



The Assessment of Fit Data Model Feasibility of the Teachers' Pedagogic Competency Variables

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This study examines the relationship among the variables that affect the pedagogic competence of Islamic education teachers in Gorontalo. These consist of effective classroom management, effective teaching practices, technology skills, and effective assessment variables. Furthermore, the respondents in this study are 320 Islamic religious education teachers selected by a cluster sampling technique. Here in after, the data were analyzed using a structural equation modeling (SEM) approach due to the implementation of multivariate analysis of the relationship among variables with the help of LISREL in order to describe the structural model. The results indicated that not all relationships among variables possessed a positive and significant influence on Islamic religious teachers' pedagogic competence. In addition, this study showed only three relationships among the latent variables that have a positive and significant effect on teachers pedagogical competence, namely effective classroom management (A) to effective teaching practice (B) with a T-value of 5.37, effective classroom management (A) to technological skills (C) with a T-value of 4.10, and effective teaching practice (B) to technology skill (C) with a T-value of 2.55. Thus, teachers' pedagogical competence plays a significant role in achieving successful learning by considering to link one variable to another.

Keywords: Islamic education teachers, pedagogic competence, assessment, teacher, fit data model

INTRODUCTION

The quality of teachers is an essential factor that affects the quality of education. It determines the education quality as a process and the success of learning which depends on the professional skill of the teacher (Lisnawati, 2018). Teacher quality becomes

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global attention in every developed country. It has been strongly related to the critics and consensus that require the standard of teacher quality and how to improve it due to its positive effects on learning achievement and the quality of education in a country. In addition, the significance of teachers' competence for student progression has become a crucial topic in educational research (Blömeke et al., 2022). Therefore, the teacher-student relationship is a significant aspect of the classroom environment (Talebi et al., 2015).

A qualified teacher has a high performance and a significant and substantive effect on learning achievement. Students' achievement caused by the high performance usually leads to the good performance of students (Blömeke et al., 2022). Martorana et al., (2021) stated that teachers, social workers, and pedagogues have a fundamental role in creating a greater openness for the majority of the citizens to compare and exchange questions from other historical and geographical contexts. Therefore, the improvement of factors that influenced the quality of teachers is essential to be conducted, especially in Indonesia. In line with that, the government provides requirements for teachers in the Constitution of 2005 Number 14 concerning Teachers and Lecturers Article 10, states that teacher competencies include pedagogical, personality, social, and professional competencies. Teachers should join the training to improve their pedagogic competence, and their performance in teaching and assessing (Yusnita et al., 2018). Besides, the problem or issue of creative and humanistic renewal of vocational pedagogical education is considered (Nargiza, 2021). In addition, Irmawati et al., (2017) recommended that future researchers should conduct additional studies that include other aspects of pedagogic competence development, especially those that deal with teacher preparation and student academic research. Sudargini & Purwanto (2020) found a significant effect of pedagogical ability on the learning goals regarding learning assessment. Furthermore, Parker et al., (2016) have encouraged additional steps to develop distinctive pedagogies for learning across different settings and content areas. Hence, Omar et al., (2020) suggested that teachers holistic traits of knowledge, skills, and attitudes inclusively enhance their level of competence in becoming effective teachers. Nonetheless, Blömeke et al., (2022) showed that there is no direct influence of teacher skills to students' achievement because of discussed their findings concerning the teacher-competence-as-a-continuum model and future research.

There are many factors that support teachers' pedagogic competencies, for instance, effective classroom management, effective teaching practices, technology skills, and effective assessment as latent variables that affect teacher pedagogical competence (Nessipbayeva, 2012a) which become crucial and a challenge from the perspective of professional teachers in the 21st century (Jurčić, 2014). Fauth et al., (2019) also found that teachers' competence which became pedagogical content knowledge, self-efficacy, and enthusiasm for teaching was positively related to student's interest, and self-efficacy was positively related to student's achievement by analyzing through the three dimensions of teaching quality, namely cognitive activation, supportive climate, and classroom management related to teacher-student interactions. However, these competencies tend to be minimum professional standards implemented by teachers who will enhance the role of the teaching profession, including in Indonesia. It indicates that

if the teachers' pedagogic competence is low, the quality of the learning process will be low, so competency is crucial for the teacher and needs to be improved continuously. Sumual & Ali (2017) indicated that teaching experience and skills are negatively correlated ($r = -0.403$), and the relationship is significant with p-value of 0.000. It means that the longer the teaching experience, the lower the teaching ability is. Moreover, there is a relationship among teachers' competence, performance, and emotional intelligence (Wahyuddin, 2016). Further, Wubbels et al., (2006) found that many elements of the professional ability of teachers to teach a cultural class can be considered as the aspects of generic teaching competence. Therefore, teachers' competence determines the quality of learning that affects students' progression.

Thus, this research needs to examine the relationship of the factors that affect teachers' competence. The results will show that based on the feasibility assessment of the level of conformity between the data and the model from the data analysis with SEM through LISREL 8.51 software assistance, and the model was fit in accordance with the general rules based on suggested for the feasibility of a model. The results of this study can be used to improve the pedagogic competence of the teachers of Islamic Religious Education, and generally for all teachers at various levels of education, junior and senior high schools.

METHOD

This study employs a quantitative approach to examine the relationship among the latent variables namely effective classroom management, effective teaching practices, technology skills, and effective assessment. Consequently, it is the proper approach to test the theories by examining the relationship among variables (Creswell, 2014). Further, the sample of this research consists of 320 respondents taken by using cluster sampling technique by taking into account the characteristics of respondents (gender, educational qualifications, age, and years of service) and the level of education of primary schools, middle schools, and high schools spread over five districts (*Boalemo, Bone Bolango, Gorontalo, Gorontalo Utara, dan Pohuwato*) and one city (*Kota Gorontalo*) in Gorontalo provinces as shown in the following table 1.

Table 1
The data of Islamic education teachers in Gorontalo Province

| No | Area | The number of Islamic education teachers | | | | | Total |
|-------|-----------------|--|---------------|-------------|---------------|------|-------|
| | | Elementary School | Junior School | High School | Senior School | High | |
| 1 | Boalemo | 135 | 49 | | 29 | | 213 |
| 2 | Bone Bolango | 119 | 38 | | 19 | | 176 |
| 3 | Gorontalo | 91 | 64 | | 44 | | 199 |
| 4 | Gorontalo Utara | 67 | 46 | | 23 | | 136 |
| 5 | Kota Gorontalo | 94 | 32 | | 26 | | 152 |
| 6 | Pohuwato | 72 | 44 | | 25 | | 141 |
| Total | | 578 | 273 | | 166 | | 1017 |

Gorontalo province is one of 32 provinces in territory of Indonesia where extends from East to West in the North of Sulawesi Island with an area of 11,257.07 km². This

province located on the "mouth" of the Pacific Ocean that overlooks the Korean Republic, Japan, and Latin America. It has only two seasons, rainy and dry season with 1,136,559 of population. In 2017, it was hown that the data of Islamic Religious Education teachers amounted to 1017 teachers

Next, the questionnaire is self-made before being implemented as the primary data-gathering tool. Researchers proved the validity and reliability estimation of the instrument to know its reliability and consistency in measuring teacher pedagogic competence. Questionnaires are created by referring to the framework of variable and theoretical relationships consisting of four latent variables and 14 observed variables using the Likert scale, always = 5, often = 4, sometimes = 3, rarely = 2, and never = 1. The questions in the questionnaire refer to the four dimensions of ideal pedagogic competencies that teachers must have: effective classroom management, effective teaching practices, technology skills, and successful assessment (Nessipbayeva, 2012b).

Then, according to Chin (cite in Hutabarat, 2003), the analysis in structural equation modeling is divided into structure-based-analysis and component-based analysis. In this study, structural equation modeling used with Linear analysis Structure Relationship (LISREL) aims to explore the direct and indirect relationship between latent in influencing the pedagogical competence of Islamic religious education teachers. Data analysis techniques using Structural Equation Modelling (SEM) through the help of the LISREL version 8.51 program by first preparing the data in the form of IBM SPSS data with a file of type *. Sav using SPSS version 24.00 for the needs of data analysis in this study, the naming for each variable using the code as presented in table 2 below:

Table 2
The naming of latent variable and observed variable

| Latent Variable | Code | Observed Variable | Code |
|---------------------------------------|------|--|------|
| <i>Effective classroom management</i> | A | 1. Identifying the characteristics of learners. | A1 |
| | | 2. Planning and Organizing the learning activities in classroom. | A2 |
| | | 3. Communicating effectively, empathically and courteously to learners in Classroom. | A3 |
| | | 4. Creating positive relationships and cooperation | A4 |
| <i>Effective teaching practices</i> | B | 1. Mastering the theory of learning and the principles of learning | B1 |
| | | 1. Conducting educational learning. | B2 |
| | | 2. Facilitating the development of potential learners | B3 |
| <i>Technology Skill</i> | C | 1. The availability | C1 |
| | | 2. The suitability with the characteristics of learners | C2 |
| | | 3. The suitability with the material and time allocation | C3 |
| | | 4. The skill in using it. | C4 |
| <i>Effective Assessment</i> | D | 1. Designing and conducting process evaluation and study result. | D1 |
| | | 2. Analyzing the results of process evaluation and study result. | D2 |
| | | 3. Utilizing the results of learning assessment | D3 |

To prove a model of the latent variable relationship theory, which has been proposed to measure teacher pedagogic competence through four latent variables A, B, C, and D with fourteen observed variables are presented in the following figure.

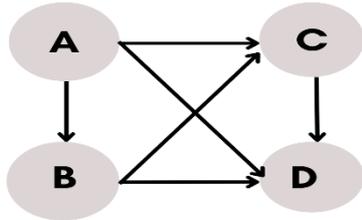


Figure 1
The model of interrelationship among variables’ theory

FINDINGS

For data processing which used SEM with the help of software LISREL 8.51 for sample data 320 respondents, it was obtained the result of output path diagram as seen in Table 3:

Table 3
Goodness of fit statistic model sample data 320

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 352,92 | Not Fit |
| P-Value | ≥ 0,05 | 0,00000 | Not Fit |
| RMSEA | ≤ 0, 08 | 0,112 | Not Fit |
| Goodness of Fit Index (GFI) | ≥ 0, 90 | 0,86 | Not Fit |
| Adjusted Goodness of Fit Index (AGFI) | ≥ 0, 90 | 0,80 | Not Fit |
| Normed Fit Index (NFI) | ≥ 0, 90 | 0,86 | Not Fit |
| Comparative Fit Index (CFI) | ≥ 0,95 | 0,89 | Not Fit |
| Incremental Fit Index (IFI) | ≥ 0,95 | 0,89 | Not Fit |

Based on the data path diagram results for 320 sample data, the result was not fit and it was obtained Chi Square 352.69, df = 71, P-value = 0,00000 and RMSE = 0.112 value had not reached the standard set of a fit model where Chi Square 0.1, <1 x df = 2, RMSE = 0.08 and p-value > 0.05, so it was necessary to modify where the measurement errors on some items were allowed or freely correlated with each other by selecting the largest modification indexes as shown in the table 4-9:

Table 4

Goodness of fit statistic model modification indices let the errors of A2 and A1 correlate

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 287,23 | Not Fit |
| P-Value | $\geq 0,05$ | 0,00000 | Not Fit |
| RMSEA | $\leq 0,08$ | 0,099 | Not Fit |
| Goodness of Fit Index (GFI) | $\geq 0,90$ | 0,89 | Not Fit |
| Adjusted Goodness of Fit Index (AGFI) | $\geq 0,90$ | 0,83 | Not Fit |
| Normed Fit Index (NFI) | $\geq 0,90$ | 0,89 | Not Fit |
| Comparative Fit Index (CFI) | $\geq 0,95$ | 0,92 | Not Fit |
| Incremental Fit Index (IFI) | $\geq 0,95$ | 0,92 | Not Fit |

Table 5

Goodness of fit statistic model modification indices let the errors of C3 and C1 correlate

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 226,08 | Not Fit |
| P-Value | $\geq 0,05$ | 0,00000 | Not Fit |
| RMSEA | $\leq 0,08$ | 0,084 | Not Fit |
| Goodness of Fit Index (GFI) | $\geq 0,90$ | 0,91 | Fit |
| Adjusted Goodness of Fit Index (AGFI) | $\geq 0,90$ | 0,86 | Not Fit |
| Normed Fit Index (NFI) | $\geq 0,90$ | 0,91 | Fit |
| Comparative Fit Index (CFI) | $\geq 0,95$ | 0,93 | Not Fit |
| Incremental Fit Index (IFI) | $\geq 0,95$ | 0,93 | Not Fit |

Table 6

Goodness of fit statistic model modification indices let the errors of C3 and C2 correlate

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 202,37 | Not Fit |
| P-Value | $\geq 0,05$ | 0,00000 | Not Fit |
| RMSEA | $\leq 0,08$ | 0,079 | Fit |
| Goodness of Fit Index (GFI) | $\geq 0,90$ | 0,92 | Fit |
| Adjusted Goodness of Fit Index (AGFI) | $\geq 0,90$ | 0,87 | Not Fit |
| Normed Fit Index (NFI) | $\geq 0,90$ | 0,92 | Fit |
| Comparative Fit Index (CFI) | $\geq 0,95$ | 0,94 | Not Fit |
| Incremental Fit Index (IFI) | $\geq 0,95$ | 0,94 | Not Fit |

Table 7

Goodness of fit statistic model modification indices let the errors of C2 and C1 correlate

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 166,32 | Not Fit |
| P-Value | $\geq 0,05$ | 0,00000 | Not Fit |
| RMSEA | $\leq 0,08$ | 0,068 | Fit |
| Goodness of Fit Index (GFI) | $\geq 0,90$ | 0,93 | Fit |
| Adjusted Goodness of Fit Index (AGFI) | $\geq 0,90$ | 0,89 | Not Fit |
| Normed Fit Index (NFI) | $\geq 0,90$ | 0,92 | Fit |
| Comparative Fit Index (CFI) | $\geq 0,95$ | 0,95 | Fit |
| Incremental Fit Index (IFI) | $\geq 0,95$ | 0,95 | Fit |

Table 8

Goodness of fit statistic model modification indices let the errors of A4 and A3 correlate

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 157,86 | Not Fit |
| P-Value | ≥ 0,05 | 0,00000 | Not Fit |
| RMSEA | ≤ 0, 08 | 0,066 | Fit |
| Goodness of Fit Index (GFI) | ≥ 0, 90 | 0,93 | Fit |
| Adjusted Goodness of Fit Index (AGFI) | ≥ 0, 90 | 0,89 | Not Fit |
| Normed Fit Index (NFI) | ≥ 0, 90 | 0,93 | Fit |
| Comparative Fit Index (CFI) | ≥ 0,95 | 0,96 | Fit |
| Incremental Fit Index (IFI) | ≥ 0,95 | 0,96 | Fit |

Table 9

Goodness of fit statistic model modification indices let the errors of B3 and B2 correlate

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 151,32 | Not Fit |
| P-Value | ≥ 0,05 | 0,00000 | Not Fit |
| RMSEA | ≤ 0, 08 | 0,065 | Fit |
| Goodness of Fit Index (GFI) | ≥ 0, 90 | 0,94 | Fit |
| Adjusted Goodness of Fit Index (AGFI) | ≥ 0, 90 | 0,90 | Fit |
| Normed Fit Index (NFI) | ≥ 0, 90 | 0,94 | Fit |
| Comparative Fit Index (CFI) | ≥ 0,95 | 0,96 | Fit |
| Incremental Fit Index (IFI) | ≥ 0,95 | 0,96 | Fit |

Based on the results of the largest modification indexes and output path diagram, the result is still not fit obtained Chi Square 151,32, df = 65, P-value = 0,00000, although the value of RMSE = 0.065 has met the criteria <0.08, so the modification needs to be done by selecting the largest modification indexes in the same group of observed variables, but in the output results there is no longer the largest modification indexes in the same group of observed variables, while the output obtained is not fit, so the next modification step is done by reducing the number of samples by trying to reduce the number of samples that found each modification of 20 samples to obtain the fit criteria as shown in the table 9-15:

Table 10

Goodness of fit statistic model modification sample data 300

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 141,83 | Not Fit |
| P-Value | ≥ 0,05 | 0,00000 | Not Fit |
| RMSEA | ≤ 0, 08 | 0,063 | Fit |
| Goodness of Fit Index (GFI) | ≥ 0, 90 | 0,94 | Fit |
| Adjusted Goodness of Fit Index (AGFI) | ≥ 0, 90 | 0,90 | Fit |
| Normed Fit Index (NFI) | ≥ 0, 90 | 0,94 | Fit |
| Comparative Fit Index (CFI) | ≥ 0,95 | 0,96 | Fit |
| Incremental Fit Index (IFI) | ≥ 0,95 | 0,96 | Fit |

Table 11

Goodness of fit statistic model modification sample data 280

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 132,35 | Not Fit |
| P-Value | $\geq 0,05$ | 0,00000 | Not Fit |
| RMSEA | $\leq 0,08$ | 0,061 | Fit |
| Goodness of Fit Index (GFI) | $\geq 0,90$ | 0,94 | Fit |
| Adjusted Goodness of Fit Index (AGFI) | $\geq 0,90$ | 0,90 | Fit |
| Normed Fit Index (NFI) | $\geq 0,90$ | 0,94 | Fit |
| Comparative Fit Index (CFI) | $\geq 0,95$ | 0,97 | Fit |
| Incremental Fit Index (IFI) | $\geq 0,95$ | 0,97 | Fit |

Table 12

Goodness of fit statistic model modification sample data 260

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 122,86 | Fit |
| P-Value | $\geq 0,05$ | 0,00000 | Not Fit |
| RMSEA | $\leq 0,08$ | 0,059 | Fit |
| Goodness of Fit Index (GFI) | $\geq 0,90$ | 0,94 | Fit |
| Adjusted Goodness of Fit Index (AGFI) | $\geq 0,90$ | 0,90 | Fit |
| Normed Fit Index (NFI) | $\geq 0,90$ | 0,94 | Fit |
| Comparative Fit Index (CFI) | $\geq 0,95$ | 0,97 | Fit |
| Incremental Fit Index (IFI) | $\geq 0,95$ | 0,97 | Fit |

Table 13

Goodness of fit statistic model modification sample data 240

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 113,37 | Fit |
| P-Value | $\geq 0,05$ | 0,00019 | Not Fit |
| RMSEA | $\leq 0,08$ | 0,056 | Fit |
| Goodness of Fit Index (GFI) | $\geq 0,90$ | 0,94 | Fit |
| Adjusted Goodness of Fit Index (AGFI) | $\geq 0,90$ | 0,90 | Fit |
| Normed Fit Index (NFI) | $\geq 0,90$ | 0,94 | Fit |
| Comparative Fit Index (CFI) | $\geq 0,95$ | 0,97 | Fit |
| Incremental Fit Index (IFI) | $\geq 0,95$ | 0,97 | Fit |

Table 14

Goodness of fit statistic model modification sample data 220

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 103,89 | Fit |
| P-Value | $\geq 0,05$ | 0,00156 | Not Fit |
| RMSEA | $\leq 0,08$ | 0,052 | Fit |
| Goodness of Fit Index (GFI) | $\geq 0,90$ | 0,94 | Fit |
| Adjusted Goodness of Fit Index (AGFI) | $\geq 0,90$ | 0,90 | Fit |
| Normed Fit Index (NFI) | $\geq 0,90$ | 0,94 | Fit |
| Comparative Fit Index (CFI) | $\geq 0,95$ | 0,97 | Fit |
| Incremental Fit Index (IFI) | $\geq 0,95$ | 0,97 | Fit |

Table 15
Goodness of fit statistic model modification sample data 200

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|---------|
| Chi-Square | ≤ 2 DF | 94,40 | Fit |
| P-Value | $\geq 0,05$ | 0,01004 | Not Fit |
| RMSEA | $\leq 0,08$ | 0,048 | Fit |
| Goodness of Fit Index (GFI) | $\geq 0,90$ | 0,94 | Fit |
| Adjusted Goodness of Fit Index (AGFI) | $\geq 0,90$ | 0,90 | Fit |
| Normed Fit Index (NFI) | $\geq 0,90$ | 0,94 | Fit |
| Comparative Fit Index (CFI) | $\geq 0,95$ | 0,98 | Fit |
| Incremental Fit Index (IFI) | $\geq 0,95$ | 0,98 | Fit |

Table 16
Goodness of fit statistic model modification sample data 180

| Criteria | Cut of Value | Output of Value | Status |
|---------------------------------------|--------------|-----------------|--------|
| Chi-Square | ≤ 2 DF | 75,42 | Fit |
| P-Value | $\geq 0,05$ | 0,17691 | Fit |
| RMSEA | $\leq 0,08$ | 0,032 | Fit |
| Goodness of Fit Index (GFI) | $\geq 0,90$ | 0,94 | Fit |
| Adjusted Goodness of Fit Index (AGFI) | $\geq 0,90$ | 0,90 | Fit |
| Normed Fit Index (NFI) | $\geq 0,90$ | 0,94 | Fit |
| Comparative Fit Index (CFI) | $\geq 0,95$ | 0,99 | Fit |
| Incremental Fit Index (IFI) | $\geq 0,95$ | 0,99 | Fit |

Based on the result of modification at 180 samples, it was obtained the result of output with Chi Square 75,42, $df = 65$, P-value = 0,1761, and RMSE = 0.032. All these values have reached the established standard of a fit model in which Chi Square is $0.1, <1 \times df = 2$, RMSE = 0.08 and $p\text{-value} > 0.05$. Thus, the theory constructs that fulfill the fit model criteria, on the results of modifications with sample data of 180 respondents from 8 criteria of model match testing indicate that all model fit criteria are fulfilled then it can be concluded that the model is fit. This is in accordance with the general rule suggested for the feasibility of a model as shown by the path at the following diagram:

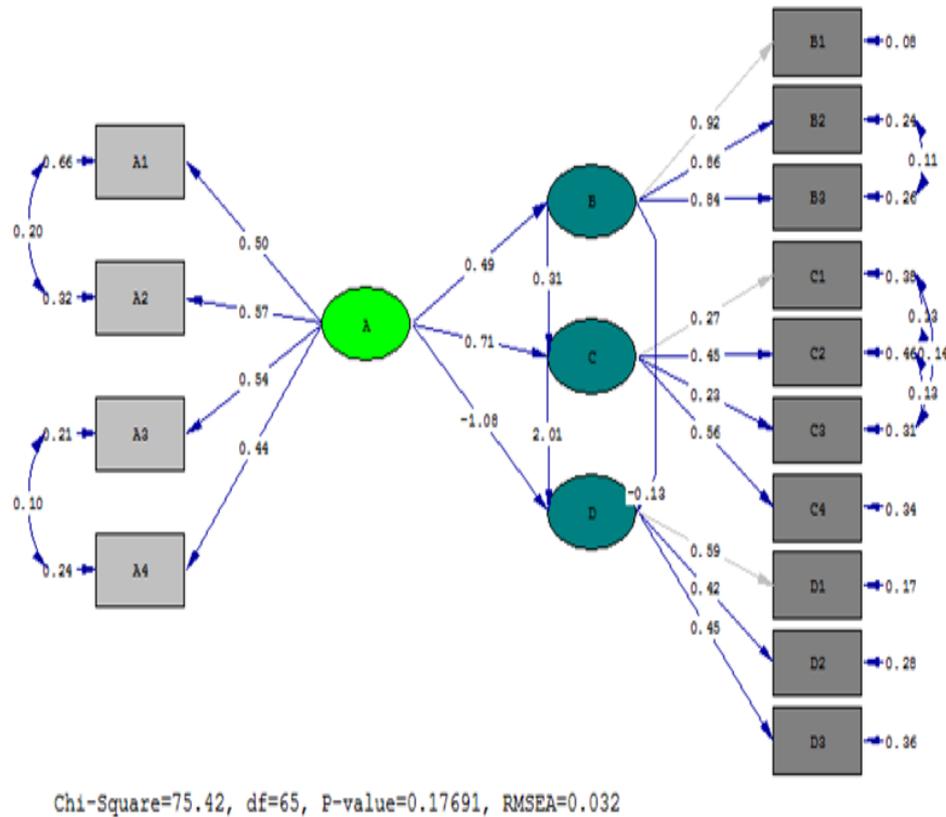


Figure 2
Path diagram model FIT sample data

Based on the path diagram above, it is seen that the RSMEA, Chi-square and p-value values have fulfilled the fit model requirements. Furthermore, it analyzes the suitability of the structural model which shows the causal relationship (causal) or the influence of one latent variable to another latent variable. The results of testing on the structural model were summarized in the table 17 below:

Table 17
Path coefficient and meaning of influence between variables

| Latent Variable | Path Coefficient | T-value ($\geq 1,96$) | Conclusion |
|-----------------|------------------|-------------------------|------------------------------|
| A – B | 0,49 | 5.37 | Positive and significant |
| A – C | 0,71 | 4.10 | Positive and significant |
| A – D | -1,08 | -1,02 | Negative and not significant |
| B – C | 0,31 | 2.55 | Positive and significant |
| B – D | -0,13 | -0,28 | Negative and not significant |
| C – D | 0,21 | 1.40 | Positive and not significant |

The data in the table above shows that the path coefficient between variables A and C is highest compared to other variables is 0.71 and has a significant influence. This is also in line with the total value of the effects discussed earlier, in which the total effect value of variables A and C is higher than other variables. Of the 6 paths analyzed, there are 3 paths that have positive and significant influence that is the influence of latent variable A to B, the influence of variable A to C, and the influence of variable B to C. Then, the other three lines there are two paths that have a negative influence and not significant which are named as the influence of variables A to D, and the variable B to D. While 1 lane is positively influenced but not significant, that is the variable C to D. Therefore, the results of this study indicated that not all relationships among variables have a positive and significant influence on Islamic religious teachers' pedagogical competence. In addition, only three relationships among variables have a positive and significant effect on the competence of Islamic religious education teachers.

DISCUSSION

This section elaborates in-depth on the assessment of the feasibility of the data fit model of the teacher pedagogic competence variable that finds not all relationships between latent variables have a positive and significant influence on Islamic religious teachers' pedagogical competence in Gorontalo, so this study categorizes all relationships between latent variables into three paths. For instance, a path has a positive and significant influence, a positive but not significant, and a positive but not significant influence. As the following explanation;

a) Paths that have a positive and significant relationship consist of effective classroom management (A) to effective teaching practices (B), effective classroom management (A) to technology skills (C), and effective teaching practices (B) to technology skills (C).

Effective classroom management (A) and the effective teaching practices as the latent variables (B) have a positive and significant influence. Slater & Main (2020) state that classroom management skills are crucial for effective teaching practices and consequently form an integral part of undergraduate teaching degrees. Next, Sims et al., (2021) state that effective classroom management is of crucial significance to the success of universal. Niemeyer et al., (2014) say that classroom management is an essential skill for any teacher and suppose a guide for training alternate-route-teachers on effective classroom management strategies through role-play simulation. Then, Adeyemo (2012) expresses that classroom management skills or techniques have a strong and positive influence on student achievements. To maximize classroom management, Nisar & Khan (2019) recommend that a training to increase teachers lead to ensure learning activity. In addition, effective classroom management sets the stage for effective learning that is important to the whole teaching-learning process because it offers learners an ideal learning environment (Lavanya, 2017). Therefore, effective classroom management (A) as latent variable is an essential and crucial skill needed in learning, and it has a positive and significant influence on teaching variable (B) by 0.49 for the path coefficient.

These findings are similar to with a study conducted by Wirastudi about classroom management. She found that contribution of classroom management to the effective learning process is 16 %, but learning management to the effective learning process is only 11. 5% (Wirastuti, 2020). Next, Amalia, (2019) said a teacher's ability to manage class determines successful learning. Then, Irgashevich (2022) stated that technology seems in our life not so long ago, but modern people cannot live without it at the moment. It also took place in the education system by supporting the learning process. It also took place in the education system by supporting the learning process. Yusuf & Al-Banawi (2013) added that technology-increased learning potentially leads to a revolution in learning, making high-quality, cost-effective education available to many people. Albrahim (2020) also investigates six categories and competencies needed to teach in the online process for learning environments, one of them being technological skills. Furthermore, Raja & Nagasubramani (2018) express that the role of using technology in the teaching process is more enjoyable for learners. Their findings supported the result of this study that effective classroom management (A) and effective teaching practices (B) as the latent variables have a positive and significant influence on the technology skills variable (C). This finding affects religious teachers' competency, as shown in Table 16 for the Path Coefficient of 0.49 and T-value of 5.37.

b) Paths that have negative and not significant relationship consist of effective classroom management (A) to effective assessment (D) variable, and effective teaching practices (B) to effective assessment (D) variable.

Sigler & Rhee (2014) state that an assessment is a reality of life for management educators, but the ideal assessment plan can be completely elusive. Gaytan & McEwen (2007) mentioned that effective assessment techniques include projects, portfolios, self-assessments, peer evaluations, and weekly assignments with immediate feedback. However, most teachers showed difficulties with assessing (El-Emam, 2014). Consequently, effective classroom management (A) has a negative and insignificant relationship with the effective assessment variable (D) to influence religious teachers competency by the path coefficient of 1.08 and T-value of 1.02. However, Adeyemo (2012) conveyed that classroom management skills are a strong and positive influence on student achievements. Its achievement is reflected in the assessment result. Unfortunately, teachers have not used the assessment tool for its intended purpose (Sigler & Rhee, 2014). Therefore, classroom management has not a positive influence on assessment skills. It is related to teachers' difficulties in implementing assessments in the learning process. This study also showed that effective teaching practices (B) have a negative and insignificant relationship on effective assessment (D). Confait (2014) says that effective teaching involves students' voices, effective classroom management, and teaching meaningfully and related topics. Tuckman (1995) defined effective teaching as either that a) causes students to learn or b) is accepted by teachers and other educational professionals. Last, Stronge (2018) stated that an essential knowledge is a crucial factor in teaching. It expands well beyond the insight of learners and their culture and community.

Based on those explanations, effective teaching practice (B) consider classroom management, students, teachers, and knowledge, but the skills assessment is a separated part of learning activities or teaching practices. On other side, Gurney (2007) argued that a foundation for good teaching is activity to assess. Unfortunately, these activities are not always used as intended (Sigler & Rhee, 2014) in the learning process. El-Emam (2014) added that most teachers showed difficulties in doing the assessments. Furthermore, Lumadi (2017) found some crucial challenges for assessing in the classroom for instance, policy interpretation, assessment planning, assessment implementing, and assessment methods. It leads to result of this study which effective teaching practice (B) has a negative and insignificant relationship on effective assesment (D) to influence religius teachers competency.

c) A path that has a positive and not significant relationship is the technology skill (C) to effective assessment (D)

Last, a path that has a positive but insignificant relationship to influence religious teacher competency. That path is the technology skill (C) to effective assessment (D). With fast-growing technology, education has to adapt and use technology constantly as a tool to teach and learn. Simões et al., (2022) showed that educational and enjoyment of computer attitudes positively influence computer confidence. Baylor & Ritchie, (2002) added that the impact of technology on higher-order thinking skills by educators' prediction openness to change. Then, T.Ottenbreit-Leftwich et al., (2010) indicated that educators used technology to convey professionalism, for instance, by creating classroom materials and increasing classroom management. Therefore, this study prove that technology skill (C) has a positive relationship with effective assessment (D) variable to influence religious teachers' competency. Moreover, Albee (2003) offered a model for other institutions that face the same obstacle to asset the technology skills needed by elementary preservice educators.

However, technological skills as a latent variable have no significant relationship towards effective assessment variable especially in influencing the Islamic teachers' competency. Paradoxically, technology is a tool to facilitate educators in the teaching-learning process. Hence, technology skill is one of the abilities of teachers for teaching learning process. Nevertheless, this path does not have a significant influence on effective assessment. Baylor & Ritchie, (2002) stated that negatively influenced technology use when learners work alone. Integration of technology for teaching subject matter needs knowledge not only of content, technology, and pedagogy, but also the relationship between variables that affect teachers' competency. Without integration, technology skill variable (C) has an insignificant relationship to effective assessment variable to influence teachers' competency. As shown in Table 16, technology skill (C) to effective assessment (D) has an insignificant relationship to influence Islamic teacher competency by T-value of 1.40.

Based on the discussion above, this study indicates that not all paths between variables have a positive and significant relationship to influence Islamic religious teachers' pedagogic competence. In addition, the result showed three relationships between variables that have a positive and significant relationship to influence teachers

competence, namely effective classroom management (A) to effective teaching practice (B) with a T-value of 5.37, effective classroom management (A) to technological skills (C) with a T-value of 4.10, and effective teaching practice (B) to technology skill (C) with a T-value of 2.55. Next, two paths have a negative and not significant relationship to teachers' competency. They are effective classroom management (A) to effective assessment (D) variable with a T-value of -1,02, and effective teaching practices (B) to effective assessment (D) variable with a T-value of -0,28. Moreover, this study found a path that has a positive relationship but is not significant to influence religious teachers' competency, the technology skill (C) to effective assessment (D) with a T-value of 1.40. Thus, these results convey some of the consideration to religious teachers to pay attention to a positive and significant relationship between the variables for increasing or maximizing pedagogical competency without ignoring the other relationships of variables.

CONCLUSIONS

This study shows that latent variables which measure teacher pedagogic competence fulfill the criteria of fit model data. The structural model used is called the structural model of development because it changes the relationship model among variables as suggested by modification index. That is conducted by choosing the largest modification indexes, but in the latent variable with the observed group of variables. The results of the data analysis show that all observable variables contribute significantly to the latent variables of effective classroom management, effective teaching practices, technology skills, and effective assessment although T-values are not all significant paths based on several path coefficients. The results emphasize that not all relationships between variables have a positive and significant relationship to influence the Islamic religious teachers' pedagogical competence. Therefore, this study found three relationships between variables that have a positive and significant relationship to teachers' pedagogic competence, namely the effective classroom management (A) to effective teaching practice (B) with a T-value of 5.37, effective classroom management (A) to Technological Skills (C) with a T-value of 4.10, and effective teaching practice (B) to technology skill (C) with a T-value of 2.55. Thus, teachers' pedagogical competence plays a crucial role in achieving learning by considering the linking or relationship between variables. It has broad implications for improving teacher pedagogic competence, not only for teachers of Islamic Religious Education but also for all teachers based on education level. For this purpose, the data presented in this article need to develop more not only for the Islamic religious education teachers, but also for all teachers with the larger data to be more valid and reliable.

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