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E-Leadership, Technology Acceptance and Technological Self-Efficacy: Its Effect on Teacher Attitudes in Using Virtual Learning Environments

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Abstract

This study seeks to understand better how e-leadership, technology acceptance and technological self-efficacy contribute to improved teacher attitudes in using virtual learning environments. The method used was quantitative with structural equation modeling with SmartPLS 3.2.8. The population of this study consisted of 1,570 teachers in the Malang district, Indonesia. A sample of 420 teachers was selected using a systematic random sampling technique. The findings demonstrated a positive and significant effect of e-leadership, technology acceptance, and technological self-efficacy on teacher attitudes in using virtual learning environments. In addition, e-leadership positively and significantly affects teachers' technology acceptance and technological self-efficacy. Subsequent studies may also use a hybrid explanatory sequential approach. It can also make technology acceptance and technological self-efficacy a mediator variable in building the relationship between e-leadership and teacher attitudes in using virtual learning environments.

Keywords: E-Leadership, Teacher Attitudes, Virtual Learning Environments, Technology Acceptance and Technological Self-Efficacy.

Introduction

The COVID-19 pandemic and technology advancements have altered how individuals do business. According to the Future of Jobs Report 2020, companies worldwide will go digital. They replace 84% of conventional ways of working with digital ways to accelerate their work (World Economic Forum, 2020). This phenomenon also occurs in education due to the unavoidable advancement of technology (Hargreaves & Fullan, 2020; Rasmitadila et al., 2020; Sutarni et al., 2021). These issues become a challenge to develop technology-based education (Hébert et al., 2021) as an answer to meet future educational needs. It includes an increasingly flexible and inclusive education system (Rasmitadila et al., 2020), being able to meet challenges in inspiring and attracting students' attention in the context of distance and face-to-face education (Almousa et al., 2022), increasing teacher and student interactions in different spaces and times (Rayahneh & Al-Batiyha, 2022), encouraging higher order thinking (Lee & Choi, 2017; Nayak, 2021; Zhang & Liu, 2010), promoting lifelong education (Xiu, 2016), cost efficiency (Xu & Zhu, 2020) and increasing teacher and student productivity (Singh, 2021).

According to Singh (2021), technology must be able to be introduced and integrated into the learning process in the classroom. By having virtual learning environments (VLE), teachers are expected to be able to use technology in the information space to present an online constructivist learning environment (Tuttle & Hansen, 2022). VLE can assist with virtual and face-to-face learning (Rashid et al., 2021). The VLE design is more comprehensive when compared to Computer Aided Instructions (CAI), which involves the dimensions of communication and interaction and discussion between teachers and students or between students (Trafford & Shirota, 2011) both in different places and times (Thah, 2014). VLE is an information room mediated by Advanced Information Technology (AIT), integrating various tools where both teachers and students become actors in the learning process (Kerimbayev, 2015). VLE has various characteristics such as online classroom forums, interactive multimedia content, various pedagogical designs, students following independent instruction, and collaborative and gamification-based learning (Bozkurt & Sharma, 2020; Siddiqui et al., 2018).

The key to success in building a VLE is the skill of school leaders in integrating technology in all school systems and developing connections among stakeholders (Akram & Muhammad Khan, 2020). Promoting technology in education requires new paradigms in leadership (Akram & Khan, 2020;

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Purvanova & Bono, 2009). E-leadership was introduced as transformational leadership in organizations where work is mediated by Advanced Information Technology (AIT) (Capogna et al., 2018). It is a process of social influence mediated by Advanced Information Technology (AIT) to produce changes in feelings, thoughts, behavior, and performance with individuals, groups, and organizations (Avolio & Kahai, 2001). E-leadership differs from traditional team leadership in that only the leader can choose technology that is in line with the cultural quirks of the members, establish a virtual work environment that is psychologically secure, and inspire a feeling of collective purpose and meaning in work (Chamakiotis et al., 2021). E-leadership may enhance the virtual learning environment by fostering goodwill among stakeholders and enhancing learning performance (Wei, 2021).

ICT, E-leadership, and organizations have a complex relationship in a social context (Mishra et al., 2016). E-leadership is a milestone in changing one's beliefs and behavior in using VLE (Fullan, 2017). It encourages technological literacy and attitudes towards technology (Yildiz Durak, 2021). The perceived ease and the effect of perceived benefits in using VLE together impact teacher behavior in using VLE (Al-Rahmi et al., 2021). Researchers have confirmed the significant positive impact of technology self-efficacy on VLE acceptance and utilization through studies related to teacher efficacy in exploring how to integrate VLE technology into teaching and learning processes by striking a balance between technology, pedagogy, and hands-on teaching skills (Yildiz Durak, 2021). Technology self-efficacy becomes a proxy for individual control beliefs in VLE use (Pan, 2020).

Due to the limited usage of VLE in secondary level education (Pei, 2017a), there is still a dearth of research on the topic, with the majority of it being found at postsecondary educations (Aditya et al., 2019; Rasim et al., 2018; Rojabi, 2020). Numerous research on VLE continue to emphasize technology design, teachers conduct, and skills gain e d from utilizing VLE. Some of these studies (Aditya et al., 2018, Rasmitadila et al., 2020) explain how technology design readiness enhances teacher behavior while using VLE, while other studies cover the implementation of VLE use in an effort to raise students' motivation, thinking abilities, and independence. to understand (Rasim et al., 2018; Rasmitadila et al., 2020; Rojabi, 2020; Rosyadi et al., 2021). Similarly, research on e-leadership in relation to VLE is currently quite scarce. Recently discovered study relates to this, specifically instructors' attitudes about VLE use (Ottestad, 2013; Pei, 2017a). Based on the research findings, it is required to create e-leadership research on additional elements, including technology acceptance (TAC), Technological Self-Efficacy (TSE), and teacher attitudes (TA) regarding VLE deployment at the school level.

Theoretical foundation and hypotheses

E-Leadership Toward Technology Acceptance

On the organizational aspect, one of the challenges of implementing VLE is how the organization members will embrace and use the VLE's technology (Schepers et al., 2005). The Technology Acceptance Model (TAM) (Davis, 1986) focuses on psychological factors such as perceived usefulness factors, and ease of use of technology as the primary determinants of VLE utilization (Grani & Maranguni, 2019; Rashid et al., 2021) is the model that is most frequently used to explain technology acceptance. Perceived usefulness refers to the degree to which a person believes using a particular system will improve his or her job performance. On the other hand, perceived ease of use indicates the extent to which a person believes that using a particular system will be effort-free (Al-Nuaimi & Al-Emran, 2021).

The type of leadership influences the psychology of technology acceptance (Bonab et al., 2021). Technology acceptance by members is significantly impacted by technology-based transformational leadership that may encourage technology usage (Schepers et al., 2005). The best level of mastery of the digital transformation may be attained by organizations that promote digital leadership and skills through technology adoption (Jayawardena et al., 2020). A technology-based leadership approach is advised as the foundation for the technology acceptance process (Bonab et al., 2021). The following hypothesis can be developed based on the description:

H_1: There is a significant relationship between e-leadership and teacher technology acceptance

E-Leadership Toward Technological Self-Efficacy

A person's overall confidence level in their capacity to carry out a task is called self-efficacy. According to the self-efficacy theory, a person's perception of their ability to carry out particular activities impacts their emotional reactions and behavior (Pan, 2020). The definition of technological self-efficacy was developed based on self-efficacy, which reflects one's beliefs or attitudes towards pedagogical abilities based on the use of the latest technology (Ismail et al., 2021). Numerous research supports the idea that high levels of teacher self-efficacy and ICT competency lead to the use of technology in teaching formation (Crossan, 2020). Effective teaching techniques are impacted by teacher self-efficacy, but it also has a huge impact on the whole learning environment (Omar & Siti, 2021).

Through technology leadership self-efficacy technological leadership influences teacher self-efficacy (Doan, 2018). It is evidenced by the principal's excellent professional conduct and online behavior. The ability to grow teacher self-efficacy through psychological encouragement to develop pedagogy

through an ICT approach (Ismail et al., 2021) and professional development by promoting educational equity through improving ICT practices among teachers (Gilkes, 2020). The following hypothesis can be developed based on the description:

H_2: There is a significant relationship between e-leadership and teacher's technological self-efficacy

E-Leadership Toward Teacher Attitudes

The positive attitude of teachers is part of an important component of the successful implementation of VLE in schools (Afshari et al., 2009; Williams Dr., 2015). It is a psychological construct and has the power to influence how people behave. An individual's conduct reflects their attitude, which is a way of thinking and feeling about something. Attitudes can be positive, neutral and negative (Atabek, 2020). A few to conclude, it demonstrates how positive attitudes influence people's behavior regarding the usage of technology (Peng et al., 2019). Assumed to have internal consistency with one another, attitudes are made up of cognitive, emotional, and behavioral components. They are often created through direct experience, imitation, reinforcement, and social learning (Atabek, 2020).

It takes more than just introducing a new technological tool or VLE to improve someone's attitude (Pei, 2017a). Leadership is an important starting point for changing the context in which it is possible they can change a person's beliefs and behavior (Fullan, 2017). In order to expand the usage of VLE, effective e-leadership may influence teacher attitudes and encourage collaboration between principals and teachers (Pei, 2017a). According to specific data, there may be a connection between teachers' attitudes toward the usage of VLE and the e-leadership strategies of the principals (Ling et al., 2013; Ottestad, 2013; Pei, 2017a). The following hypothesis can be developed based on the description:

H_3: There is a significant relationship between e-leadership and teacher attitudes in using VLE

Technology Acceptance Toward Teacher Attitudes

The readiness of teachers to use VLE is largely determined by the technology acceptance factor and the teacher's attitude in using technology (Kaur & Hussein, 2015). User attitudes towards technology are mainly influenced by perceived benefits and perceived ease of use factors. Perceived benefit is the prospective user's subjective likelihood that using a particular VLE system will improve job performance. In contrast, the ease of use of the VLE is defined as the degree to which the prospective user expects the target system to be effort-free (Guelfi & Silva, 2012). It can be seen from the strong reciprocal relationship between perceived benefit and ease of using VLE on attitudes in using VLE (Al-obaydi, 2020). The perceived ease of using VLE can influence the actual intention and behavior in using VLE (Rienties et al., 2016). The following hypothesis can be developed based on the description:

H_4: There is a significant relationship between teacher technology acceptance and teacher attitudes in using VLE.

Technology Self-Efficacy Toward Teacher Attitudes

Teachers' self-efficacy beliefs regarding their ability to use certain technologies are important factors influencing their attitudes and how teachers integrate technology into their curriculum (Chen et al., 2021). According to studies, having a high level of computer self-efficacy helps one overcome challenges brought on by computer technology (Dong et al., 2020). The researchers also discovered that technology self-efficacy substantially impacts behavioral preferences for utilizing technological tools and their opinions of how effective technology is for learning (Pan, 2020).

Teachers with higher self-efficacy for technology integration can integrate knowledge into better learning designs (Yildiz Durak, 2021). Teachers tend to use innovative components in learning activities and are more willing to try creative and untested teaching methods (Gavora, 2010). Open to new concepts, more dedicated to teaching, and more eager to embrace more effective teaching techniques (Joo et al., 2018). The following hypothesis can be developed based on the description:

H_5: There is a significant relationship between technology self-efficacy and teacher attitudes in using VLE

Method

Research Design

This study used a quantitative approach to test the effect of e-leadership, technology acceptance and technological self-efficacy on teacher attitudes in using a virtual learning environment. The variables in this study consisted of exogenous variables: e-leadership, technology acceptance and technological self-efficacy, while endogenous variables included teacher attitudes. In Figure 1, the path analysis of the proposed model is displaye.

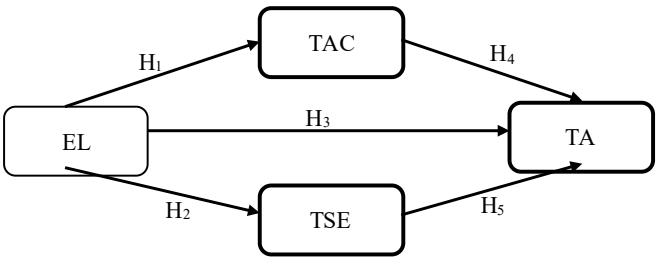

Fig. 1: Path analysis of the hypothesized model
Note: EL: E-Leadership, TAC: Technology Acceptance, TSE: Technological Self-EfficacyTA: Teacher Attitudes

Population and Sample

The population of this study was high school teachers in Malang Regency, Indonesia. The COVID-19 pandemic led to a decision by the Indonesian Ministry of Education to encourage the home study and blended learning. All schools at the time developed online-based learning strategies by utilizing a virtual learning environment. The total population of teachers in the Malang district was 1,570 teachers. A sample of 420 teachers was selected using systematic random sampling. The demographic sample consisted of male teachers (n=180) and female teachers (n=240). Teachers with teaching experience under five years (n=64), teachers with teaching experience above 5 to 10 years were (n=256), and teachers over ten years were (n=100). The data on teachers with undergraduate education levels were (n=312) and postgraduates (n=108). The sample was drawn from institutions that adopted blended and online learning during the COVID-19 pandemic.

Data Collection Tools

Each instrument was adopted and developed based on the following literature: E-Leadership (Chua & Chua, 2017; Van Wart et al., 2019), which consisted of 9 items, Technology Acceptance (F. Davis, 2013) and other literature (Sanchez, 2010; Venkatesh & Davis, 2000) consisted 13 items, technological self-efficacy consisted of 7 items (Miltiadou & Yu, 2000; Wang et al., 2004). Some instruments had to be updated to match the context of using the virtual learning environment during the COVID-19 pandemic, and phrasing adjustments were required. Participants were asked to rate the importance of each item on a 5-point scale, ranging from 1 point for strongly disagree to 5 for strongly agree.

Data Collection

The Google Forms program was used to create the questionnaire. Teachers can fill out online questionnaires at their respective places. This questionnaire was given to teachers during the COVID-19 pandemic in December 2021. Following its collection via a Google Form, the data is then methodically organized in line with the requirements of the data testing program in order to be tested.

Data Analysis

The data analysis process used structural equation modeling with SmartPLS 3.2.8. The primary factor in choosing the method was that it used partial least square-structural equation modeling (PLS-SEM), which had the advantage over regression in terms of simultaneous estimation of all model parameters (Iacobucci et al., 2007). PLS-SEM provided comprehensive information about the degree to which a model was supported by data, such as measuring the goodness of fit and predictive relevance (Hair, Hult, et al., 2017). This study used a consistent estimator by applying a consistent PLS (PLSc) due to the confirmed nature of this study.

Data analysis used structural equation modeling with Smart PLS-SEM 3.3.3 and processed in two stages. The first stage evaluated the measurement model (other models), which consisted of descriptive statistics, convergent validity, composite reliability, and discriminant validity (Hamid & Anwar, 2019). The second part of the structure model (inner model) was to present substantive results related to the research hypothesis by modeling structural equations using PLS bootstrap by testing the T value (Hair et al., 2014), the R-Square determination coefficient (Wong, 2013), and the Path Coefficient (Wong, 2013).

Findings

Measurement Model

This section explains how to evaluate measurement models using descriptive statistics, convergent validity, composite reliability, and discriminant validity. The measurement of convergent validity is used to measure the validity of the reflexive indicator as a measure of the variables analyzed using the outer loading data from each variable indicator.

Measuring convergent validity using outer loading with the value of each item must be higher than 0.7, and the AVE of each construction must be above 0.5. However, the outer loading value of 0.5 was still acceptable as long as the AVE for specific constructions meets the requirements of 0.5 (Hair, G.T.M., et al., 2017). An AVE of less than 0.5 indicated that the item failed to describe most construct variances. Based on table 1. Appendix 1, based on the findings of the outer loading of all instruments on the E-Leadership (EL) and Technological Self-Efficacy (TSE) variables of all instruments was > 0.50, while in the Technology Acceptance (TA) variable on instrument number 7 was < 0.50 and the Teacher variable Attitudes (TAVL) in using Virtual Learning Environments on instrument number 10 was < 0.50, requiring the removal of the instrument.

Descriptive statistics of the variables E-Leadership, Teacher Acceptance, Technological Self-Efficacy and Teacher Attitudes in using Virtual Learning Environments showed the average score at a high level. E-Leadership M = (4.198 to 4.614), SD = (0.581 to 0.758), Teacher Acceptance M = (3.957 to 4.629), SD = (0.505 to 0.951), Technological Self-Efficacy M = (4.088 to 4.371), SD = (0.503 to 0.762) and Teacher Attitudes in using Virtual Learning Environments M = (4.293 to 4.762), SD = (0.431 to 0.756).

Composite reliability value can be measured with the following conditions; The Alpha coefficient value measures internal consistency with a value greater than 0.7 (Henseler et al., 2015), and the AVE value must be greater than 0.5 (Hair et al., 2014). Therefore, the reliability of the consistency of table 1 was considered satisfactory.

Discriminant validity was assessed using the Heterotrait-Monotrait Ratio of Correlation (HTMT). In terms of methodological durability, this measurement was preferable to cross-loading and the Fornell and Larcker (1981) criterion. Besides, this approach can overcome the limitations of the previous measures (Henseler et al., 2015). Table 2. shows that all HTMT values are less than the threshold value of 0.90. Thus, there was no discriminant validity problem for this measurement model.

Structure Model

The structural model served as the testing ground for the study's hypotheses. As stated by Sang et al. (2010), the structural model showed the value of the significant relationship between constructs, path coefficients (direct effects), and specific indirect effects (mediation effects) in the model that estimated t values > 1.96 and p values < 0.05 (Hair et al., 2014).

Figure 2. shows the effectiveness of each indicator in assessing variables. By looking at its T statistics, The bigger the T statistic, the bigger the dominant indicator in measuring the variable

The next step in our analysis was to assess the hypothetical relationship (Figure 2 & Table 4). For participants as a whole, the findings showed that e-leadership and technology acceptance (H1: t = 3.529, p < 0.05), e-leadership and technological self-efficacy (H2: t = 2.361, p < 0.05), e-leadership and teacher attitudes in the use of VLE (H3: t = 2,970, p < 0.05), technology acceptance and teacher attitudes in the use of VLE (H4: t = 2,928, p < 0.05), technology self-efficacy and teacher attitudes in the use of VLE (H5: t = 4.118, p < 0.05) were positive and significant.

Table 1: Reliable Komposit

Constructs	*Cronbach's alpha*	*Composite reliability*	*The average variance extracted (AVE)*
E-Leadership (EL)	0.936	0.946	0.663
Technology Acceptance (TA)	0.932	0.943	0.603
Teacher Attitudes (TAVL)	0.97	0.972	0.651
Technological Self-Efficacy (TSE)	0.922	0.938	0.686

Table 2: Discriminant Validity: Heterotrait-Monotrait Ratio (HTMT)

	EL	*TA*	*TAVL*	*TSE*
EL				
TA	0.191			
TAVL	0.211	0.274		
TSE	0.132	0.159	0.212	

Discussion

Due to ongoing improvements in educational technology and lack of research, eleadership in education has become a crucial area of study (Liu et al., 2018). This study investigates the effect of e-leadership, technology acceptance and technological self-efficacy on teacher attitudes in using virtual learning environments. The first study demonstrates that e-leadership has a significant effect on technology acceptance. The findings of this study support those of Bonab et al. (2021), Jayawardena et al. (2020), and Schepers et al. (2005), which claim that e-leadership is technology-based leadership that encourages and supports the use of technology in order to increase the technology acceptance of members.

E-leadership substantially influences teachers' acceptance of technology because of its capacity to promote usage, foster member creativity, and collaborate with many stakeholders in integrating VLE (Akram & Muhammad Khan, 2020).

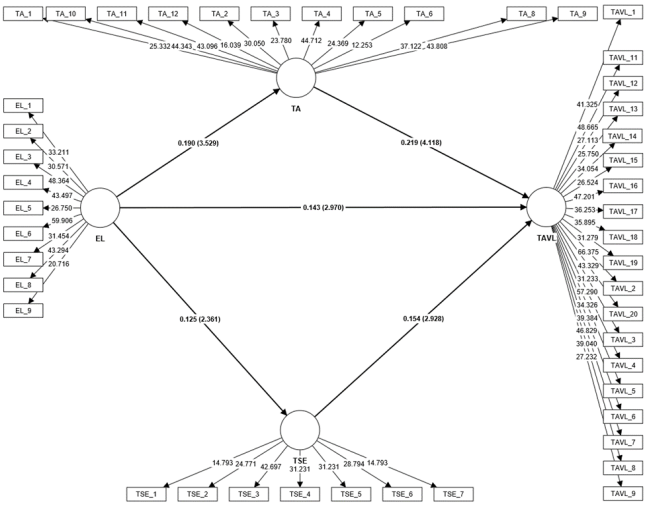

Figure 2. Evaluation of Structural Model Through PLS Bootstrapping (Inner Model)

Tabel 3: Summary of Hypotheses Testing

Hypotheses	*Paths*	*SD*	*t-Value*	*P values*	*Decision*
H1	EL -> TA	0.054	3.529	0.000	Supported
H2	EL -> TSE	0.053	2.361	0.019	Supported
H3	EL -> TAVL	0.048	2.970	0.003	Supported
H4	TSE -> TAVL	0.053	2.928	0.004	Supported
H5	TA -> TAVL	0.053	4.118	0.000	Supported

Motivating instructors to improve their digital abilities through a solid grasp of digital transformation raises the maximum level of technology adoption while implementing VLE (Liu et al., 2018). Strong digital transformation mastery can motivate teachers to advance their digital literacy, which affects the degree to which technology is used in virtual learning environments (Liu et al., 2018). Leaders may enhance the idea of e-leadership by concentrating on applying techniques and leadership styles in line with technological advancements and environmental variables (Saleh, 2018).

The second finding is a significant relationship between e-leadership and teachers' technological self-efficacy. This study provides empirical evidence to extend the findings between e-leadership and technological self-efficacy. According to Dogan (2018), a significant positive association exists between a leader's technological self-efficacy and their technological leadership (Doan, 2018). Leadership with transformative technological capability positively influences perceived ease of use both directly and indirectly through the application of self-efficacy measures (Elkhani et al., 2014). Creativity may be developed via technological self-efficacy and information sharing, and teacher pedagogy can be developed through psychological support (Elkhani et al., 2014). (Ismail et al., 2021).

The third finding, there is a significant relationship between e-leadership and teacher attitudes in using VLE. This study's findings align with those of Pei (2017b), which discovered that effective e-leadership practices help leaders change teachers' attitudes regarding collaborating with school principals to increase the adoption of VLE. In this study, the teacher showed a high attitude in using VLE, following (Chai et al., 2009) and (Tezci, 2010). However, the results of this study contradict those of a previous study (Samuel & Zaitun, 2007), which indicated that instructors usually lacked positive attitudes toward integrating ICT resources into the classroom. E-leadership is the initial key in changing beliefs and encouraging teachers' positive attitudes in using VLE (Fullan, 2017). Teachers' positive attitudes play a crucial role in the effective implementation of VLE in schools (Afshari et al., 2009; Williams Dr., 2015).

The fourth conclusion is that there is a significant relationship between teacher technology acceptance and teacher attitudes in using VLE. This study is in line with research conducted by (Teo, 2010) and (Kaur & Hussein, 2015) related to the influence of teacher technology acceptance on teacher attitudes in using VLE through pre-service teachers and teacher preparation in using technology. Acceptance of technology can encourage teacher attitudes in using VLE; this is a significant factor in teacher readiness to use VLE (Kaur & Hussein, 2015). This factor is influenced by perceived benefits and ease of using VLE (Granić & Marangunić, 2019; Rashid et al., 2021). Teachers' perceived ease of use significantly affects perceived benefits and attitudes towards VLE (Teo, 2010). There is a strong reciprocal relationship between perceived benefits and ease of use of VLE (Al-obaydi, 2020). This aspect prompts a concurrent movement that strengthens the impact of genuine intention and conduct while using VLE (Rienties et al., 2016).

The fifth finding, there is a significant relationship between technology self-efficacy and teacher attitudes in using VLE. This finding has never been done previously; thus, this discovery is brand-new. This study demonstrates how high technological self-efficacy aids in resolving issues brought on by computer technology (Dong et al., 2020). Teachers with higher self-efficacy for technology integration can integrate knowledge into better learning designs (Yildiz Durak, 2021). They will be more willing to adopt novel, unproven methods of using technology and experiment with fresh approaches to learning (Gavora, 2010). (Joo et al., 2018) Researchers discovered that people's behavioral preferences for utilizing technology tools and their opinions of how effective technology is for learning are both strongly influenced by their technological self-efficacy (Pan, 2020).

Conclusion, Limitations and Future Research

This study examines the relationship between e-leadership, technology acceptance, technological self-efficacy and teacher attitudes in using virtual learning environments in COVID-19. Based on the research findings, e-leadership, technology acceptance, and technological self-efficacy positively and significantly affect teacher attitudes in using virtual learning environments. In addition, e-leadership also positively and significantly affects teachers' technology acceptance and technological self-efficacy.

The findings of this study are fascinating to both principals and teachers because due to the e-leadership of the principal and its understanding perceived by teachers, principals can increase technology acceptance, technological self-efficacy and teacher attitudes in using virtual learning environments. It is also crucial to note the limitations of this study. In order to determine whether there are any changes between the two contexts, future research might examine post-COVID-19 pandemic typical situations when students interact face-to-face while learning and compare it with this study. Subsequent studies may also use a hybrid explanatory sequential approach. It can also make technology acceptance and technological self-efficacy a mediator variable in building the relationship between e-leadership and teacher attitudes in using virtual learning environments.

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Appendix Table 1: Descriptive Statistics of Each Item in Each Variable (n = 420)

Item & Variable	*EL*	*TA*	*TAVL*	*TSE*
E-Leadership				
EL_1	0.795			
EL_2	0.807			
EL_3	0.856			
EL_4	0.863			
EL_5	0.743			
EL_6	0.884			
EL_7	0.794			
EL_8	0.856			
EL_9	0.717			
Teacher Attitudes Using VLE				
TAVL_1			0.795	
TAVL_11			0.838	
TAVL_12			0.743	
TAVL_13			0.704	
TAVL_14			0.827	
TAVL_15			0.791	
TAVL_16			0.833	
TAVL_17			0.796	
TAVL_18			0.799	
TAVL_19			0.786	
TAVL_2			0.882	
TAVL_20			0.826	
TAVL_3			0.723	
TAVL_4			0.878	
TAVL_5			0.820	
TAVL_6			0.796	
TAVL_7			0.849	
TAVL_8			0.836	
TAVL_9			0.785	
Technology Acceptance				
TA_1		0.782		
TA_10		0.835		
TA_11		0.848		
TA_12		0.626		
TA_2		0.752		
TA_3		0.766		
TA_4		0.858		
TA_5		0.770		
TA_6		0.554		
TA_8		0.834		
TA_9		0.852		
Technological Self-Efficacy				
TSE_1				0.754
TSE_2				0.776
TSE_3				0.867
TSE_4				0.900
TSE_5				0.900
TSE_6				0.830
TSE_7				0.754