

# Relationship between Preschool Teachers' Knowledge and Attitude with their Practice towards Active Learning Approach

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To Link this Article: <http://dx.doi.org/10.6007/IJARPED/v13-i1/20662>

DOI:10.6007/IJARPED/v13-i1/20662

*Published Online:* 18 February 2024

## Abstract

Active learning compatible with the 21st-century learning approach is an essential teaching and learning strategy to create a world-class educational system. The successful implementation of an active learning approach can establish a paradigm aimed at transitioning Malaysia's preschool education from a teacher-centered to a child-centered approach. As an effort to incorporate an active learning approach in the classroom, the readiness of the preschool teachers is the key to success. Based on the prior study, the research on the relationship between teachers' readiness level "active learning approach" in the early childhood education (ECE) field is still a gap. Therefore, this study was conducted to identify preschool teachers' readiness levels in the aspects of knowledge, attitude, and practice. The main aim of this study is to examine the relationship between preschool teachers' knowledge and attitude with their practice towards an active learning approach in private preschools. A quantitative approach with a cross-sectional survey design was used to achieve the research objective of this study. In total, this study consists of 362 private preschool teachers in the state of Johor, Malaysia, who were selected through the simple random sampling technique. In this study, a questionnaire was used as the data collection method. After completing data collection, SPSS was used to analyze the data in descriptive and inferential ways. The finding of this result indicates that preschool teachers' knowledge (mean = 3.24), attitude (mean = 3.19), and practice (mean = 3.17) level are only at a moderate-high level. Besides, multiple linear regression tests showed a strong and significant relationship between preschool teachers' knowledge and attitude with their practice towards an active learning approach ( $R^2 = 0.519$ ). In addition, it is suggested that further research could involve determining the preschool teachers' readiness level based on their demographic characteristics to provide a clearer picture of whether the teachers' knowledge, attitude and practice level influenced by their academic qualifications and teaching experience or not. In short, the stakeholders in the ECE field play an important role in providing preschool teachers adequate support towards the application of active learning activities which in turn help the children in holistic development.

**Keywords:** Active Learning, Preschool Teachers, Knowledge, Attitude, Practice

**Introduction**

In the Malaysia Education Development Plan (PPPM 2013-2025), the Ministry of Education (MOE) Malaysia has launched a framework for early childhood educators and teachers to deliver quality teaching and learning (Zin et al., 2019). The purpose of this PPPM 2013-2025 is to raise children holistically and fulfil their potential as natural explorers to ensure they are able to succeed in the 21<sup>st</sup> century world (KARLIDAĞ, 2022). In PPPM 2013-2015, one of the main goals is promoting and implementing an active learning approach to engage children in the teaching and learning process actively. Educators and teachers must integrate these active learning approaches in early childhood education (ECE), which can properly develop knowledgeable and competitive young Malaysians, transforming Malaysia's education system into a world-class (Braslauskienė et al., 2022).

According to Leng et al (2022), active learning is an approach in which children can actively participate and have the authority to decide on their learning. Besides, active learning is defined as a focused approach to child-centred learning, as opposed to the traditional approach in which the children can passively receive the knowledge presented by the teacher (Jf & Azmi, 2022). In the active learning approach, teachers are responsible for creating meaningful educational experiences that can fully grab their attention in learning. This is vital to help the children solve real-world problems through observation, practice, and exploration. In other words, the active learning process involves the whole child, who is responsible for the learning process (Braslauskienė et al., 2022). They need to set their academic goals for their studies to know what they have learned, understood, made mistakes, and achieved (Maidin, 2022). The most important thing in active learning is to participate actively so that the learners can do analysis, integration, evaluation, and reflection on their learning (Jf & Azmi, 2022; KARLIDAĞ, 2022).

Chew and Ismail (2020) assert that the application of the active learning approach in the teaching and learning process is not a novel concept in Malaysia. Consequently, the Ministry of Education (MOE) in Malaysia introduced the National Preschool Standard Curriculum (KSPK) in 2017, emphasizing the implementation of the active learning approach. The KSPK curriculum has been introduced in all preschools, whether government or private kindergartens, under the MOE (MOE, 2017). It aims to provide effective teaching and learning strategies for children between four to six years old to develop holistically, including their physical, cognitive, language, emotion, and social development (MOE, 2017). Besides, Hardiyanti et al (2021) found that the application of an active learning approach can help children achieve their full potential. Therefore, in the active learning process, preschool teacher plays an important role in creating effective teaching and learning strategies that benefit children's learning.

Preschool teachers not only play the roles of observer, instructor, listener, and mentor but also serve as implementers in creating practical learning approaches (Matsushita et al., 2018). Therefore, preschool teachers need to be prepared with sufficient knowledge, attitude, and practice level to implement this active learning approach in the classroom. Belda-Medina and Calvo-Ferrer (2022) found that teachers with high knowledge and a positive attitude towards active learning tended to practice meaningful teaching and learning strategies in the classroom. A knowledgeable and nurturing positive attitude towards an active learning approach may assist preschool teachers in planning activities appropriate to the child's developmental level, needs, strengths, and weaknesses (Bremner, 2021). Therefore, it clearly

shows that preschool teachers with a high level of commitment to their knowledge, attitudes, and practices are essential for building high-quality early education for children.

### **Problem Statement**

In early childhood education (ECE) settings, the active learning approach is relatively common in preschool and associated with the child's 21st-century learning skill development. Preschool teachers' knowledge and attitudes are the key indicators affecting their perception and teaching practices towards an active learning approach (Belda-Medina & Calvo-Ferrer, 2022). However, there is a lack of prior research studies on the active learning approach; most of the studies have focused on the child-centered learning approach, such as play-based learning, higher-order thinking skills (HOTs), Information and Communication Technology (ICT), and so on (Nachiappan et al., 2019; Chew & Ismail, 2020; Nikolopoulou, 2020). If there is an existing study related to this research topic, it is more on examining preschool teachers' perspectives towards active learning. Consequently, the study on assessing teachers' knowledge, attitudes, and behaviours remains incomplete and limited. This also clearly demonstrates a deficiency in research about the correlation between the knowledge and attitude of preschool instructors and their implementation of an active learning method.

In Malaysia, it cannot be denied that there are a few studies related to preschool teachers' readiness level for the application of active learning. The study by Mokhlis (2021) found that most of the preschool teachers working in KEMAS preschool have a high level of readiness in applying this active learning approach. This study is supported by Towpek and Mohamed (2023), who found that many teachers of Integrated preschools use child-centered learning as their teaching style. However, previous studies on the knowledge, attitude, and practice level of preschool teachers toward the application of active learning in private preschools are still limited. If there is an existing study related to this research topic, the research topic is more focused on the readiness level of teachers or educators in primary, secondary, and tertiary-level education context (Chen & Tsai, 2021). Therefore, it is clearly shown that the application of an active learning approach in a preschool setting is still ambiguous and controversial. Also, there is a positive and strong relationship between preschool teachers' knowledge, attitude, and practice in applying this effective approach is still questionable. Hence, this study aims to examine whether there is a relationship between preschool teachers' knowledge and attitude with their practice towards an active learning approach at a private preschool.

Ho: There is no significant relationship between preschool teachers' knowledge and attitude with their practice towards an active learning approach at private preschools.

### **Literature Review**

Since the early 20<sup>th</sup> century, scholars in the fields of philosophy and psychology have recognised the need to include an active learning method into preschool education. Among the early years researchers who explored the concept of active learning is John Dewey, who popularized the progressive education philosophy and experiential learning theory, which states that children can learn best through a hands-on approach or learning by doing (Pardjono, 2016). He emphasized that the children's life experiences are irrelevant to the acquisition of knowledge, hence developing them to become independent thinkers (Follari, 2019). Besides that, John Dewey believed that meaningful learning could be provided by

actively integrating the active learning approach in the classroom and allowing the children to explore (Pardjono, 2016). Hence, John Dewey states that education should be based on children's development and interests instead of teachers rigidly imposing on the child (Follari, 2019). So, the main role of the educator is to uncover children's interests, needs, thoughts, and feelings (Bremner, 2021). In addition, the discussion of the prior research study related to this research topic will be divided into two subsections as follows

#### *Preschool Teachers' Knowledge, Attitude and Practice*

Kumar and Mohamed (2022) state that preschool teachers' knowledge, attitude, and practice have been a long-established variable for ECE researchers to identify teachers' readiness levels. According to Layang dan Mahamod (2019), knowledge can be defined as a field of knowledge that one has mastered to form one's actions. In the context of this study, preschool teachers' knowledge includes knowledge of pedagogy, content, teaching aids, and learning environment in active learning planning. According to Sakellariou dan Banou (2020), most preschool teachers in Greece show a high level of knowledge to implement active learning activities in the teaching and learning process. This study is further supported by Stein et al (2019), who found that many preschool teachers in Estonia are concerned with the application of active learning by shifting their teaching approaches to "Child-Centered". Meanwhile, local studies have reported different findings, such as the knowledge level of most preschool teachers in Selangor is only at a moderate level (Leng et al., 2021). The primary cause for their lack of understanding about this active learning strategy is the prevalence of untrained instructors in the area of ECE (Leng et al., 2021).

According to Chear and Yunus (2019), attitude is the perception and thought of an individual, which may influence their actions and practices. In the context of this study, attitude can be seen as the teachers' personality or behavior, either positive or negative in planning this active learning approach. In the study of Tuuling et al (2019), they found that most Estonia preschool teachers showed a positive mindset towards the implementation of active learning activities. They think that the application of active learning approach is good, easy, fun, and meaningful. However, according to Leng et al (2021), most of the Selangor preschool teachers in Malaysia showed a negative attitude towards the active learning approach. Greaves and Bahous (2021) found that many of them still did not apply this active learning due to a lack of skills, self-confidence, and motivation. Hence, they are still using traditional teaching methods in the teaching and learning process, which consist of whiteboards, textbooks, and flashcards (Tuuling et al., 2019). The results of this finding are parallel with the findings of Ibrahim et al (2019), who found that most of private preschool teachers in Malaysia did not see active learning as a meaningful and valuable approach for children's holistic development.

According to Low (2022), practice is a habit or behavior practiced by an individual in a daily routine. Layang and Mahamod (2019) stated that teachers' practice is related to teachers' behaviour in implementing a set of teaching and learning strategies. In this study, practice is a teaching style used by preschool teachers to help the children achieve their learning outcomes. Teachers' practice of an active learning approach should cover the determination of teaching and learning standards, considering the diversity of children, community and parent involvement, and others (Low, 2022). According to Stein et al. (2019), the level of teacher practice in Sweden is only moderate because most teachers still use traditional methods. Similarly, the findings of a local survey indicate that the quality of teacher practice is subpar, as many still rely on the traditional 'Chalk and Talk' approach throughout the teaching and learning process (Layang & Mahamod, 2019).

### ***Relationship between Preschool Teachers' Knowledge and Attitude with their Practice towards Active Learning Approach***

In a preschool setting, the constantly changing early childhood education (ECE) system requires teachers' readiness from knowledge, attitude, and practice to master implementing an active learning approach. According to Layang and Mahamod (2019), the teachers' practice level in implementing an active learning approach in preschool settings is associated with their knowledge and attitude level. According to Mulatu and Bezabih (2018), the readiness of teachers in terms of knowledge and attitudes plays an important role because they are the key indicators to increase their practice level towards active learning activities. This statement has been supported by Li and Li (2019) in China, who found a significant relationship between the level of knowledge and the teacher's attitude with the level of their practice towards implementing active learning activities. This is because highly knowledgeable teachers will know the meaningful and effective approach to help children in achieving learning goals. In addition, Hanapi et al (2021) found that a teacher's attitude level is also one of the important elements in influencing the implementation of active learning methods. An inappropriate learning environment with an unattractive classroom atmosphere can be built if the teachers have a negative attitude towards implementing active learning activities (Layang & Mahamod, 2019). This is because they will continue using traditional methods as teaching styles, which will decrease the children's motivation and attention in the learning process, affecting their holistic development.

In Malaysia, scholars also reported that the teachers' knowledge, attitude, and practice levels are often interrelated with each other. According to Hata and Mahmud (2020), they found that the level of knowledge and attitude of teachers have a positive and significant relationship with their practice level towards the application of active learning activities. This study's findings are supported by Hanapi et al (2021), who showed that teachers who are not highly knowledgeable and have a negative attitude will affect the teaching and learning process and weaken children's interest and motivation in learning. Mohamed and Surat (2023) revealed that active learning has not yet been applied effectively in a kindergarten because the teacher's readiness to take responsibility remains at a moderate level. Therefore, it can be concluded that the practice of active learning is dependent on the knowledge and positive attitude of preschool teachers.

### **Methodology**

#### ***Research Design***

A survey research design with a quantitative approach was used to achieve the research objective. Specifically, this study uses a cross-sectional design to examine the relationship between preschool teachers' knowledge and attitude (independent variables) with their practice (dependent variables) towards active learning approaches at private preschools. According to Ghazali dan Sufean (2021), cross-sectional survey research design is suitable for identifying knowledge, attitudes, traits of the population and hence covers a large sample size.

#### ***Population and Sample of Study***

The population of this study consisted of 5000 preschool teachers who worked in the state of Johor, Malaysia based on National Preschool Information System (SMPK). As to the sample size determination chart proposed by Krejcie and Morgan (1970), if the population size is

more than 5000 persons, a minimum sample size of 357 individuals should be used. The research had a sample size of 362 private preschool teachers. Besides that, the researcher used a simple random sampling technique to ensure that each private preschool teacher in the state of Johor had an equal opportunity to participate in this study. Table 1 shows the descriptive statistics of the study respondents' demographic profiles.

Table 1  
*Respondents' Demographic Profil (n = 362)*

No	Category	Frequency	Percentage (%)
1	Gender:		
	• Female	350	96.7
	• Male	12	3.3
2	Age:		
	• 18 years and below	27	7.5
	• 18 - 24 years	168	46.4
	• 25 - 34 years	127	35.1
	• 35 - 44 years	31	8.6
	• 45 years and above	9	2.5
3	Ethnic:		
	• Malay	26	7.2
	• Chinese	316	87.3
	• Indian	17	4.7
	• Others	3	0.8
4	Working Experiences		
	• Less than 5 years	266	73.5
	• 6 - 10 years	43	11.9
	• 11 - 15 years	26	7.2
	• 16 – 20 years	15	4.1
	• 21 years and above	12	3.3
5	Qualification Level		
	• Malaysian Certificate of Education (SPM)	72	19.89
	• Diploma in Education	77	21.30
	• Bachelor's Degrees in Education	81	22.38
	Master's Degrees in Education	65	18.01
	Others	67	18.51

Based on the descriptive analysis, it was found that many female teachers followed this study compared to male teachers, the percentage of female teachers at 96.7% (n = 350) and 3.3% (n = 12) male teachers. As for age, it showed 7.5% of respondents (n = 27) aged less than 18 years old, 46.4% respondents (n = 168) aged 18 to 24 years old, 35.1 respondents (n = 127) aged 25 to 44 years old, 8.6% respondents (n = 31) aged 35 to 44 years old and 2.5% respondents (n = 9) aged over 45 years old. Meanwhile, it shows that the 87.3% (n = 316) of Chinese teachers involved in this study, 7.2% (n = 26) were Malay teachers, 4.7% (n = 17) were Indian teachers and followed by 0.8% (n = 3) teachers with others ethnic. Regarding teaching experiences, 73.5% (n = 266) teachers have less than 5 years of experience, 11.9% (n = 43) teachers have experience from 6 to 10 years, 7.2% (n = 26) teachers have experience from 11

to 15 years, 4.1% (n = 15) teachers have experience from 16 to 20 years, and only 3.3% (n = 12) teachers have teaching experience that more than 21 years. As for qualification level, 19.89% (n = 72) teachers have Malaysian Certificate of Education (SPM), 21.30% (n = 77) were Diploma holders in education, 22.38% (n = 81) teachers qualified with Bachelor's Degrees in Education, 18.01% (n = 65) were Master's Degrees holder and the remaining 18.51% (n = 67) teachers have other qualifications.

### **Research Instrument**

The researcher adapted the questionnaire used from previous studies that related to the topic of "Play-Based Learning", which is entitled "Preschool Teachers' Knowledge, Attitude, Practice and Challenges Regarding Play Based Instruction" (Adane, 2020). This modification of questionnaire was used to consist the needs of this research topic related to "Active Learning", which are still limited in the field of ECE. This questionnaire comprises 37 items in four sections, namely section A, B, C, and D. In section A, respondents' demography profile consists of 5 items, including gender, age, ethnic, teaching experience, and qualification level. Section B consists of 10 questions to assess preschool instructors' knowledge about active learning. Then, Section C is made up of nine items to obtain relevant responses on preschool teachers' attitude level towards active learning. In section D, the construct of the preschool teacher's practice level comprises 12 items. Besides that, a four-point Likert scale ranging from 1 to 4 representing responses of "Strongly Disagree" (SD), "Disagree" (D), "Agree" (A), and "Strongly Agree" (SA) was used to scoring section B, C and D.

This questionnaire was distributed to four experts with more than 7 years of experience in the field of early childhood education to address the issue of content validity. This questionnaire showed a good item-content validity index (I-CVI) for section B, C, and D, which were 0.925, 0.961, and 0.940. Besides, a pilot study was carried out in the districts of Muar and Segamat, Johor state to determine the construct validity of this research instrument. This questionnaire obtains the accepted construct validity because the factor loading value for each item is more than >0.6. In addition, the Cronbach alpha value ( $\alpha$ ) was used to demonstrate the reliability of this questionnaire. It clearly showed that this research instrument obtained a good level of internal consistency, as shown in Table 2.

Table 2

*Cronbach Alpha Value for Each Construct*

No	Construct	Item	Cronbach Alpha ( $\alpha$ )
1	Teachers' Knowledge	6 - 15	0.841
2	Teachers' Attitude	16 - 24	0.813
3	Teachers' Practice	25 - 36	0.859

### **Data Collection Method and Analysis Technique**

Before commencing this research, the researchers referred to the National Preschool Information System (SMPK) website and listed all the private preschools in the state of Johor, Malaysia. Then, the researchers conducted a real study by distributing the 'Google Form' link to the kindergartens' Facebook group via Messenger and requesting principals' help to distribute it to the preschool teachers. The questionnaire also consists of the "Consent Letter", which mentions the purpose of this research and the prerequisites for following this

study. Therefore, the researcher also distributed the questionnaire to social media, including Facebook, Instagram, and Xiao Hong Shu, by giving RM1. This incentive is provided for the respondents willing to follow this study and meet the requirements through Touch 'n Go E-wallet. During the data collection process, the researcher imposed a restriction of allowing just one answer per email in order to enhance the dependability of the study findings.

Overall, the data collection process took two months from August to September 2023. After collecting 362 sets of questionnaires, Statistical Package for the Social Sciences (SPSS) version 29 was used to analyze the research data in the form of descriptive and inferential statistics. Descriptive analysis was used to analyze respondents' demographic profiles by reporting the frequency and percentage. In contrast, the mean and standard deviation of descriptive statistics were used to analyse the knowledge, attitude, and practice level of the preschool. The mean scale for the four-point Likert scale, adapted from Alico and Guimba (2015) was used to interpret preschool teachers' knowledge, attitude, and practice level towards the implementation of active learning, as shown in Table 3.

Table 3

*Interpretation of Mean Score: Four-Point Likert Scale*

Mean Score	Interpretation
1.00 - 1.74	Low
1.75 - 2.49	Moderate - Low
2.50 - 3.24	Moderate - High
3.51 - 4.00	High

Resource: Alico & Guimba (2015)

On the other hand, multiple linear regression inferential statistics was run to examine the relationship between preschool teachers' knowledge and attitude with their practice towards implementing the active learning approach. The effect size measure for the multiple regression test was adopted from the interpretation suggested by Cohen (1988), as illustrated in Table 4.

Table 4

*Effect Size Measures for Multiple Regression Test*

f <sup>2</sup> Values	Interpretation
f <sup>2</sup> = 0.02	Small
f <sup>2</sup> = 0.15	Medium
f <sup>2</sup> = 0.35	Large

Resource: Jacob Cohen (1988)

## Results and Discussion

### *Preschool Teachers' Knowledge, Attitude and Practice*

Table 5 exhibits the overall mean score and standard deviation for the private preschool teachers' level of knowledge, attitude, and practice toward implementing the active learning approach in Johor, Malaysia.



Table 5

*Overall Mean Score on the Teachers' Readiness towards Active Learning*

No	Construct	Mean	Standard Deviation	Score Mean Interpretation
1	Knowledge	3.24	0.59	Moderate-High
2	Attitude	3.19	0.61	Moderate-High
3	Practice	3.17	0.66	Moderate-High

This descriptive analysis shows that private preschool teachers in the state of Johor, Malaysia demonstrate a moderate-high level of knowledge in terms of active learning approach with a mean score of 3.24 and a standard deviation value of 0.59. The results of this study are contrary to previous studies, which found that the majority of preschool teachers have obtained a high level of knowledge in the implementation of active learning activities. Meanwhile, this study's findings align with the local study, which found that most of private preschool teachers in Malaysia are not incredibly knowledgeable about the application of active learning strategies due to their qualification level (Stein et al., 2019). This statement is supported by Leng et al (2022), who found that most private preschool administrators still do not care about the importance of hiring qualified preschool teachers in the field of ECE to ease the financial burden through underpaid teachers' salaries. Hence, this study discovered that unqualified teachers are the key indicators that cause their knowledge gaps in implementing effective pedagogy in teaching and learning.

Besides that, this result found that private preschool teachers have more positive attitudes towards the implementation of active learning activities but remain at a moderate-high level with a mean score of 3.19 and a standard deviation value of 0.61. This study's results align with the local study, which found that private preschool teachers in the state of Selangor were perceived negatively towards the implementation of active learning activities (Leng et al., 2021). According to Greaves and Bahous (2021), most private preschool teachers still do not apply active learning due to a lack of skills, self-confidence, and exposure, hence decreasing their motivation to plan active learning approaches in various ways. This statement is supported by the study of Leng et al (2021), who reported that skilled and knowledgeable teachers are important for building positive attitudes in implementing active learning activities. Also, they will feel that integrating active learning strategies is fun, comfortable, and easy (Tuuling et al., 2019). At the same time, they are more able to overcome a series of problems they face while implementing active learning (Greaves & Bahous, 2021). In short, preschool teachers did not demonstrate a highly positive attitude towards the use of active learning as the majority of them were unskilled in applying various types of active learning strategies and faced the problem of integrating this effective approach in the teaching and learning process.

In addition, the result finding revealed that private preschool teachers have a moderate-high level regarding practicing an active learning approach in the classroom, with a mean score of 3.17 and a standard deviation value of 0.74. The findings of this study align with the foreign study conducted by Lev et al (2020), which is that the level of practice of preschool teachers in Estonia is only at a moderate level due to the constraints they face. This statement has supported the study of Mulatu and Bezabih (2018), which proved that parents who are more focused on worksheet activities that focus on academic achievement and do not fully support active learning activities are the main challenges that teachers face in applying an active learning approach. In addition, they indicated that the lack of formal (seminar/workshop) and

informal training (website, YouTube, etc.) is the primary factor that diminishes teachers' motivation to use the active learning strategy, which seeks to foster the holistic development of children (Mulatu & Bezabih, 2018; Lev et al., 2020). Hence, it shows that active learning implementation in the preschool setting is strongly associated with parental support and inadequate content knowledge due to insufficient training.

### ***Relationship between Preschool Teachers' Knowledge and Attitude with their Practice towards Active Learning Approach***

A standard multiple linear regression test was performed to examine the relationship between preschool teachers' knowledge and attitude level with their practice level in the implementation of an active learning approach. According to Pallant (2011), several assumptions were made before interpreting the multiple linear regression test. First, preliminary analyses show that the variables are normally distributed and are free from univariate outliers. Second, the inspection of no violation on the assumption of normality, linearity, and homoscedasticity through scatterplot. Third, there is no multicollinearity issue between the constructs, which means that the tolerance value between constructs is more than 0.1, and the 'VIF' value is less than 10. The maximum allowable value for the 'Mahalanobis Distances' involving two independent variables is 13.82.

Table 6  
*Model Summary*

<b>Model</b>	<b>R</b>	<b>R<sup>2</sup></b>	<b>Adjusted R Square</b>	<b>Std. Error of the Estimate</b>
1	.720 <sup>a</sup>	.519	.516	2.67752

a. Predictors: (Constant), Knowledge, Attitude

b. Dependent Variable: Practice

Table 7  
*ANOVA<sup>a</sup>*

<b>Model</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
1	Regression	2772.016	2	1386.008	193.33	.000 <sup>b</sup>
	Residual	2573.708	359	7.169		
	Total	5345.724	361			

a. Dependent Variable: Practice

b. Predictors: (Constant), Knowledge, Attitude

Table 8  
Coefficients

Model	Unstandardized Coefficients			Standardized Coefficients	t	Sig.
		B	Std Error			
1	(Constant)	9.505	1.619		5.871	.000
	Knowledge	.278	.060	.243	4.661	.000
	Attitude	.704	.069	.527	10.128	.000

Based on the statistical output of this multiple regression test, it has reported the results of this study, which aims to determine the relationship between the preschool teachers' knowledge (IV<sup>1</sup>) and attitude (IV<sup>2</sup>) with their practice level (DV) towards the implementation of active learning approach. This multiple linear regression test shows that the null hypothesis (Ho) of this test has been rejected ( $p < 0.001$ ). This means that both the level of knowledge and attitude of preschool teachers have a significant relationship with the level of teacher practice towards the implementation of active learning,  $F(2, 359) = 193.331$ ,  $P < 0.001$ , and Pearson coefficient value ( $R^2$ ) = 0.519. The level of teacher readiness in terms of knowledge ( $b = 0.278$ ,  $t = 5.871$ ,  $p < 0.001$ ) and in terms of attitude ( $b = 0.704$ ,  $t = 4.661$ ,  $p < 0.001$ ) is a significant predictor of the level of teachers' practice. The multiple regression formula for this model is  $Y = 9.505 + 0.278X^1 + 0.704X^2$ . In addition, the effect size value for this multiple regression test is  $f^2 = 0.37$ . Based on the effect of size presented by Cohen (1988), the researcher can conclude that there is a positive, significant, and strong relationship between the level of knowledge and attitude of preschool teachers with their practice level towards the implementation of this active learning approach in the preschool setting.

The results show that preschool teachers with a high knowledge and positive attitude would increase their motivation to practice various active learning strategies in the teaching and learning process. This result finding is supported by the local study of Mohamed and Surat (2023), who found that a knowledgeable preschool teacher is the key to provide children opportunities to be involved in innovative teaching and learning approaches. When preschool teachers have a high readiness of knowledge towards the active learning approach, they will know the importance of child-centered learning, various types of active learning strategies, appropriate learning environment, and effective assessment methods to practice the active learning approach (Li & Li, 2019; Leng et al., 2020; Mohamed & Surat, 2023). Also, the teacher with high readiness from the aspect of knowledge can realize the importance of ways to practice an attractive learning atmosphere, which can increase children's motivation, help them achieve a series of learning goals and hence develop holistically (Leng et al., 2020).

Furthermore, the findings of Li and Li's (2019) research provide further support for this conclusion, demonstrating that the teacher's attitude level significantly influences the success of implementing child-centered activities in the classroom. Also, this study's findings align with a local study conducted by Hata and Mahmud (2020) in Malaysia, who state that preschool teachers' attitude level in the state of Selangor is only at a moderate level. Therefore, the amount of impact on instructors' practice is quite minimal. This is due to the fact that a preschool instructor who has a negative attitude towards the execution of a certain strategy would result in many adverse consequences, such as stress, lack of interest, or boredom. Layang and Mahamod (2019) found that preschool teachers' negative attitudes

towards the teaching and learning strategies will create feelings of failure. Hence, they will remain with their existing teaching pattern, which is the traditional teaching approach.

As a result of this study, private preschool teachers' knowledge, and attitude level which only at a moderately-high level caused their practice level to be only at a moderately-high level. This statement is supported by Hanapi et al (2021), who stated that the teachers' practice level towards active learning will be influenced by their inadequate content knowledge and non-proactive to shoulder the responsibilities to advance their teacher skills who aim to enhance their professional growth in ECE field. In short, it can be clearly shown that preschool teachers' knowledge and attitude levels are significantly related to their practice level towards the implementation of active learning approach.

### **Conclusion**

Overall, preschool teachers' knowledge, attitude, and practice level towards the implementation of the active learning approach was at a moderate-high level in private preschool. Besides, the result of this study found that preschool teachers' knowledge and attitude level towards the activity planning are often interrelated with their practice level. The findings of this research unequivocally indicate that the Ministry of Education Malaysia should prioritize teachers' preparedness to guarantee that private preschool instructors consistently possess knowledge and maintain positive attitudes while designing active learning activities. Teachers' awareness of the importance of mastering high-level content knowledge and positive attitudes about the active learning approach can help them integrate these effective teaching strategies in the preschool setting. Thus, it can be clearly seen that private preschool teachers' teaching patterns are still not modified or remain with traditional methods, depending on administrators. This is because most private preschool administrators do not shoulder their responsibilities in providing sufficient training and dealing with the challenges faced by teachers when implementing an active learning approach. Apart from the administrators, other stakeholders such as MOE, parents, school board members and local community also play an important role in increasing the readiness level of preschool teachers towards practicing this effective active learning approach in the teaching and learning process. This is because preschool teachers' major role is acting at the forefront to build the aspiration development plan for developing our future generation. The teachers' high-quality active learning practice can make the teaching and learning programs more meaningful for the children and promote optimal development, including physical, language, intellectual, social, emotional, and adaptive development.

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