# The Impact of Achievement Motivation on Educational Compatibility mediated by Perceived Ease of Use

Dessy Seri Wahyuni<sup>1</sup>, Gede Ariadi<sup>2</sup>, Nyoman Sugihartini<sup>3</sup>, I Nengah Eka Mertayasa<sup>4</sup>

{seri.wahyuni@undiksha.ac.id<sup>1</sup>, ariadi.ratih@gmail.com<sup>2</sup>, sugihartini@undiksha.ac.id<sup>3</sup>, eka.mertayasa@undiksha.ac.id<sup>4</sup>}

Department of Informatics and Engineering Education, Universitas Pendidikan Ganesha<sup>1,3,4</sup> Department of Management, Universitas Kristen Satya Wacana<sup>2</sup>

**Abstract.** This research investigates the substance of achievement motivation students to utilize interactive worksheet digital applications, affecting educational compatibility via a mediator variable. This study implements the perspective theory of the technology acceptance model to put the perceived ease of use as a mediator variable for bridging the relationship between achievement motivation and educational compatibility. The study examines sampling data from 167 students in the junior high school in Buleleng Regency by partial least square-path modeling. The outcomes exhibit that achievement motivation on educational compatibility is partially mediated by perceived ease of use. The result determines that perceived ease of use as the mediator has a greater impact than a direct link between achievement motivation and educational compatibility.

**Keywords:** achievement motivation; educational compatibility; perceive ease of use; interactive worksheet digital.

#### **1** Introduction

Online learning is a wide-ranging trend, generally reflected in the software program to convey elements or complete components for studying at schools [1]. Unexpectedly, there needs to be more clarity on whether to base explanations of e-learning on high-tech features, web capacities, substance, or instructional procedures. Opportunely, online learning is explained as integrating innovative technology such as digital worksheets and digital modules combined with studying [2]. Thus, online learning in this study affirms where pupils gradually become familiarized with normal interaction devices. The instruments comprise asynchronous digital worksheets and are revealed to efficacy and inventive performance and can adjust on modifies in an extensive span of the latest instruments, which deliver various software for interaction in studying [3]. To position it concisely, online learning in the scope of this study was restrained to learning substance carried through the interactive digital worksheet to accomplish students' assignments.

E-learning in junior high school generally transforms into various modes, which in digital online mastery have maintained the impact of perceived ease of use on initial pupils' reception and stable utilization of the technology [4]. Recognizing the element construct of this important catalyst of students' reception and utilization is vital because it would deliver practical aims to ascertain positive insights and improve students' taking and utilization. Moreover, the study built considerably on evaluating online learning while pupils conducted learning by accomplishing tasks through digital tools. There is no satisfactory empirical study considering how online courses have affected the studying method from a pupil's viewpoint. Conversely, there are several signs that online lessons in urgent situations have several advantages [5].

Successful online lesson grows in a lessoning method [6]. Equally, the more effectual shifts to online courses are influenced by the pupils' recognition degree of the educational tool [7], [8]. The public supposes that across the educational tool, e-learning is rapid, low-cost, can be implemented simply by every student, and is proper for all learning degrees. Conversely, online learning emphasizes that learners are distant from the instructors and need a suit conveyance method [9]. The result might affect the pupils' studying performance if they are low self-belief in the learning technology and do not perceive a feeling of knowledgeable assignation [10]. Moreover, applying developing learning technologies single-handedly cannot improve the learning outcomes if they are not attended to by good tutoring [11]. Then, this research responds to the necessity for a more decisive evaluation of pupils' conduct in online learning.

Subsequently, exploring the elements applicable to learning technology compatibility in online learning conditions is fundamental. Then, the current research tries to fill the research gap by displaying a full image of the aspects that enhance students' motivation for educational tools. The software is the interactive worksheet digital when students perform assignments from their teacher. More specifically, this study follows the following questions: What suitable ways should be obtained to encourage pupils to acknowledge online lessons to sustain their ability? What are junior high pupils' perceptions about the acknowledgment of digital tools for online classes? The implications of this study will help schools apply suitable methods to encourage students to enhance and realize online lessons to maintain their studying. More precisely, the research results imply that students' motivations affect the success of online studying.

### **2** Literature Review

#### 2.1 The Influence Achievement Motivation on Educational Compatibility

Motivation means a learner's inspiring enthusiasm to study [12]. It contains the enjoyment natural in the doings and the purpose of completing an assignment. Motivation indicates the felt implication of an action that affects the conduct aim. Pupils who are inspired will contribute to self-directing deeds which support them in achieving their aims [7]. Empirical findings have stated that an absence of motivation in online learning could generate pupils to allocate extra time to finish tasks, becoming in delayed homework or typical bad-quality coursework [13].

Educational compatibility is stated as the degree that digital technology is sensed as standing stable with a pupil's studying expectancy [7]. Compatible digital learning indicates studying efficacy reflected in the capability of the studying source to deliver the required literacy

results. Learning technology is important purely if it generates an educational source, thus supporting the pupils to realize their studying aims. Another way learning technology will advantage the system is if it delivers quality to pupils' studying existence [14]. Based arguments above, the motivation directs the pupils to utilize the technology if the application system, such as an interactive worksheet digital, is compatible with their learning [15]. Then, achievement motivation affects educational compatibility, as intended (portrayed in figure 1). So, we propose the hypothesize that is:

H1: Achievement motivation is positively linked to educational compatibility.

# **2.2** Mediation impact of Perceive Ease of Use on the relation between Achievement Motivation to Educational Compatibility

The present study employs the theory of technology acceptance model (TAM) that put perceived ease of use (PU) as a mediator variable. TAM proposes which PU influences an individual's behavior considering technology practice related to succeeding conduct [16]. This theory is proper in the study viewpoint because it describes how knowledge is applied effectively relating to the elements which affect the reception and software of educational tools, specifically in an extremely unpredictable condition. Moreover, PU states that the pupils suppose the focus is learning digital tools to be easy to use [17], [18]. The PU represents the motivation and directs the pupils to utilize the technology [15]. Thus, achievement motivation affects the PU, as propositioned.

Furthermore, educational compatibility is the degree to which digital technology is felt stable with a learner's studying expectancy [7]. Compatible online learning indicates studying efficacy which can be explained as the capability of the studying source to deliver the required knowledge results. Furthermore, the construct of PU is regarded as the degree to which the pupil feels the developing educational tool is compatible and employs prior experience (portrayed in figure 1). Pupils incline to use or not use the learning technology toward the total they regard as supporting them in conducting their assignment well [19]. Thus, we hypothesize:

H2: Perceive ease of use mediates the relationship between achievement motivation and educational compatibility.



Fig. 1. Conceptual Model

## 3 Method

#### 3.1. Sample and data collection

Whereas for this research, quantitative data were gathered from April to June 2022. The study's aimed population was pupils at junior high schools in Buleleng Regency, Bali Province. Moreover, all the respondents were familiar with using interactive worksheet digital applications at the time they were responding. A link to an online survey was distributed through email to get the school students' online learning. The pupils were invited to complete the study, and 274 form responses were acquired. Finally, 167 fulfilled responses were utilized for analyzing data.

#### 3.2 Measuring Instruments

This study obtained and implemented variable measures tailored to the existing literature. Three items measure motivation: I utilize interactive digital worksheets, including accomplished homework through online learning; I utilize interactive worksheets digital, including reading module lessons through online learning; I utilize interactive worksheets digital in my free time [16].

Four items measure perceived ease of use. It is a simple instruction for me to retrieve the online worksheet digitally; I seek the module simple to edit the online worksheet digitally via smartphone; I discover the lesson module to be adaptable to cooperate with the digital worksheet application; My collaboration with the digital worksheet application is obvious and comprehensible [20].

Five items measure compatibility: trust in involving an active part in handling learning; trust in one's own searching the lesson module; Continually attempting a new method of studying; trust in the prospect of technology for studying; technology suits learning design and requirements [21]. Respondents were inquired to grade all items by implementing a five-point Likert scale (1 "strongly disagree" and 5 "strongly agree").

#### **4 Analysis Results**

To recognize the direct and indirect influence of achievement motivation on educational compatibility with the mediating impact of perceived use on junior high school pupils' in Buleleng Regency. In a statistical presentation, PLS-SEM is applied to predict the conceptual model that constructing PLS-SEM is specifically helpful for scrutiny study [22].

#### 4.1 Measurement of Constructs

Several methods were applied to examine the variable's reliability and validity. The reliability was tested via the composite reliability. The average variance extracted (AVE) was used to check the convergent test. The Heterotrait-Monotrait Ratio (HTMT) was utilized to measure the discriminant test. Several robustness trials were used for further validity evaluations of the outcomes, represented by Table 2 and Table 3. The PLS-SEM analysis via the SmartPLS program was employed for all three variables and 12 items. Finally, we propose which model structure proper fitting data is also sufficient to explore the postulation for the study.

Constructs and Items	Factor	Composite	AVE
	Loadings	Reliability	
Achievement Motivation (AM) AM1: I utilize interactive digital worksheets, including accomplished homework through online learning.	0,830	0,878	0,705
AM2: I utilize interactive worksheets digital, including reading module lessons through online learning.	0,821		
AM3: I utilize interactive worksheets digital in my free time.	0,867		
Perceived Ease of Use (PU)			
PU1: It is a simple instruction for me to retrieve the online worksheet digital.	0,885	0,855	0,664
PU2: I seek the module simple to edit the online worksheet digital via smartphones.	0,726		
PU3: I discover the lesson module to be adaptable to cooperate with digital worksheet application.	0,825		
PU4: My collaboration with the digital worksheet application is obvious and comprehensible.	0,798		

Table 2. Convergent Validity

Educational Compatibility (EC)			
EC1: trust in involving an active part in handling learning	0,716	0.000	0.500
EC2: trust in one's own searching the lesson module	0,808	0,880	0,596
EC3: Continually attempting a new method of studying;	0,819		
EC4: trust in the prospect of technology for studying	0,787		
EC5: technology suits learning design and requirements	0,726		

Table 3 Discriminant Validity				
	AM	EC	PU	
AM				
EC	0,75	3		
PU	0,61	8 0,67	6	

#### 4.2 Examining of Hypothesis

The research evaluates the fundamental relations amongst the constructs by exploring the mediator influences applied to test hypotheses in the finding model. The finding in Table 4 shows the coefficient value of the conceptual model. Table 4 and Figure 2 depict that the path values from Achievement Motivation to Educational Compatibility were positively significant ( $\beta$ = 0.328; p value < 0.01). Then, H1 is proved. Equally, the indirect relation of Achievement Motivation on Educational Compatibility via Perceived Ease of Use as a mediator was positively significant ( $\beta$  = 0.466, p < 0.01), which is supported. Presented the above, we establish which Perceived Ease of Use partially mediates the relationship between Achievement Motivation and Educational Compatibility.

Table 4	Hypot	heses	Testing
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Hypothesis	Relationship	Standard	Test Result
		Coefficients	
$H_{1}$	Achievement Motivation Educational	0,328 *	Significant
Н <sub>2</sub>	Achievement Motivation Perceived Ease Use Educational Compatibility	e of 0,446 *	Significant

Note: Significant Level at \* 99%



Fig. 2. Analysis Result ( direct effect; - - -> indirect effect)

#### **5** Discussion and Implications

The discoveries of this study corroborate the results of [7], [12], [13], which expose achievement motivation substantially influences educational compatibility. Coherent with the current study, it confirms that if pupils are motivated, their insight considering educational tools will be more significant and compatible with the learning process. Achievement motivation is the main catalyst for students to utilize interactive worksheets digital, which reveals that students have an enormous expectation for accomplishing their Homework. Most students want to experiment with the module lesson, persuade their spirit to finish the tasks, get an appreciation of achievement, and entirely express the atmosphere of rivalry. Furthermore, motivation influences the pupils' effort and degree of keenness to finish particular assignments. This research finds that achievement motivation substantially impacts pupils because they trust future technology for studying and compatible learning design and requirements.

Consequently, the individuals' motivation to utilize the interactive digital worksheet is attained to substantially impact their perceived ease of use. This result is coherent with the prior studies that students contemplate digital technologies to help their learning support [23], [24], [25]. In this context, the students get expressive pleasures through digital technology, such as worksheets that quickly improve their understanding of lesson modules. Besides, some students utilize its technology to engage themselves in an enjoyable ambiance [25]. This finding confirms that the prior study affirms that pupils are inspired to accomplish their learning assignments. Motivation influences assignment inclination, attempt, and purpose to utilize the worksheet digitally, which is distinctly linked with perceived ease of use [12], [26]. While conveying online learning, it is fundamental to enhance pupils' effect by encouraging them to recognize their earlier abilities and proficiency and support them to believe in using digital tools. Then, teachers must emphasize the pupils through this demanding time to create a positive impression and insights of applying interactive worksheets digital in learning

awareness. The current research shows that some pupils that have utilized learning technology have higher perceived use of worksheet digital.

Furthermore, the research outcomes maintain the empirics of [27], [28], which reveal that perceived ease of use significantly influences educational compatibility. The study states that perceived ease of use is the students' perception where the utilization of a digital worksheet is very simple to edit and inquiry the module lesson that is compatible with digital learning. This finding emphasizes the significance of students' perceived ease of use, in which students are involved around the interactive worksheet digitally is effortless and affluent to comprehend with student expectation [29]. The finding states that the perceived ease of use of the interactive digital worksheet influences students to engage with online learning. Then, a student's ability to alter the lesson module to their personal preferences, visualize 3D-graphic and get the lesson module improves their involvement with interactive digital worksheets. Finally, perceived ease of use directly influences achievement motivation via educational compatibility.

From a practical viewpoint, pupils' motivation is complex; therefore, teachers must inquire about pupils to encourage them incessantly. Teachers need to socialize the utilizing digital tool to help accomplish Homework and deliver an interactive material lesson that can be visualized by application. However, teachers require to be concerned about the learners' motivation degrees. Learners need to increase a positive attitude concerning a transient condition. Pupils recognize to understand which motivation can substantially influence the perception of ease to utilize the application that is compatible with supporting their learnings.

#### **6** Conclusion and Limitation

These findings have given some interestingly beneficial parts of the evidence of the achievement motivation to support educational compatibility for the pupils in Yunior High School in Buleleng Regency-Bali Province. However, the direct effect of achievement motivation on educational compatibility is significant, and then the perceived ease of use mediates the link between achievement motivation and academic compatibility. The impassioning result recommends that perceived ease of use as a mediator variable has a more significant impact on the relationship between achievement motivation and educational compatibility rather than the relation between achievement motivation toward academic compatibility.

There are limitations in this research that propose some future research suggestions. First, the sample size during the data gathering period decreased because students were not answering and withdrawing from the study. Second, this study converged on interactive worksheet digitals; when it looks sensible, the results will expand to various educational digital tools. So, it will be beneficial for forthcoming studies to investigate other kinds of digital educational tools to deliver extensive comprehension.

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