

# The Antecedent of teachers' intention to use e-learning during a pandemic: TAM approach

Hanafi <sup>a,1,\*</sup> 

<sup>a</sup> Universitas Muhammadiyah Jember, Jl. Karimata No. 49, Jember 68124, Indonesia

<sup>1</sup> [hanafi@unmuhjember.ac.id](mailto:hanafi@unmuhjember.ac.id) \*

\* corresponding author



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## ABSTRACT

Many education institutions implement e-learning to replace traditional face-to-face teaching and learning activities due to the Covid19 pandemic. The situation forced students and teachers to adapt to the new normal of teaching and learning activities. This study aimed to evaluate the teachers' intention to use e-learning after almost a year after the Covid19 pandemic widespread began, using Technology Acceptance Model (TAM) approach. The partial Least Square-Structural Equation Model (PLS-SEM) technique was employed to evaluate the intention to use e-learning. Using 291 samples of Teachers in Indonesia, this study shows that the TAM approach describes the antecedent of teachers' intention to use e-learning during a pandemic. Perceived ease of use, perceived usefulness, and job relevance are determinant factors of teachers' intention to use e-learning during the pandemic.



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## 1. Introduction

Corona Virus Disease 2019 (Covid-19) outbreak has been a global catastrophe because nearly 110 million infection cases were reported in February 2021 [1]. Many countries apply a lock-down policy for their citizens to prevent the spreading of Covid-19. Consequently, many education institutions implement e-learning to replace traditional face-to-face teaching and learning activities due to the Covid-19 pandemic. The situation forced students and teachers to adapt to the new normal of teaching and learning activities. The issue of pandemic situations that can change human behavior, including in the usage of e-learning, begin to be discussed since Van, Mc Laws, Crimmins, MacIntyre, and Seale [2] conducted a survey during the H1N1 pandemic resulting in 51.1% (1472/2882) students and staff willing to continue studying online. Some recent studies addressed the issue during the Covid-19 where the e-learning usage is inescapable [3-5], so the evidence becomes more apparent. However, research on this related issue needs more to discuss and explain behavior changes in e-learning usage.

In normal situations, the behavior changes towards e-learning and integrated technology learning system continue to grow gradually along with the digital native generation's growth. Several studies in this decade show that more students and teachers are more likely to accept technology-integrated learning systems [6]–[12]. E-learning at that time mostly was operated as a supplement for the traditional system and was expected to make significant development in learning activities [13]. E-learning also was functioned as a tool to facilitate learning or as a means for formative assessment [14]. An approach called Technology Acceptance Model (TAM) can evaluate people's acceptance of technology during the pandemic. TAM is a broadly used framework that can be implemented in the educational context. TAM approach can be enormously versatile since it can be tested on students, in-service teachers, pre-service teachers, teachers in different education levels, and teachers in various

countries [12]. Specifically, this research mainly focused on Indonesian teachers' intention towards e-learning since limited research in developing countries used the TAM approach in a pandemic context.

A recent study performed TAM in education during pandemic context, evaluating Sports students in Higher Education Institution (HEIs) [4]. Nevertheless, e-learning during the pandemic was not only conducted in HEI, but also at the lower level of education such as kindergarten, elementary school, junior high school, and senior high school. Those lower levels of the educational institution also need some attention regarding their technology acceptance [15]. A literature review by Granić & Marangunić [16] found that most research was conducted with students as their subject. It was advised that the faculty members'/teachers' points of view are also being studied [17]. Research on teachers' usage of e-learning during pandemic has been conducted before [3], [5], yet not using the TAM approach. This research focused on investigating the antecedent of kindergarten, elementary school, junior high school, and senior high school's intention to use e-learning using the TAM approach. The research mainly contributed to enhance knowledge in Technology Acceptance Model in educational research especially in lower educational institutions. This research was also expected to contribute to gaining better explanation about how people dealing with outbreak situation in term of educational implementation during pandemic.

## 2. Method

### 2.1. Research Model

This study utilizes a modified Technology Acceptance Model (TAM) proposed to fit in an educational context, especially for school teachers, rather than the classical TAM proposed by Davis [19]. The difference between the two models is the exogenous construct, where Hu et al. [18] incorporates three additional constructs, namely self-efficacy (SE), compatibility (C), and Job relevance (JR) as an explanatory of external factors in Davis' [19] original model. The exogenous construct (JR, SE, and C) is expected to have a relationship directly to intention to use (ITU), perceived ease of use (PEU), perceived usefulness (PU), and subjective norm (SN). Some measurement adjustments managed to gain a better fit in education and pandemic situation context. The model of analysis can be seen in Fig 1.

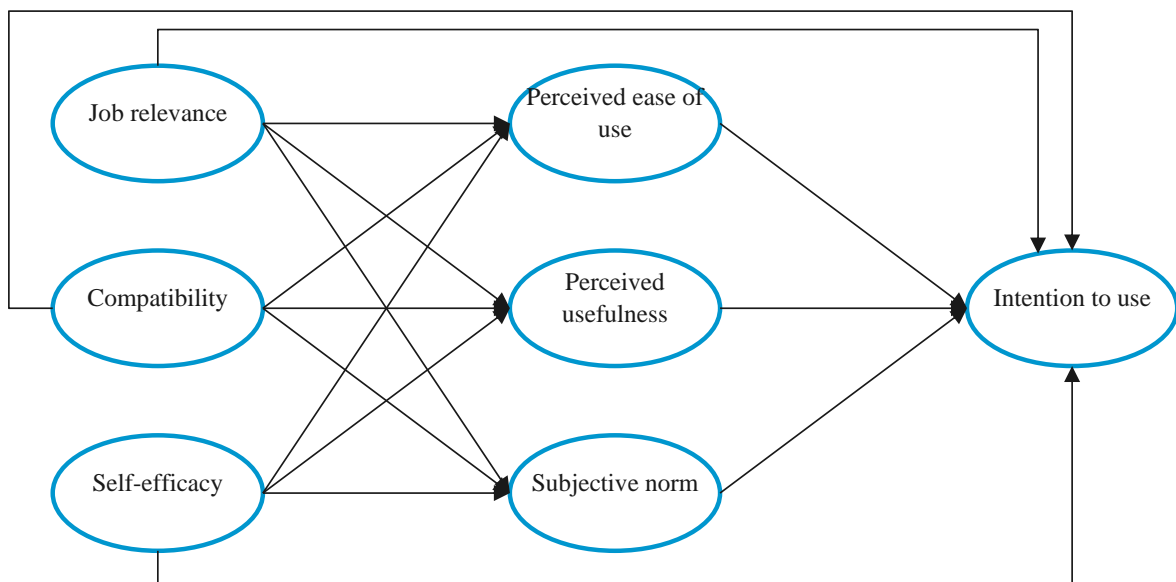


Fig. 1. Research Model

### 2.2. Hypotheses

According to related literature and previously stated study objectives, the subsequent hypotheses tested during this study are:

- H1: teachers' intention to use e-learning is directly determined by perceived ease of use (H1a), perceived usefulness (H1b), subjective norm (H1c), job relevance (H1d), compatibility (H1e), and self-efficacy (H1f).

H2: teachers' perceived ease of use is directly determined by job relevance (H2a), compatibility (H2b), and self-efficacy (H2c).

H3: teachers' perceived usefulness is directly determined by job relevance (H3a), compatibility (H3b), and self-efficacy (H3c), perceived ease of use (H3d), and subjective norm (H3e).

H4: teachers' subjective norms are directly determined by job relevance (H4a), compatibility (H4b), and self-efficacy (H4c).

### 2.3. Data Collection

The survey questionnaires were administered to 290 teachers in Indonesia using online questionnaires by Google Form. This research focused on lower educational institutions because previous TAM research already discussed in HEIs context. The research sample involving teachers from kindergarten, elementary schools, middle schools, and high schools in Indonesia aged from 20-50 years old with tenure ranged from 0 - >15 years. The sample also involving teachers mostly from rural district (74%) rather than developed city (22%) because most of area in Indonesia are rural district. Demographic data of the sample are shown in [Table 1](#).

**Table 1.** Sample Demographic

	frequency	Percentage
<b>Gender:</b>		
Male	38	13%
Female	252	87%
<b>Age:</b>		
20-30	90	31%
31-40	139	48%
41-50	33	11%
>50	28	10%
<b>Domicile :</b>		
Rural district	215	74%
Developed City	63	22%
<b>Tenure:</b>		
0 - 5	75	26%
6 - 10	92	32%
11 -15	76	26%
>15	47	16%
<b>Workplace:</b>		
Kindergarten	135	47%
Elementary School	36	12%
Middle School	31	11%
High School	88	30%
<b>Education</b>		
High School	22	8%
Diploma	5	2%
Bachelor	247	85%
Master	15	5%

Close-ended questionnaires were employed to obtain data for the primary analysis in this study, and some open-ended questionnaires for additional information, which are more likely to be used for further research. The 26 questionnaire items employed representing 26 indicators of 7 constructs (latent variable). A five-point Likert scale ranging from 1 - strongly disagree to 5 – strongly agree was used to measure those variables. The researcher adopts the questionnaire items from Hu et al. [18], translates them into the Indonesian language, and modified them to online learning during the pandemic context. The questionnaire items are shown in the [Appendix 1](#).

## 2.4. Data Analysis

This study incorporates structural equation modeling (SEM) statistical analysis to explain the relationship between variables in the model containing constructs (latent variable) and indicators (observed variable). PLS path modeling was firstly developed by Wold [21]. PLS calculation is a series of regressions analysis on their weight vectors [22]. The weight vectors acquired at convergence satisfy exact point equations [23]. PLS for latent variables later developed by Lohmöller [25] and widely known as PLS-SEM. PLS-SEM can be employed when the sample size is relatively small, or the data are non-normally distributed, and the primary objective of the research is to predict or identify the central key construct [26]. PLS-SEM statistical procedure using SmartPLS (v3.2.9) providing pre-hypothesis testing analysis, i.e., descriptive statistics, test for reliability of measurement, multicollinearity test, and R-square. This software package also provides hypothesis testing, including direct effect, indirect effect, and total effect.

## 3. Results and Discussion

### 3.1. Reliability Measurement

Each item and construct should have surpassed the reliability test. Good item reliability reflected by loading factor score on each item exceeded 0.70 [27]. Construct reliability measured by composite reliability (CR) and Average Variances Extracted (AVE) score. CR recommended an adequate score for good construct reliability is 0.70 and above [28]. Meanwhile, an AVE score above 0.50 also, as suggested by Hair et al. [27], is considered good construct reliability. The details of the reliability measurement could be observed in Table 2.

**Table 2.** Reliability Measurement

Variable	Items	Loading	Mean	Std. Dev	A	CR	AVE
<i>Compatibility</i>	C1	0.832	4.424	0.754	0.580	0.826	0.704
	C2	0.846	4.010	1.005			
<i>Intention to Use</i>	ITU1	0.891	3.497	1.074	0.731	0.882	0.788
	ITU2	0.885	3.828	0.935			
<i>Job Relevance</i>	JR1	0.866	3.966	0.909	0.867	0.905	0.659
	JR2	0.873	3.962	0.933			
	JR4	0.800	4.000	0.883			
	JR5	0.867	3.886	0.978			
<i>Perceived ease of use</i>	PE1	0.845	3.831	0.880	0.772	0.868	0.687
	PE2	0.836	3.831	0.900			
	PE3	0.765	3.834	0.875			
	PE4	0.846	3.931	0.884			
<i>Perceived Usefulness</i>	PU1	0.841	3.862	0.926	0.841	0.894	0.679
	PU2	0.795	3.845	0.958			
	PU3	0.849	3.841	0.919			
<i>Self-Efficacy</i>	SE1	0.821	3.824	0.863	0.641	0.808	0.584
	SE2	0.708	4.117	0.855			
	SE6	0.760	3.462	1.034			
<i>Subjective norm</i>	SN1	0.761	4.038	0.903	0.839	0.892	0.675
	SN2	0.855	3.717	0.966			
	SN3	0.845	3.745	0.985			
	SN4	0.822	3.583	0.990			

The result of reliability measurement shows that the self-efficacy construct was below the criterion threshold (0.381). Confirmatory Factor analysis (CFA) was used to make a better construct by

eliminating indicators with loading factors below 0.7, namely SE3, SE4, SE5, until AVE turn above 0.50 (0.584). Meanwhile, the other constructs have no issue in reliability measurement.

### 3.2. Hypothesis Testing Result

The hypothesis testing result from SEM-PLS was obtained by bootstrapping technique performed by software through 500 sub-sampling. This research incorporating various significance level which are 1%, 5%, and 10%. P-value below 1% considered as very strong predictors; below 5% are strong predictors; below 10% are mild predictor; and more than 10% are non-significant predictors. The result shown in Table 3 are also containing p-values when control variables are incorporated for robust result.

**Table 3.** Analysis result

Hypothesis path		$\beta$	P-Values		Result
			Original	Controlled	
Perceived ease of use -> Intention to Use	H1a	0.200	0.009	0.000	Significant
Perceived Usefulness -> Intention to Use	H1b	0.325	0.000	0.000	Significant
Subjective norm -> Intention to Use	H1c	0.091	0.107	0.138	Not significant
Job Relevance -> Intention to Use	H1d	0.249	0.003	0.002	Significant
Compatibility -> Intention to Use	H1e	-0.028	0.588	0.562	Not significant
Self-Efficacy -> Intention to Use	H1f	0.055	0.356	0.348	Not significant
Job Relevance -> Perceived ease of use	H2a	0.429	0.000	0.002	Significant
Compatibility -> Perceived ease of use	H2b	0.258	0.000	0.562	Significant <sup>b)</sup>
Self-Efficacy -> Perceived ease of use	H2c	0.289	0.000	0.000	Significant
Job Relevance -> Perceived Usefulness	H3a	0.477	0.000	0.000	Significant
Compatibility -> Perceived Usefulness	H3b	-0.019	0.741	0.549	Not significant
Self-Efficacy -> Perceived Usefulness	H3c	0.112	0.088	0.099	Significant <sup>a)</sup>
Perceived ease of use -> Perceived Usefulness	H3d	0.377	0.000	0.000	Significant
Subjective norm -> Perceived Usefulness	H3e	0.011	0.849	0.961	Not significant
Job Relevance -> Subjective norm	H4a	0.557	0.000	0.000	Significant
Compatibility -> Subjective norm	H4b	0.210	0.000	0.000	Significant
Self-Efficacy -> Subjective norm	H4c	0.110	0.075	0.111	Significant <sup>a)</sup> <sup>b)</sup>
Control variable:					
Age -> Intention to Use		0.043		0.550	Not significant
Education -> Intention to Use		-0.013		0.712	Not significant
Gender -> Intention to Use		-0.020		0.616	Not significant
Rural -> Intention to Use		-0.015		0.677	Not significant
Workplace -> Intention to Use		0.025		0.549	Not significant
experiences -> Intention to Use		-0.008		0.904	Not significant

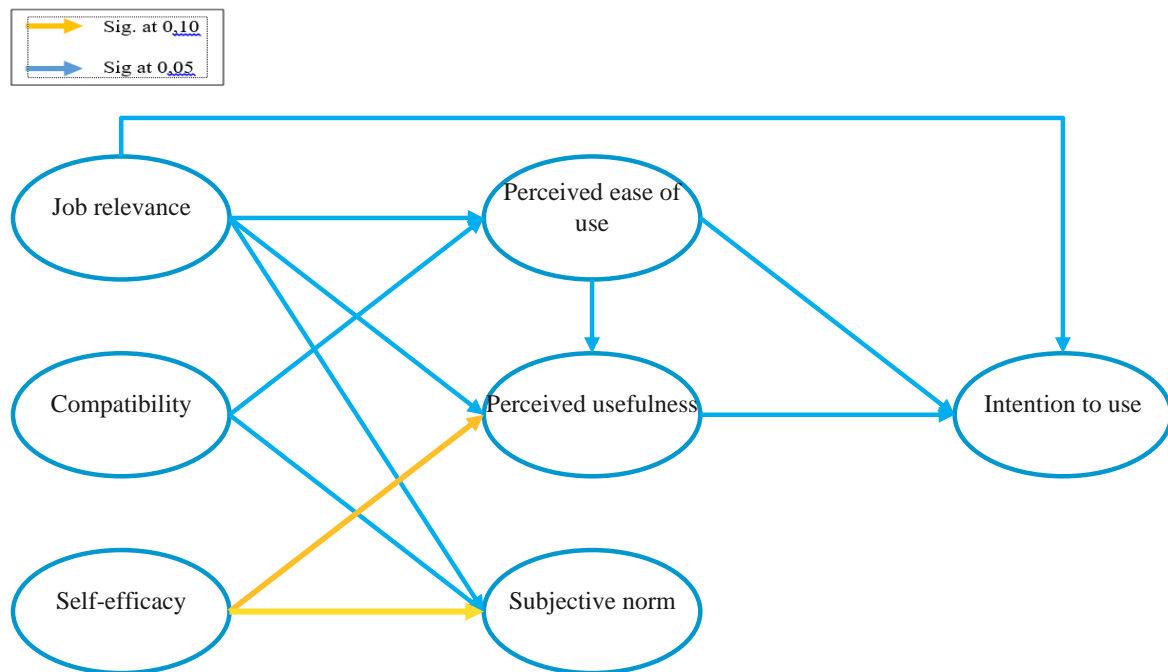
<sup>a)</sup> Significant at  $\alpha=10\%$ , <sup>b)</sup> not significant when controlled

This study result is shown in Table 3, where several paths are significant, while the others are not. Perceived ease of use, perceived usefulness, and job relevance are determinant factors of intention to use where perceived usefulness is the strongest determinant ( $\beta=0.325$ ;  $p=0.000$ ). Meanwhile, subjective norm, compatibility, and self-efficacy were not the significant predictors for intention to use since their  $p$ -value  $>0.05$ . Job relevance, compatibility, and self-efficacy are confirmed as good predictors for perceived ease of use and subjective norm, although self-efficacy is only significant at a 10% level of significance predicting subjective norm ( $\beta=0.110$ ;  $p=0.075$ ). The compatibility variable

seems to significantly affect the intention to use ( $\beta=0.258$ ;  $p=0.000$ ) and changed after the control variables were applied ( $p=0.562$ ). It will be explained further in the robustness test and discussion section. At 5% level of significance, perceived usefulness is determined by job relevance ( $\beta=0.477$ ;  $p=0.000$ ) and perceived ease of use ( $\beta=0.325$ ;  $p=0.000$ ), while self-efficacy significant at 10% ( $\beta=0.112$ ;  $p=0.088$ ). The other variable connected to perceived usefulness, such as compatibility and subjective norm, are not significant predictors ( $\beta=-0.019$ ;  $p=0.549$ ;  $\beta=0.011$ ;  $p=0.961$ ; consecutively).

### 3.3. Robustness Test

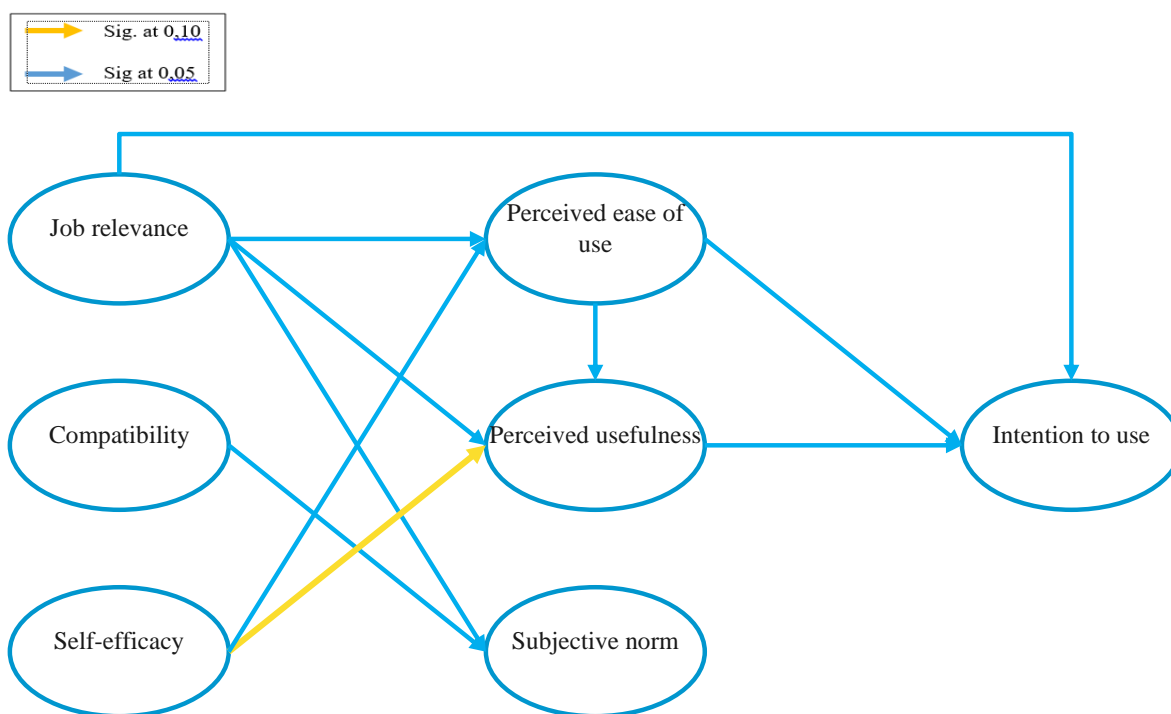
This research also employs a robustness test for the result. Controlled variables such as age, education level, gender, rural area, workplace, and teaching experiences were included in the model analysis. Most of the results are consistent with the first developed model except H2b and H4c. in H2b, where compatibility significantly predicting perceived ease of use in the original model, turned into an insignificant predictor when control variables are applied. A similar result also occurred in H4c, where self-efficacy tested as a predictor of subjective norm, regardless of only a 10% significance level. The comparison between the uncontrolled model and the controlled model could be observed in Fig 2 and Fig 3.



**Fig. 2.** Uncontrolled Model

This study modified the original TAM using Hu, Clark, and Ma's [18] model to analyze teacher's acceptance of e-learning technology during the COVID-19 pandemic situation, specifically one year after the pandemic situation first declared in Indonesia. The research result indicates that TAM could predict the teachers' acceptance towards technology where perceived usefulness, perceived ease of use, and job relevance are the direct predictors of the teachers' intention to use technology. From all those variables that predict intention to use, perceived usefulness is the strongest predictor. A similar result was found by Davis [19], Davis, Bagozzi, and Warshaw [29], Šumak, Heričko, & Pušnik [30] and Granić & Marangunić [16]. Teachers are willing to use e-learning because of its usefulness in delivering the material for teaching and learning even though they are unable to meet directly because of the COVID 19 pandemic. Perceived usefulness is also affected by perceived ease of use and job relevance. In line with Davis' [19] findings, difficulties in using e-learning can reduce the users' perceived usefulness. When the technology is relevant to their job as a teacher and it could help them complete their duties, those teachers will consider e-learning as useful tools which increase their intention to use the technology. Even though it has larger confounding factors, self-esteem also affects the perceived usefulness. When the teachers consider themselves able to use the e-learning system, they will consider the technology easy to be used, thus increasing their perceived ease of use and perceived usefulness.





**Fig. 3.** Controlled Model

Perceived ease of use is another predictor from the original TAM model which has proven to be able to predict the intention of use in almost every research about TAM [19], [29]. In this research, it was found that perceived ease of use is affected by job relevance, compatibility, and self-esteem. Job relevance is affecting perceived ease of use because of the context of technology use where teachers need to use it for teaching and learning whether they like it or not. So, if e-learning is relevant for their job, they will get a sense of familiarity with what they are doing when they use it. The compatibility of the e-learning system with the devices they use makes them feel easier to use the technology. When the teachers feel that they can use the technology which indicates that they have high self-esteem in using the e-learning, they will tend to perceive the technology as easy to use.

Interestingly the compatibility of e-learning with the devices the teachers use did not significantly affect perceived ease of use when age, education, gender, living place, workplace, and teaching experiences are being controlled. When not controlled, those control variables are confounding the relationship between compatibility and perceived ease of use. By adding the control variables, the main variables affecting perceived ease of use are getting clearer and better reflects the reality because the error is being minimized. We hypothesized that social norms would affect the intention to use, but the research result indicates that social norms are not determining the teachers' intention to use e-learning. This is probably due to the time which has passed as the pandemic first declared and e-learning became mandatory. In a longitudinal study by Hu, Clark, and Ma [18], it was found that in several first months of the introduction of technology, the social norms are affecting the intention to use technology, but after several months of the program, the social norms are no longer affecting the intention to use technology.

The implication of this study is that TAM could provide what aspects to be emphasized in introducing technology in e-learning. Most of the teachers in Indonesia lack the ability to use e-learning and it needs to be developed. E-learning provides a lot of chances to have a deeper discussion through its various features such as video conference, discussion forums, chat, etc., but they usually are not well utilized that e-learning is just felt like a computerized correspondence class [31]. This might be caused by the lack of adequate knowledge about e-learning environments and the difficulties in assessing the students' progress in different domains [32]. Batubara [33] stated that some teachers in Indonesia, especially those aged 45 years old and above are unable to create good PowerPoint slides, using projectors, and creating audio and video content for learning. By using this result based on the technology acceptance model we suggest emphasizing perceived usefulness, perceived ease of

use, and relating the content to their job so that they could increase their intention to use the technology, especially for e-learning.

These findings are also useful in designing an e-learning environment for the students. Some students reported that they experienced some difficulties in using e-learning such as financial problems which affect their ability to pay for the cost of e-learning (mobile data, device, etc.), motivation to learn, assessment of their progress, isolation from peers, inadequate skills, affection, and social aspect of studying [32]. Al-Adwan et al, [10] specified that TAM could explain what aspect needs to be emphasized in increasing intention to use e-learning. Based on our findings, emphasize the perceived usefulness and the ease of use of e-learning could increase the intention to use technology. A user-friendly interface is needed to increase the perceived ease of use while the content. The user-friendly interface should also be accessible through mobile phones since most students are accessing e-learning through it [5]. With a user-friendly interface and quality content, the students might perceive that e-learning is useful for them so that their intention to use e-learning is increasing.

There are several limitations of this study. Firstly, this research is cross-sectional research that describing the events at a point in time. A longitudinal study is needed to give a better understanding of the dynamics of the Technology Acceptance Model in e-learning use. Secondly, differentiating the level of teaching such as kindergarten teacher, elementary school teacher, junior high school teacher, and senior high school teacher might be needed. Probably, kindergarten has a different opinion on the intention to use e-learning because, in kindergarten, physical activities and direct social interaction are needed. The teaching and learning process must be accompanied by the parents while most of the parents don't have adequate pedagogical knowledge and time to accompany their child to study online. This could affect the effectiveness of the teaching and learning process using e-learning media during the pandemic. Thirdly, because we are only analyzing teacher's acceptance toward tech, additional studies are needed to complete the picture in the educational setting. Students are also involved in the teaching and learning process so that their acceptance toward technology is also needed to be studied. Previous research has found a gap between students' perception toward e-learning which is mostly negative [5] while the teachers or lecturers mostly have a positive perception toward e-learning and willing to continue using it in the future [11].

#### 4. Conclusion

The situation forced students and teachers to adapt to the new normal of teaching and learning activities. The issue of pandemic situations that can change human behaviour, including in the usage of e-learning. The technology acceptance model is an excellent model to predict teachers' antecedents to use e-learning during the pandemic. Perceived usefulness is the strongest antecedent predicting the teachers' intention of using e-learning during pandemics. Understanding the key variable in the technology acceptance that affects intention to use technology could help professional and administrators design and promote the e-learning use, whether it is in pandemic context or normal situation.

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\*Collecting data performed by field enumerator
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## Appendix 1

## Questionnaires Items

Construct	Item Code	Questionnaires Item
Perceived Usefulness	PU1	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): PowerPoint enables me to accomplish tasks more quickly</li> <li>Adapted version (Bahasa Indonesia): E-learning membuat saya dapat menyelesaikan tugas mengajar saya lebih cepat</li> </ul>
	PU2	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): Using PowerPoint increases my productivity</li> <li>Adapted version (Bahasa Indonesia): Penggunaan e-learning meningkatkan produktivitas saya</li> </ul>
	PU3	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): Using PowerPoint makes it easier to do my teaching job</li> <li>Adapted version (Bahasa Indonesia): Penggunaan e-learning membuat tugas mengajar saya semakin mudah</li> </ul>
Perceived Ease of Use	PE1	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): Learning to operate PowerPoint is easy for me</li> <li>Adapted version (Bahasa Indonesia): Belajar menggunakan e-learning cukup mudah bagi saya</li> </ul>
	PE2	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): It is easy for me to become skillful in using PowerPoint</li> <li>Adapted version (Bahasa Indonesia): Saya cepat terampil menggunakan e-learning di sekolah</li> </ul>
	PE3	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): I find it easy to get PowerPoint to do what I want it to do</li> <li>Adapted version (Bahasa Indonesia): Saya merasa e-learning dapat memfasilitasi saya melakukan pembelajaran yang saya inginkan</li> </ul>
	PE4	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): Overall, I find PowerPoint easy to use</li> <li>Adapted version (Bahasa Indonesia): Secara umum, saya merasa e-learning mudah digunakan</li> </ul>
Intention to Use	ITU1	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): Whenever possible, I intend to use PowerPoint in my teaching</li> <li>Adapted version (Bahasa Indonesia): Jika memungkinkan, saya ingin menggunakan e-learning setiap saat</li> </ul>
	ITU2	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): To the extent possible, I would use PowerPoint to do different teaching tasks</li> <li>Adapted version (Bahasa Indonesia): Saya ingin menggunakan e-learning untuk melakukan berbagai macam teknik mengajar</li> </ul>
Self-Efficacy	SE1	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): I could complete a job using a computer if I had seen someone else using it before trying it myself</li> <li>Adapted version (Bahasa Indonesia): Saya bisa mengajar menggunakan e-learning setelah belajar secara mandiri</li> </ul>
	SE2	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): I could complete a job using a computer if I could call someone for help if I got stuck</li> <li>Adapted version (Bahasa Indonesia): Saya dapat mengajar menggunakan e-learning dengan mencari tahu caranya dari berbagai sumber apabila kebingungan</li> </ul>
	SE3	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): I could complete a job using a computer if someone else had helped me get started</li> <li>Adapted version (Bahasa Indonesia): Saya dapat mengajar menggunakan e-learning setelah mendapat bantuan untuk menggunakannya</li> </ul>
	SE4	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): I could complete a job using a computer if I had a lot of time to complete the job for which the PowerPoint was provided</li> <li>Adapted version (Bahasa Indonesia): Saya dapat mengajar menggunakan e-learning setelah menghabiskan banyak waktu untuk mempelajarinya</li> </ul>
	SE5	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): I could complete a job using a computer if someone showed me how to do it first</li> <li>Adapted version (Bahasa Indonesia): Saya dapat mengajar menggunakan e-learning setelah mendapat tutorialnya</li> </ul>
	SE6	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): I could complete a job using a computer if I had used similar package before to do the same job</li> <li>Adapted version (Bahasa Indonesia): Saya dapat mengajar dengan e-learning karena sebelumnya saya pernah menggunakan program/aplikasi yang mirip</li> </ul>
Subjective Norm	SN1	<ul style="list-style-type: none"> <li>Original by Hu et al (2003): My friends would think that I should use PowerPoint</li> <li>Adapted version (Bahasa Indonesia): Teman-teman saya menganggap bahwa saya sebaiknya menggunakan e-learning di masa pandemi</li> </ul>

Construct	Item Code	Questionnaires Item
	SN2	<ul style="list-style-type: none"> <li>– Original by Hu et al (2003): My colleagues would think that I should use PowerPoint</li> <li>– Adapted version (Bahasa Indonesia): Rekan kerja saya berpikir bahwa saya sebaiknya menggunakan e-learning</li> </ul>
	SN3	<ul style="list-style-type: none"> <li>– Original by Hu et al (2003): People who influence my behavior would think that I should use PowerPoint</li> <li>– Adapted version (Bahasa Indonesia): Atasan saya berpendapat bahwa saya sebaiknya menggunakan e-learning</li> </ul>
	SN4	<ul style="list-style-type: none"> <li>– Original by Hu et al (2003): People who are important to me would think that I should use PowerPoint</li> <li>– Adapted version (Bahasa Indonesia): Orang-orang terdekat saya berpendapat bahwa saya sebaiknya menggunakan e-learning</li> </ul>
Compatibility	C1	<ul style="list-style-type: none"> <li>– Original by Hu et al (2003): PowerPoint is compatible to the computer I use at school and/or at home</li> <li>– Adapted version (Bahasa Indonesia): E-learning yang dilakukan di sekolah saya dapat digunakan di perangkat yang saya miliki (komputer, laptop, HP, dll)</li> </ul>
	C2	<ul style="list-style-type: none"> <li>– Original by Hu et al (2003): PowerPoint is compatible to the software I use at school and/or at home</li> <li>– Adapted version (Bahasa Indonesia): E-learning yang dilakukan di sekolah saya dapat digunakan dengan aplikasi yang saya miliki (zoom, google meet, google classroom, dan sejenisnya)</li> </ul>
Job Relevance	JR1	<ul style="list-style-type: none"> <li>– Original by Hu et al (2003): I consider PowerPoint to be important to my job</li> <li>– Adapted version (Bahasa Indonesia): Saya menganggap e-learning penting untuk pekerjaan saya</li> </ul>
	JR2	<ul style="list-style-type: none"> <li>– Original by Hu et al (2003): I consider PowerPoint to be needed to my job</li> <li>– Adapted version (Bahasa Indonesia): Saya menganggap e-learning diperlukan untuk pekerjaan saya</li> </ul>
	JR3	<ul style="list-style-type: none"> <li>– Original by Hu et al (2003): I consider PowerPoint to be fundamental to my job</li> <li>– Adapted version (Bahasa Indonesia): Pekerjaan saya tidak akan bisa dilakukan tanpa e-learning</li> </ul>
	JR4	<ul style="list-style-type: none"> <li>– Original by Hu et al (2003): I consider PowerPoint to be of concern to my job</li> <li>– Adapted version (Bahasa Indonesia): Penggunaan e-learning menjadi keutamaan dalam pekerjaan saya selama masa</li> </ul>
	JR5	<ul style="list-style-type: none"> <li>– Original by Hu et al (2003): I consider PowerPoint matters to my job</li> <li>– Adapted version (Bahasa Indonesia): Saya menganggap e-learning berperan penting terhadap pekerjaan saya.</li> </ul>