MALAYSIAN ONLINE JOURNAL OF EDUCATIONAL MANAGEMENT (MOJEM)

JULY 2023, VOLUME 11, ISSUE 3, 16 - 27
E-ISSN NO: 2289 – 4489

FACTORS AFFECTING ETHICAL COMPETENCE OF PRIMARY SCHOOL ADMINISTRATORS: A MULTI-LEVEL STRUCTURAL EQUATION MODELLING

Jirawat Wongkhong[1]*, Chiranan Wachrakul[1], Dawruwan Thawinkan[1], Jatuphum Ketchatturat[1] & Keow Ngang Tang[2]

[1]
Faculty of Education,
Khon Kaen University,
Khon Kaen, Thailand

[2]
Institute for Research and Development in Teaching Profession for ASEAN,
Khon Kaen University,
Khon Kaen, Thailand

Corresponding Author:
Faculty of Education,
Khon Kaen University,
Khon Kaen, Thailand

E-mail:
saddneng@gmail.com

ABSTRACT

The ethical competence of primary school administrators enables them to conscientiously deal with the day-to-day challenges occurring from their professional roles in academic and professional contexts. These tasks can only be achieved if the administrators possess ethical competencies by attaching importance to ethical values and standards according to determined ethical codes in their school management. Despite the growing emphasis on school administrators' ethical competencies and little attention has been given to this issue, the purpose of this survey was constructed to examine the significant factors that impact primary school administrators in the northeast region of Thailand using a multi-level structural equation modelling. The researchers employed a multi-stage sampling method to select a total of 1280 primary school teachers and administrators from every cluster in the northeast region to be respondents. A quantitative survey design using a five-point rating scale questionnaire was utilized as an instrument. The instrument was validated its content validity using judgemental approach encompassing literature reviews and evaluated by five experts while reliability test to 30 panels with Cronbach's alpha value of 0.985 indicating the instrument was reliable. The researchers started to explore the data using assumption tests before testing whether the identified factors could fit with empirical data. At the final stage, the effects of causal relationships on primary school administrators' ethical competence were examined. The initial finding showed that a total of three factors were found to be significant factors in the ethical competence structural model within and between levels respectively. Moreover, the structural model of ethical competence of primary school administrators was congruent with the experimental data, with χ^2 = 314.088, df = 281, χ^2/df = 1.117, CFI = 0.994, TLI = 0.990, RMSEA = 0.014, SRMR within level = 0.074, and SRMR between level = 0.053. On top of that, the strongest significant factor affecting the ethical competence of primary school administrators between levels was the organisational structure (β = 0.727), and within levels was ethical intelligence (β = 0.659). Consequently, the researchers presumed that the structural ethical competence model for primary school leaders has a goodness of fit with the obtained data. Currently, there is lacking of previous studies that can be used as the foundation for the researchers to be built upon to achieve our research aims will be our limitation. Therefore, the implications of this study only limited to observed factors that affecting primary school administrators' ethical competencies in north-eastern region of Thailand. The implications of this study revealed that primary school administrators should focus on all the six factors, namely organizational structure, organizational culture, and ethical climate between levels and ethical leadership, ethical intelligence, and motivation within levels to develop their ethical competencies. Lastly, the outcomes of this study imply that the structural model is indicated to by primary school administrators to enhance their ethical competency levels as our main impact to the field of educational management.

Keywords: **Ethical Competence, Ethical Climate, Organisational Culture, Organisational Structure, Primary School Administrators**

INTRODUCTION

Ethical competence of primary school leadership is very important because it is determined by a respect for values and a persistent trust in the dignity and moralities of others. Therefore, primary school administrators who possess ethical competence can construct school cultures administered by rational, obviously, expressed potentials, relatively than cultures determined by behaviours or politics (Bromley, 2020). In other words, the ethical competence of primary school administrators in practice is attached to five principles, namely honesty, justice, respect, community, and integrity (Bromley, 2020). This constitutes the background for a moral relationship involving people and their values in the educational process (Ghiațău, 2015).

The ethical competence of primary school administrators consists of conveying ethical beliefs, producing moral judgments, and exercising fairness and respect, according to Bromley (2020). An ethical leader tends to be a good communicator who is comfortable in public speaking, leading meetings, and writing communications that evidently articulate what he or she is trying to convey. Communicating moral values and competence can develop good relationships between primary school administrators and their teams on the principles of fairness, integrity, and trust. This is because these types of relationships are built via communication that primary school administrators are communicating clearly, and concisely, and always keep their colleagues, teachers, parents/carers informed. As a result, everyone understands what the expectations are and why these expectations are consistent with primary school's values and principles (Bromley, 2020).

In addition, primary school administrators are required to possess competence in making ethical decisions (Kiral, 2021). This competence requires primary school administrators to assess each decision and only initiate those decisions that are meeting the ethical criteria. This is to make sure that the decision consensuses with the school's vision and mission, values, and principles before implementing it (Kiral, 2021). Therefore, primary school administrators with this ethical competence communicate their decisions after they have consulted with a range of stakeholders and behave in the greatest concerns of their students, subordinates, and communities. Practising justice and respect competence requires primary school administrators always perform with justice and respect for others (Gardiner & Tenuto, 2015). Therefore, primary school administrators demonstrate respect by listening thoughtfully, staying empathetic, contemplating differing standpoints equally, and appreciating their roles correspondingly (Gardiner & Tenuto, 2015).

The above discussion showed that there are several advantages for primary school administrators to possess ethical competencies such as promoting school culture (Bromley, 2020). This is because school administrators with strong ethical competencies place the feeling for a positive and supportive school culture. Therefore, primary school administrators who can create this positive and supportive school culture because of their ethical competencies where organisational members including teachers, students, or staff feel safe, respected, and valued in this environment. Moreover, primary school administrators with ethical competencies build trust and respect among stakeholders, including parents, teachers, and the community (Ghiațău, 2015). Following this line of reasoning, primary school administrators with ethical competencies are better equipped to handle ethical dilemmas and make difficult decisions (Kiral, 2021).

On the other hand, primary school administrators may face time and resource constraints that make it difficult to prioritize ethical consideration, as mentioned by Kiral (2021). In addition, most of primary school administrators may not receive sufficient training in ethics and ethical decision-making because the ethical leadership and development training courses are not indicated in Thailand Higher Education Curriculum of Educational Administration and Management programme. On top of that, primary school administrators may be influenced by their own biases and prejudices, which can lead to decisions that are unfair or discriminatory.

BACKGROUND OF STUDY

Primary schools in Thailand, like many other educational institutions, have a tendency to adhere to universal organisational structures (Prasertcharoensuk et al., 2020). Therefore, organisational structure maintains a distinct chain of command and transparent limits as to which teachers or divisions are accountable for numerous responsibilities engaged in educational management (Reeder, 2023). Generally, primary school administrators are responsible for whole-school management and supervising instructors of various disciplines are separated into groups according to class stages or educational subject matter fields. In other words, organisational structure consists of a school director, and one or more assistant directors who are school administrators to manage supervision to teachers and make schoolwide decisions, enforce discipline regulations and provincial-degree procedures, regulations, and practices. Hence, primary school directors must check instructors are efficiently tutoring students the mandatory national curriculum (Prasertcharoensuk et al., 2020). As a result, the moral encouragement by the primary school administrators to the instructors can increase the school performance, stated by Kiral (2022). This supports the idea of Cunningham and Cordeiro (2006) who emphasised that ethical management requires establishing strong and positive personal relationships with people in the school organisational structure. As a result, a clear organisation structure can help school administrators understand their subordinates' roles and responsibilities, including their ethical obligations.

Every school has distinct characteristics which perceived as organisational cultures that differ from other schools. According to Negís-Isik and Gűrsel (2013), organisational culture is one of the essential factors that affect in school efficiency and success. Therefore, school organisational culture can be a method to transform teachers' and students' behaviours and attitudes thus forming their learning model. Following this line of reasoning, organisational culture is recognised as a prominent factor in influencing the consequences of teachers and students to changes in the school environment (Flint, 2000). Tsai (2018) emphasised the relationship between organisational culture and school administrators' ethical competence as organisational culture generally involves the principle that be able to direct teachers in realising job tasks that should do and should not do. This comprises procedures, principles, and beliefs regarding their job wherein the central principles of a school organisation start with school administrators' ethical competence. This idea means that organisational culture has been part of the school community and has their understanding of what are appropriate ethical behaviours and attitudes. According to past researchers' arguments, the researchers concluded that the school culture can be influenced by its organisational structure. In other words, ethical administrators may prioritize structures that promote a culture of respect, fairness, and inclusivity.

Teresi et al. (2019) defined ethical climate as whatever is appropriate behaviour and by what means moral matters must be managed within school organisations. Teresi et al. emphasised that school administrators have to rely on the social identity method to evaluate the consequences of two-fold ethical climates, namely an ethical climate of egotism versus relationship on teachers' responses to play their essential role in organisational life. Consequently, an ethical climate can trace behavioural regulations that assist human being to realize whatever is suitable somewhat than sanctionable with school organisations. In other words, teachers struggle to fit in to their school organisation that is deemed proper and truthful. This significance of organisational ethics indicates them to devote themselves to the school organisation (Ellemers et al., 2013). Therefore, Aloustani et al. (2020) concluded their study by encouraging administrators to create the necessary conditions for a proper ethical climate through application of their ethical competence in order to increase organisational citizenship behaviour. To achieve organisational goals, administrators can use the concepts of ethical climate to enhance subordinates' satisfaction and improve their performance (Aloustani et al., 2020). In summary, primary school administrators with strong ethical competencies can play a critical role in creating a positive ethical climate within the school. This is because ethical administrators are more likely to communicate effectively about ethical issues, such as the importance of integrity, honesty, and fairness. Ultimately, this can assist them to foster climate of ethical behaviour and decision-making within the school.

Ethical leadership refers to the ability of leading teachers and producing great judgments according to a distinct collection of principles, for example objectivity, responsibility, confidence, integrity, equality, and respect, so-called the core foundation (Moore, 2022). Moore proposed a 6-point FATHER (Fairness, Accountability, Trust, Honesty, Equality, Respect) context to push ethical leadership into teacher groups and across school organisations, from individual personality construction to come up with high-performing, deferential, and inspired organisational followers. It is undeniable that school administrators with strong ethical competencies are more likely to provide effective ethical leadership to promote ethical behaviour. According to Bellaby (2017), ethical intelligence is the mindful personification and spirited claim of honourable ideologies, performs, and procedures that nurture empathy, collaboration, and partnership between persons and clusters across all exchanges and conditions, and through which uplifts humanitarian and supportable understandings, modernisation, and interconnectedness.

One of the essential requirements of primary school administrators is to possess a wide-ranging insight of enthusiasm. This is urgently required to encourage commitment in the teaching space, nurture the enthusiasm to discover and improve ability, strengthen the need to remain in school somewhat than abandon, and notify instructors in what way to deliver a motivationally caring teaching space climate (Souders, 2022). The relationship between primary school administrators' ethical competencies and ethical intelligence as well as motivation is complex and interdependent. Those primary school administrators with strong ethical competencies are more likely to have a well-developed ethical intelligence, which can assist them to identify and understand ethical issues in their school setting. Nevertheless, they are more likely to have high levels of motivation which can help them to act ethically. For example, they are committed to ethical principles and willing to act on these principles when they are facing difficult ethical decisions.

Even though the above literature reviews indicated the significant impacts of the relationships between primary school administrators' ethical competencies and organisational structure, organisational culture, ethical climate, ethical leadership, ethical intelligence, and motivation, primary school administrators are facing some problems in developing their ethical competencies, such as time and resource constraints, conflicts of interest, lack of training, biases and prejudices, and pressure from the stakeholders. For example, a school administrator may have a personal relationship with a teacher that could obscure their judgment in a disciplinary matter. Moreover, they may face pressure from stakeholders, such as parents or board members, that can influence their decision-making.

According to the above literature reviews, the researchers illustrated the expected relationships between the independent variables and dependent variable in a conceptual framework as below (refer Figure 1). The conceptual framework defines the relevant aim of this survey was to examine the causal effect of organisational structure, organisational culture, and ethical climate between the level together with ethical leadership, ethical intelligence, and motivation within levels of primary school administrators' ethical competence in the north-eastern region of Thailand. In short, this study conceptualised that the six independent variables influence primary school administrators within and between levels. The conceptual framework was used as our research process to map out how these six independent variables came together to draw coherent conclusions. Figure 1 illustrates the conceptual framework.

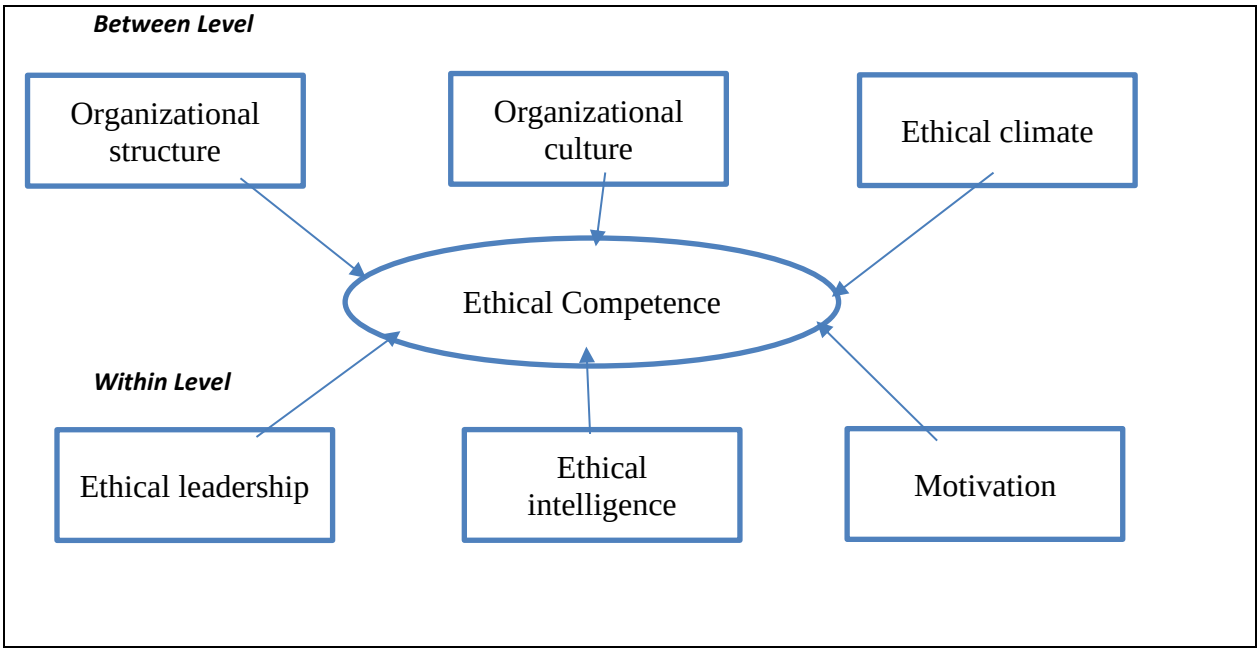

Figure 1. *Conceptual Framework*

METHODOLOGY

Population and Samples

The study included 443 university students (77.7% female, n=344; 22.3% male, n=99, Mage=22.58, age range 19-52 A multi-stage sampling method was employed which is an additional complicated method of cluster sampling which comprises two or more phases in sample collection. In modest relations, the researchers divided the population of all primary schools in the north-eastern region of Thailand into provincial groups (smaller clusters) into numerous phases, such as Primary Educational Service Area 11 to 14 by selecting a minor sample of pertinent distinct collections consistent with school size so as to make prime data gathering additional controllable (Gay, Mills, & Airasian, 2009). On top of that, the researchers applied Yamane's (1970) formula at a 95 percent confidence interval to articulate a sufficient sample size (N). The determination of sample size in this survey was computed in relation to the ratio of sample units to the parameter in composition analysis. In short, the recognised sample size is accepted as the existence of categorised manner in attaining a sufficient possibility for the required outcomes such as statistical precision, model convergence, and statistical capability for specific confirmatory factor analysis (CFA) with experimental data.

According to Hair, Black, Babin, and Anderson (2013), the ratio of parameters and samples as 20:1 is the sample size criteria to determine the required sample size. Since 32 parameters in this study managed to at least 640 primary schools as essential sample size. Moreover, Hair et al. (2013) emphasized the sample size of at least 50 or not less than 100 using the ratio between the sample and the factor analysis, for 10 to 20 parameters will be appropriate. The final stage of cluster sampling allowed the chosen samples to be divided into two sub-groupings, for example schoolteachers and directors, and randomly selected two respondents from each school respectively, made up a total of 1,280 respondents.

Design and Instrument of the Study

The researchers employed an online descriptive survey research design to take up the bulk of surveying that was considered conclusive in its quantitative nature (Gay et al., 2009). This research design allowed the researchers to pre-plan and structure in design so that the data collected could be statistically inferred on the population as mentioned above. A structured questionnaire was employed for our target respondents to complete over the internet by filling out a Google Forms survey. The researchers tried projective techniques to avoid social desirable bias by asking the respondents to observe and report on the behaviours and attitudes of their school administrators instead of about their own behavior or attitudes. The researchers customized the Google Forms questions and answers from the least to the most practical levels. The survey questionnaire was administered in the Thai language so that the respondents understood well about the questions. After the researchers had created a survey using Google Forms, they shared it with respondents to collect their responses.

There were seven variables, namely ethical competence, organisational structure, organisational culture, ethical climate, ethical leadership, ethical intelligence, and motivation, comprised of three sections with a total of 51 items created as an instrument. Section A of the questionnaire consisted of 10 items, intending to gather data regarding primary school administrators' ethical competency levels. Section B was specifically used to gauge the frequency of factors that affect the ethical competence of primary school administrators between levels, namely organisational structure (7 items), organisational culture (8 items), and ethical climate (7 items), giving a total of 22 items. On the other hand, Section C of the questionnaire was applied to assess the frequency of factors that affect the ethical competence of primary school administrators within level, namely ethical leadership (7 items), ethical intelligence (4 items), and motivation (8 items), giving a total of 19 items. To measure the respondents' responses toward the variables practised by primary school administrators, a five-point Likert scale was utilized.

Pilot Study and Data Analysis

A pilot study was organized as a fundamental stage of the research process to evaluate the potential for full-scale study. The researchers conducted content validity involving evaluation of the questionnaire to ensure that it included all the items that were essential and eliminated undesirable items to each construct domain that researchers investigated (Boudreau et al., 2001). The judgmental approach was employed to establish content validity encompassing literature reviews and then followed by the evaluation by the five experts or panels of pilot study. Therefore, the procedure of judgmental approach of content validity required the researchers to be presented with five experts in order to facilitate validation. From the panel's feedback and comments, some modifications were made to the original instrument before researchers shared it with respondents. This was followed by pilot testing of the reliability of the instrument to 30 school administrators and teachers in 15 primary schools. They were chosen because their structure and population were the same as the target respondents and excluded from the full-scale study. The Cronbach's alpha value obtained was 0.985 indicating that all seven variables had higher Cronbach's alpha values and the researchers determined that the questionnaire was reliable and good to apply.

Structural Equation Modelling (SEM) was used in this study to explore a combination of factors that affect primary school administrators' ethical competence in terms of between and within levels. SEM analysis was found suitable because it helped in investigating the direct and indirect complex relationship between the causal variables in a single model that was primary school administrators' ethical competence. On top of that, SEM was used by the researchers in testing the overall fitness of the primary school administrators' ethical competence model even in the presence of multiple relationships. This is because SEM analysis provides us with the values of absolute fitness, incremental fitness, and parsimonious fitness indexes to verify the accuracy of the model (Jain & Jena, 2020). As a result, the researchers used a CFA to analyse the structural equation model for its goodness of fit.

After the researchers tested the goodness of fit of the structural ethical competence model, they applied hierarchical linear modelling (HLM) to analyse disparity in the effect variables while the predictor variables are at differing

classified stages at the final stage. The aim of using HLM was to clarify the association of the variables within levels and the interaction between the distinct stages of every variable on the dependent variable. The findings of HLM would provide the high-level precision and minimal acceptances that could be applied to decide the appropriateness of the structural ethical competence model (Prasertcharoensuk et al., 2017).

FINDINGS

The findings of this survey are discovered according to the aims of the study indicated above. The researchers started to explore the collected data and report the assumption tests using Normality Tests, Kaiser-Meyer-Olkin (KMO) Measure, Barlett's Test of Sphericity, Multicollinearity Test, and Intraclass Correlation (ICC). Then, the researchers continued to examine the goodness of fit of the primary school administrators' ethical competence factors with the empirical data. Finally, the researchers examined the effects of causal relationships on primary school administrators' ethical competence within and between levels.

Assumption Tests

1. Normality Tests

The researchers employed skewness and kurtosis to evaluate the outline of the dispersal of the collected data. Skewness is an assessment of the irregularity of the possibility dispersal of a random variable regarding its mean meanwhile kurtosis is an assessment of whether or not a dispersal is a heavy-tailed or light-tailed relative to a normal dispersal. These two numerical measures of shape were applied to assess for normality. If skewness is not near to zero, then the data set is not normally dispersed (Hair et al., 2013). The findings of the Normality Test employing a critical ratio skewness score, recognised as critical ratio scores on the multivariate kurtosis line showed a score of 2.291 (<+2.58), meanwhile the critical ratio score for kurtosis and skewness of every single factor was not larger than +2.58. This implies that the data were normally dispersed as the critical ratio skewness score was less than +2.58 (Byrne, 2016).

2. Kaiser-Meyer-Olkin (KMO) and Barlett's Test of Sphericity

The researchers continued to analyse the appropriateness of raw data for factor analysis before finding estimates of the parameters of the ethical competence structural model. There are two major matters that the researchers should consider before deciding whether the collected data is applicable for CFA or not, and that is the intensity of the connection between factors and sample size (Pallant, 2013). Consequently, the researchers used KMO to confirm the adequacy of the sample size (Kaiser, 1974), and Barlett's Test of Sphericity (Bartlett, 1954) was used to measure the strength of the relationship between factors.

Angsuchoti (2009) introduced rules of thumb to determine the acceptable value of KMO must be more than 0.8 in order to confirm the adequacy of sampling to conduct the SEM assessment. The finding of the KMO value was 0.963 indicating that collected data was at a very good level to be analysed. On the other hand, the researchers used Barlett's Test of Sphericity to evaluate the multivariate normality in accordance with data distribution. Barlett's Test of Sphericity was used to confirm whether the distinctive correlation matrix was an identity matrix or not in conformity with the null hypothesis. Therefore, if the significant values are more than 0.05 for the variables, this implies an identity matrix was generated by the collected data. It was then worth mentioning that the variables must assess at the interval level (Bartlett, 1954). Since the finding of a correlation between variables from Barlett's Test of Sphericity was 6289.319 at a significant level of 0.01, this indicates that all variables were found correlated and could be analysed (Kraiwan, 2013).

3. Multicollinearity Test and Intraclass Correlation Coefficient

Multicollinearity happens while independent variables in a regression model are linked. However, multicollinearity problems will happen when the researchers fit the model and interpret the findings if the variables are highly correlated between each other. This is because the primary aim of regression analysis is to distinguish the

correlations exist between independent and dependent variables (Hair et al., 2013). Therefore, the clarification of a regression coefficient is that it signifies the mean change in the dependent variable for each unit change in an independent variable when researchers hold the other independent variables constant. In this study, the multicollinearity problem did not occur as the Multicollinearity Test showed the correlation coefficient between variables was between 0.303 to 0.602 at a 0.01 significant level. The finding indicates the idea of allowing the researchers to change the value of one independent variable without changing other variables because the correlation coefficient was not strong enough (Tuksino, 2016).

The last assumption test was Intraclass Correlation Coefficient (ICC) used to measure the reliability of ratings or measurements for clusters. This means that data were compiled as groupings or separated into groupings, so-called inter-rater reliability. In short, a high ICC near to 1 signifies high-level similarity between estimates from the identical group while a low ICC near to zero implies that rates from the identical group are not similar (Glen, n.d.). The finding of ICC ranged from 0.332 to 0.591. This implies that the variables had sufficient group-level variability to perform a multi-level analysis (Glen, n.d.).

The Goodness of Fit Indexes for Structural Ethical Competence Model with the Empirical Data

The findings of the linear structural equation model of factors that affect primary school administrators were discovered to have the goodness of fit with distinct data or highly correlated with experimental data, with χ^2 = 314.088, df = 281, p-value = .085, CFI = .994, TLI = .990, RMSEA = .014, SRMR within levels = .074, SRMR between levels = .053, and χ^2 /df = 1.117. This finding discovered that the structural ethical competence model was acceptable and interconnected with the CFI score and TLI score which were near to 1, the RMSEA score < .06, the SRMR score < .08, and χ^2 /df <2. The findings were found to achieve the cut-off criteria for fit indexes in covariance structure analysis, recommended by Hu and Bentler (1999). In other words, the researchers checked with the experts' rules of thumb and their proposed cut-off scores to assess fit indices in SEM as illustrated in Table 1. In conclusion, these assessments were used to verify in what way connected real scores were fixing to the expected scores in the primary school administrators' ethical competence model. This is further supported by Ullman (2001) who emphasised that the overall structural ethical competence model is acceptable or not in SEM depending on the fit indices.

Table 1: *Clarification of Goodness of Fit Indexes for Structural Ethical Competence Model*

Goodness of Fit Indexes	Real scores	Rules of thumb / cut-off scores	Experts	Interpretation
χ^2/df	1.117	<2 <5	Ullman (2001) Schumacker and Lomax (2004)	Fulfil
χ^2 *p*	314.09 0.085	*p*>0.05		Fulfil
CFI	0.994	≥ 0.95	Hu and Bentler (1999)	Fulfil
TLI	0.990	≥ 0.95	Hu and Bentler (1999)	Fulfil
RMSEA	0.014	<0.06 <0.07	Hu and Bentler (1999) Steiger (2007)	Fulfil
SRMR within level	0.074	<0.08	Tuksino (2016)	Fulfil
SRMR between level	0.053			

The Effects of Causal Relationships on Primary School Administrators' Ethical Competence

The findings of HLM showed that there were direct effects of three independent variables, namely organisational structure, organisational culture, and ethical climate between levels on primary administrators' ethical competence at a .01 significant level. The effects of these three factors with the coefficient effect sizes being .727, .630, and .518, respectively were found direct, positive, and significant toward primary school administrators' ethical competence. The finding of the R-squared value between levels as 0.879 determined the proportion of variance in the primary school administrators' ethical competence that could be explained by the three factors was 87.9 percent (Hair et al., 2013). In short, the high R-squared values (0.879) showed the data well fit the regression model thus reinforcing the finding of the goodness of fit between levels. On top of that, the most significant predictor variable was organisational structure (β = 0.727), followed by organisational culture (β = 0.630). The least capacity predictor variable was ethical climate (β = 0.518).

On the other hand, HLM analysis indicated that there were direct effects of the other three independent variables, namely ethical leadership, ethical intelligence, and motivation within levels on primary school administrators' ethical competence at a .01 significant level. The effects of these three factors with the coefficient effect sizes being .507, .659, and .481, respectively were identified as the direct, positive, significant factors toward primary school administrators' ethical competence. The finding of the R-squared value between levels as 0.877 determined the proportion of variance in the primary school administrators' ethical competence that could be explained by the three factors was 87.7 percent (Hair et al., 2013). In conclusion, the high R-squared values (0.877) showed the data well fit the regression model thus reinforcing the finding of the goodness of fit for within levels. On top of that, the most significant predictor variable was ethical intelligence (β = 0.659), followed by ethical leadership (β = 0.507). The least capacity predictor variable was motivation (β = 0.481). In conclusion, the beta weight for the three predictor variables was the predicted difference in the outcome variable in standard units for a one standard deviation increase on the given predictor variable holding the other two predictors constant in the respective between or within levels. Table 2 demonstrates the effects of causal relationship on the structural ethical competence model.

Table 2: *The Effects of Causal Relationship on the Structural Ethical Competence Model*

Between Level							
Ethical competence	Organisational structure		Organisational culture		Ethical climate		R^2
	Direct Impact	Total Impact	Direct Impact	Total Impact	Direct Impact	Total Impact	
β	0.727	0.727	0.630	0.630	0.518	0.518	0.879
S.E.	0.031		0.029		0.030		
t	23.451**		21.724**		17.266**		
Within Level							
	Ethical leadership		Ethical intelligence		Motivation		
β	0.507	0.507	0.659	0.659	0.481	0.481	0.877
S.E.	0.087		0.082		0.083		
t	5.827**		8.036**		5.975**		
x^2= 314.088, df = 281, x^2/df= 1.117, *p*-value = 0.0850, CFI = 0.994, TLI = 0.990, RMSEA = 0.014, SRMR for within level = 0.074, SRMR for between level = 0.053							

DISCUSSION AND CONCLUSION

The findings on examination of the structural ethical competence model in terms of organisational structure, organizational climate, ethical climate, ethical leadership, ethical intelligence, and motivation factors are found affecting primary school administrators' ethical competencies. The findings revealed that there are congruent with

empirical data (x^2= 314.088, df = 281, x^2/df= 1.117, *p*-value = 0.0850, CFI = 0.994, TLI = 0.990, RMSEA = 0.014, SRMR for within level = 0.074, SRMR for between level = 0.053). The implications of this finding have strengthened the significance of organisational structure factor (Prasertcharoensuk et al., 2020), organisational culture factor (Tsai, 2018), and ethical climate factor (Aloustani et al., 2020) toward primary school administrators' ethical competencies between levels. Nevertheless, the factors within levels of primary school administrators' ethical competencies also found consistent with empirical data, thus the findings were corresponding to the past research findings, for example ethical leadership factor (Moore, 2022), ethical intelligence factor (Bellaby, 2017), and motivation factor (Souders, 2022). Specifically, all independent variables led to the development of primary school administrators' ethical competencies, as elucidated in the conceptual framework.

The significant contribution of this study is the structural ethical competence model for primary school administrators to understand ethical values and why these ethical values should be applied in their school organizations in the local context of Thailand. The findings of this study imply that primary school administrators need to possess ethical competence by explaining to their teachers and supporting ethical values with their behaviors while they are demonstrating the ethical values that are accepted as moral and showing these ethical values in their administrative activities. Moreover, the finding also showed that the structural ethical competence model was predicted and confirmed its goodness of fit. Following this line of reasoning, the findings proved that all six factors have strong, constructive, and substantial effects on the ethical competence of primary school administrators both within and between levels.

In addition, the structural ethical competence model revealed that the highest prediction effect was the organisational structure factor, followed by organisational culture factor, and the ethical climate factor between levels. Likewise, the ethical intelligence factor was the highest prediction effect, followed by ethical leadership, and motivation factors, in this order, toward primary school administrators' ethical competence within level. Therefore, school administrators are encouraged to raise their expectations through these six factors in order to enhance their ethical competency level. On top of that, the findings of this study are in parallel with previous researchers' findings, such as Bromley (2020), Gardiner and Tenuto (2015), and Kiral (2021). In conclusion, the goodness of fit findings can help future researchers to predict primary school administrators' ethical competence development while they are utilizing the structural ethical competence model.

In conclusion, the researchers would like to highlight the following central ideas. Firstly, ethical competence should deserve exceptional attention in the field of educational administration and management research, since it is a fundamental feature of school administrators who need to perform their administrative roles. If we neglect those factors the relationship between school administrators and teachers may lead to dysfunction. Secondly, ethical competence includes ethical leadership, ethical intelligence, and motivation that support the primary school administrators as instinctive performers and moral models for the teachers and students. Thirdly, an appropriate approach to enhance primary school administrators is to train them to resort to both theoretical knowledge and practical knowledge. Finally, the essence of ethical values is to add those ethical values to their knowledge in the field of professional judgment for their contextualization in education.

ACKNOWLEDGMENT

The authors gratefully acknowledge the use of service and facilities of the Faculty of Education, Khon Kaen University, Khon Kaen 40002, Thailand. The contents of this manuscript are derived from the first author's doctoral dissertation thus fulfilling the Ph.D. requirement of Khon Kaen University.

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