = .94, AGFI = .91, CN = 330.91

\* \*statistical significance at the .05 level

Note: In parentheses, they were the t-value. If the value was not between -1.96 and 1.96, it was statistically significant at the .05 level. DE=Direct Effect, IE=Indirect Effect, TE=Total Effect

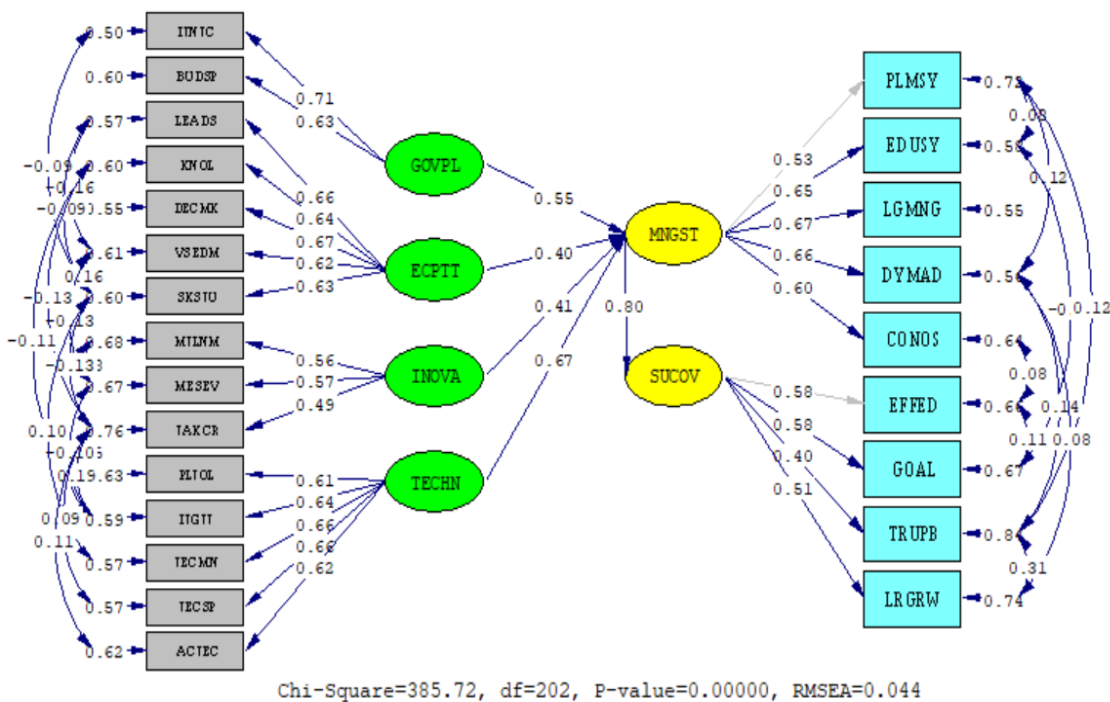


Figure 1: Adjusted model (n=480)

From results of the model analysis, as shown in Figure 1, it was found that the adjusted structural equation model of the effects of government policy, executive potential, innovation, technology, and management strategy on success of educational management under the COVID-19 pandemic of local administrative organizations in the 4 southern border provinces

was fit to the empirical data at an acceptable level, considered from the following fit indexes as:  $\chi^2 = 385.72$   $df = 202$   $p\text{-value} = .00000$  ,  $\chi^2 / df = 1.90$ ,  $RMSEA = .044$ ,  $RMR = .017$ ,  $SRMR = .041$ ,  $CFI = .99$ ,  $GFI = .94$ ,  $AGFI = .91$ ,  $CN = 330.91$

## CONCLUSION

In conclusion, the adjusted structural equation model of the effects of government policy, executive potential, innovation, technology, and management strategy on success of educational management under the COVID-19 pandemic of local administrative organizations in the 4 southern border provinces was fit to the empirical data at an acceptable level, considered from the following fit indexes as:  $\chi^2 = 385.72$   $df = 202$   $p\text{-value} = .00000$  ,  $\chi^2 / df = 1.90$ ,  $RMSEA = .044$ ,  $RMR = .017$ ,  $SRMR = .041$ ,  $CFI = .99$ ,  $GFI = .94$ ,  $AGFI = .91$ ,  $CN = 330.91$  The estimation was found in the structural equation model as follows.

- 1) Government policy (GOVPL) has a direct effect on management strategy (MNGST) with an effect coefficient of .55 and statistical significance at the .05 level. Thus, hypothesis 1, government policy directly affect management strategies, is accepted
- 2) Executive potential (ECPTT) has a direct effect on management strategy (MNGST) with an effect coefficient of .40 and statistical significance at the .05 level. Thus, hypothesis 2, executive potential directly affect management strategy, is accepted.
- 3) Innovation (INOVA) has a direct effect on management strategy (MNGST) with an effect coefficient of .41 and statistical significance at the .05 level. Thus, hypothesis 3, innovation directly affect management strategy, is accepted.
- 4) Technology (TECHN) has a direct effect on management strategy (MNGST) with an effect coefficient of .67 and statistical significance at the .05 level. Thus, hypothesis 4, technology directly affect management strategy, is accepted.
- 5) Management strategy (MNGST) has a direct effect on success of educational management under COVID-19 pandemic of local administrative organizations in the 4 southern border provinces (SUCOV) with an effect coefficient of .80 and statistical significance at the .05 level. Thus, hypothesis 5, management strategy directly affect success of educational management under COVID-19 pandemic of local administrative organizations in the 4 southern border provinces, is accepted.
- 6) Management strategy (MNGST) can predict success of educational management under COVID-19 pandemic of local administrative organizations in the 4 southern border provinces (SUCOV) by 81 percent.
- 7) Government policy (GOVPL), executive potential (ECPTT), innovation (INOVA) and technology (TECHN) can jointly predict success of educational management under COVID-19 pandemic of local administrative organizations in the 4 southern border provinces (SUCOV) by 87 percent.

## References

- 1) Abeygunasekera, A.W.J.C. (2021). "Online Teaching, Learning, and Assessment during COVID-19 A Case of a Management Faculty in Sri Lanka", Sengupta, E. and Blessinger, P. (Ed.) *New Student Literacies amid COVID-19: International Case Studies (Innovations in Higher Education Teaching and Learning, Vol. 41)*, Emerald Publishing Limited, Bingley, pp. 13-27. <https://doi.org/10.1108/S2055-364120210000041004>
- 2) Aunyawong, W., Wararatchai, P., Shaharudin, M.R., Hirunpat, A., & Rodpangwan, S. (2021). The mediating role of transportation practices during the COVID-19 crisis in Thailand. *The Open Transportation Journal, 15*(1), 170-181.
- 3) Creswell, J.W. (2003) *Research Design: Qualitative, Quantitative, and Mixed Method Approaches*. Sage Publications, Thousand Oaks.
- 4) Diamantopoulos, A., & Siguaw, J. A. (2000). *Introducing LISREL*. London: Sage Publications. <https://doi.org/10.4135/9781849209359>
- 5) Guga, E. (2018). "Local government modernization in Albania: Historical background and the territorial reform 2015-2020", *International Journal of Public Sector Management, Vol. 31 No. 4*, pp. 466-506. <https://doi.org/10.1108/IJPSM-01-2017-0018>
- 6) Hsueh, L., Bretschneider, S., Stritch, J.M. and Darnall, N. (2020). "Implementation of sustainable public procurement in local governments: a measurement approach", *International Journal of Public Sector Management, Vol. 33 No. 6/7*, pp. 697-712. <https://doi.org/10.1108/IJPSM-09-2019-0233>
- 7) Johnson, B. and Turner, L.A. (2003) *Data Collection Strategies in Mixed Methods Research*. In: Tashakkori, A.M. and Teddlie, C.B., Eds., *Handbook of Mixed Methods in Social and Behavioral Research*, SAGE Publications, Thousand Oaks, 297-319.
- 8) Johnsson, M.C., Pepper, M., Price, O.M. and Richardson, L.P. (2021). "'Measuring up': a systematic literature review of performance measurement in Australia and New Zealand local government", *Qualitative Research in Accounting & Management, Vol. 18 No. 2*, pp. 195-227. <https://doi.org/10.1108/QRAM-11-2020-0184>
- 9) Kaur, A. and Lodhia, S. (2018). "Stakeholder engagement in sustainability accounting and reporting: A study of Australian local councils", *Accounting, Auditing & Accountability Journal, Vol. 31 No. 1*, pp. 338-368. <https://doi.org/10.1108/AAAJ-12-2014-1901>
- 10) Lawrence, L. and Wu, J. (2021). "China's higher education governance during COVID: a mixed-methods study of policy analysis and student perspectives", *Asian Education and Development Studies, Vol. 10 No. 2*, pp. 295-307. <https://doi.org/10.1108/AEDS-05-2020-0115>
- 11) Riccomini, F.E., Cirani, C.B.S., Carvalho, C.C.d. and Storopoli, J.E. (2021). "Educational innovation: trends for higher education in Brazil", *International Journal of Educational Management, Vol. 35 No. 3*, pp. 564-578. <https://doi.org/10.1108/IJEM-07-2019-0245>
- 12) Rudhumbu et al. (2021). "Insight into online teaching behaviour of lecturers in Zimbabwean universities during the COVID-19 era and beyond: issues and challenges", *International Journal of Information and Learning Technology, Vol. 38 No. 5*, pp. 518-539. <https://doi.org/10.1108/IJILT-07-2021-0104>
- 13) Sahu, P. (2020). "Closure of universities due to Coronavirus Disease 2019 (COVID-19): impact on education and mental health of students and academic staff", *Cureus, Vol. 12 No. 4*, doi: 10.7759/cureus.7541.
- 14) Mahande, R.D., Malago, J.D., Abdal, N.M. and Yasdin, Y. (2022). "Factors affecting students' performance in web-based learning during the COVID-19 pandemic", *Quality Assurance in Education, Vol. 30 No. 1*, pp. 150-165. <https://doi.org/10.1108/QAE-08-2021-0130>

- 15) Rouf, M.A., Hossain, M.S., Habibullah, M. and Ahmed, T. (2022). "Online classes for higher education in Bangladesh during the COVID-19 pandemic: a perception-based study", PSU Research Review, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/PRR-05-2021-0026>
- 16) Tadesse, S. and Muluye, W. (2020). The Impact of COVID-19 Pandemic on Education System in Developing Countries: A Review. Open Journal of Social Sciences, 8, 159-170. doi: 10.4236/jss.2020.810011.
- 17) Tarei, P.K. and Kumar, S. (2021). "Benchmarking the assessment of barriers to the admission of management education in India during the COVID-19 pandemic", Benchmarking: An International Journal, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/BIJ-04-2021-0215>
- 18) Vahdat, S. (2022). "The role of IT-based technologies on the management of human resources in the COVID-19 era", Kybernetes, Vol. 51 No. 6, pp. 2065-2088. <https://doi.org/10.1108/K-04-2021-0333>