AN INTERACTIVE-BASED E-MODULE OF TRANSLATION TECHNOLOGY OF BLENDED AND ONLINE LEARNING TO IMPROVE AUTONOMOUS LEARNING

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Abstract

Dhe development of technology is very rapid in this modern era. Technology offers numerous advantages in different domains. Some advantages of information technology in education include computerized data processing, e-learning, and it-driven task assignments. This study aims to analyze the effect of interactive e-modules of translation technology towards autonomous learning through online and blended learning. This research used quasy experimental method. Data analysis used sem pls. the number of populations was 135 students with a total sample of 45 efl students. Findings show that t-statistics of online blended learning towards autonomous learning was 4.523 in which it is higher than 1.96. P-value is 0.000 with p < 0.05 so that there is significant value of this effect. T-statistics is 0.862 which it is lower than 1.96. P-value is 0.389 with p > 0.05 so that there is not significant value of this effect in online learning without and using interactive e-module. It can be concluded that there is negative effect of interactive based e-module of translation technology on autonomous learning through online learning by using e-module and positive effect of interactive based e-module of translation technology on autonomous learning through blended learning.

Keywords: Autonomous Learning**,** Blended Learning**,** Interactive E-Module**,** Translation Technology**,** Online Learning.

1. INTRODUCTION

Currently, the globe is experiencing Industrial Revolution 4.0. The era of the fourth industrial revolution is characterized by the convergence of artificial intelligence, intelligent networking, supercomputers, genetic engineering, nanotechnology (nanotech), autonomous vehicles, and innovation (Lastariwati et al., 2021). These changes occur at an exponential speed which will have an impact on the economy, industry, government, and politics (Chun et al., 2016). Likewise, its development, humans are intelligent creatures who always improve their abilities to facilitate their every activity. All tools are tried and used to achieve the efficiency and effectiveness of every action, in order to produce a large amount of efficiency with the least amount of energy possible.

Since the beginning of Industry 4.0, a phrase coined in 2011 inside Germany, various sectors of society have undergone necessary adjustments to incorporate an increased reliance on digital technologies. This adaptation has been crucial in ensuring the continuity of their operations while also promoting sustainability (Moraes et al., 2022).

Humans utilize technology due to their rationality and desire to alleviate difficulties, enhance their quality of life, and ensure their safety. Technological advancement arises from the cognitive capacity of individuals to address and resolve the challenges they encounter. Technological advancement is inevitable as it aligns with scientific progress (J. Liu, 2022). Every innovation is created to provide positive benefits for human life. Utilization of technology can be done anywhere and anytime. The advantage of technology is that it provides immediate feedback and allows quick changes the students' misconceptions (Alizadeh & Ebrahimi, 2019).

The development of technology is very rapid in this modern era (Kazu, 2021),(Apanasovich et al., 2017), Currently, technology offers numerous advantages in different domains. Some advantages of information technology in education include computerized data processing, e-learning, and IT-driven task assignments. Development is not solely determined by the passage of time, whether it be years, months, or days. Instead, the measurement of time in hours, minutes, or seconds is mostly associated with information and communication technology (ICT), which relies on electronic technology. This growth has diverse consequences on society, nation, and state. Every individual is keen on utilizing and benefiting from each of these advancements (Patience, 2016).

Likewise in the learning process, the development of Information and Computer Technology (ICT) has penetrated rapidly and significantly. According to numerous economists, cultural theorists, and political scientists, the 'new world order' in the 21st century will signify a notable departure from past eras (Marczak, 2018). The Internet and its associated Information Technologies (IT) have the potential to disrupt conventional communication patterns. The objective is to determine the optimal use of ICT to enhance the standard of education, facilitate the exchange of knowledge and information, and provide a greater level of adaptability in accordance with social demands (Viju, 2013). Several English educators' express concerns about the potential future replacement of English teachers by machines. In the current period, computers play a significant role, and there is an increasing expectation for individuals, especially instructors, to possess technological proficiency (Gull, 2020).

Based on a survey conducted by APJJI in 2019-2020 internet user penetration in Indonesia has reached 73.7% or around 196.71 million people in Indonesia have used the internet for activities and various daily needs (APJII, 2020). Since 2020 or the COVID-19 pandemic in Indonesia, learning activities have been carried out online or what are called online learning activities. Based on the guidebooks and guidelines issued by the Ministry of Education and Culture in 2020, it provides guidelines for learning activities that can be carried out using various online learning platforms or with various social media that allow for learning activities to take place.

Various strategies and one alternative that can be done is to develop teaching materials. Where the development of teaching materials is carried out by a lecturer to solve learning problems by paying attention to the targets or students and also adjusting to the competencies that must be achieved. One way to realize this is by integrating teaching materials with technology so as to create teaching materials that are easily accessible and meet these criteria (Linda et al., 2018).

One form of teaching materials that can be developed a digital-based module or known as an interactive E-module.

The use of conventional method in teaching translation during the translation learning process is unenjoyable, uncreative and demotivating students in this era. This causes students to be bored. Traditional or conventional methods refer to teaching methods that use or implement a module or textbook-based system only. Therefore, this teaching and learning method seems monotonous. Because the material given to students must be read, so students are not enthusiastic. Students assume that they only read textbooks/modules, they have difficulty carrying them anywhere, especially if they are not interesting for students.

This research is also motivated by the fact that in the translation course, no an electronic-based module or an interactive module has been designed by translation lecturers, so that the researcher is interested in designing an interactive module of translation technology as the teaching material in that course. The existence of the COVID-19 pandemic condition that occurred became the basis for the idea of adapting or adjusting learning methods into online and blended-based learning. The preparation of interactive E-modules for translation courses for even semester (VI) students of English Education Study Program Faculty of Teacher Training and Education (FKIP) Megarezky University and semester (VI) students of English Education Department Study Program Faculty of Teacher Training and Education (FKIP) Muhammadiyah University of Makassar in Academic Year 2022/2023 becomes an alternative to distance learning, blended learning and supports EFL students of autonomous learning so that they are able to guarantee that the learning process can be carried out efficiently and effectively.

2. LITERATURE REVIEW

2.1 An Interactive E-Module of Translation Technology

Rapid technological developments encourage the replacement of print technology with computer technology in learning activities. The module, which was originally a printed learning media was transformed into an electronic presentation so that it creates a new term, namely electronic module or known as e-module (Winatha, 2018). Electronic modules or commonly referred to as e-modules are autonomous teaching materials that are systematically arranged and presented in an electronic format. Electronic modules are a development and adaptation of printed modules that are presented by utilizing information and communication technology (Sugihartini, N., & Jayanta, 2017).

(Alcina, 2008) describes translation technology as a study that deals with the design and adaptation of technology strategies, tools and resources that help make translation work easier and facilitate research and teaching. In fact, no one can deny the role of translation technology tools in the translation process, (Pym, 2011) argue that in today's era people who have expertise in the IT field will be more in demand for the world of translation than people who only master the language. Emphasizing the importance of IT skills, asserts that in this era, IT skills are an inseparable part of a translator's job (Taghizadeh & Azizi, 2017).

Because technology has become an important part of translation practice, nowadays almost all translation models involve technology as a separate competency. Translation technology represents an important new area of interdisciplinary study that lies between computer science and translation (Christensen et al., 2017).

Its development depends on its academic progress and the introduction of effective translation technologies in the translator training curriculum. Mossop's argument ((Doherty, 2016) that it cannot translate with pencil and paper, now translates languages with the latest technology. Printed dictionaries, paper, and printing equipment were means of translation in the past, while computers and technology are means of translation practice today. So, if a translation training program is intended to teach translation practices. And the emergence of new needs and practices in the field of translation, for example post editing using computer technology or machine technology (Dulul, 2021).

2.2 Online Learning

The progression of online education in four stages within the United States: the 1990s (when the internet facilitated distance education), 2000-2007 (when Learning Management Systems - LMS - became more prevalent), 2008-2012 (when Massive Open Online Courses - MOOCs - experienced significant growth), and the present, where online higher education enrollments are surpassing those of traditional higher education (Palvia et al., 2018). Online learning encompasses more than just the internet.

This is an educational system that utilizes electronic applications to facilitate the teaching and learning process through internet media, computer networks, and standalone computers. Nevertheless, it is indisputable that internet-based learning is currently one of the most widely embraced forms of e-learning. The utilization of digital resources for educational purposes in E-learning settings has shown a substantial growth during the past decade.

2.3 Blended Learning

Blended learning refers to courses that combine online and traditional face-to-face class activities in a carefully designed and educationally beneficial way. In this approach, a portion of the in-person class time is substituted with online activities. The main focus is on combining two distinct paradigms: the classroom, which is synchronous, and the online environment, which is asynchronous ((Kaur, 2013).

Blended learning (BL), which combines in-person and online instruction, is increasingly embraced in higher education, often referred to as the "new traditional model" or the "new normal" for course delivery. The educational setting is adopting several innovations, including the integration of technology through blended learning (Dziuban et al., 2018). This new instructional approach has been swiftly adopted, although it undergoes a process. The implementation of blended learning, which combines both face-to-face and online teaching and learning, is considered an innovative approach (Kintu et al., 2017).

2.4 Autonomous Learning

Autonomous learning, as promoted by the English curricular standards (Danilenko et al., 2018). This is an innovative learning approach that emphasises students' comprehensive growth. Autonomous learning enhances students' cognitive abilities and impacts their utilisation of non-intellectual elements (Little, 2017), (G. Liu, 2016). Autonomous learning refers to the process of acquiring knowledge and skills without relying on external guidance or supervision (Wang, 2017). It involves being self-directed, productive, and maintaining a structured approach to studying.   The three fundamental qualities of autonomous learning are the acquisition of independence, self-regulation, and self-discipline. Autonomous learning is one of the principles of foreign language learning proposed by many experts, including (Nation, ISP & Macalister, 2010), (Kumaravadivelu, 2003). Autonomy as a principle of foreign language learning (Tseng et al., 2020). They state that language learning should train learners how to learn a language and how to monitor and become aware of their learning efforts so that they become effective and autonomous learners (Nation, ISP & Macalister, 2010).

2.5 Hypothesis

H_1 There is any significant effect of an interactive-based E-module of translation technology toward online learning.

H_2 There is any significant effect of the interactive E-module interaction of translation technology toward blended learning

H_3 There is any significant effect of blended learning toward autonomous learning

H_4 There is any significant effect of online learning toward autonomous learning

Significance of this study is carried out with the hope of realizing more effective digital translation learning, the use of an interactive e-modules of translation technology can support autonomous learning in translation courses. This is done to motivate EFL students and familiarize students with using technology, avoiding monotonous teaching techniques and improving students' linguistic competence. The objectives of this study is to analyze the effect of an interactive-based e-module of translation technology towards autonomous learning through online and blended learning both two English education department students of Muhammadiyah University of Makassar and Universitas Megarezky.

3. METHOD

3.1 Research Design

This study aims to examine an interactive e-module of translation technology on autonomous learning through online and blended learning of the English Education department, Megarezky University and English education department, Muhammadiyah University of Makassar. This study used a quasi-experimental study because in this study is not possible to control all

relevant variables, except for some of these variables. In this study, all groups receive treatment, namely the first group using an interactive E-module-based translation technology and the second group using a conventional learning model. The main threat to the experiment internal validity nonequivalent control group design, it is possible that the posttest group differences were pre-existing rather than the treatment effect (Creswell, 2021).

3.2 Group Treatment Comparisons in an Experiment

The researcher also compared scores for different treatments on an outcome. A group comparison is the process of a researcher obtaining scores for individuals or groups on the dependent variable and comparing the means and variance both within the group and between the groups.

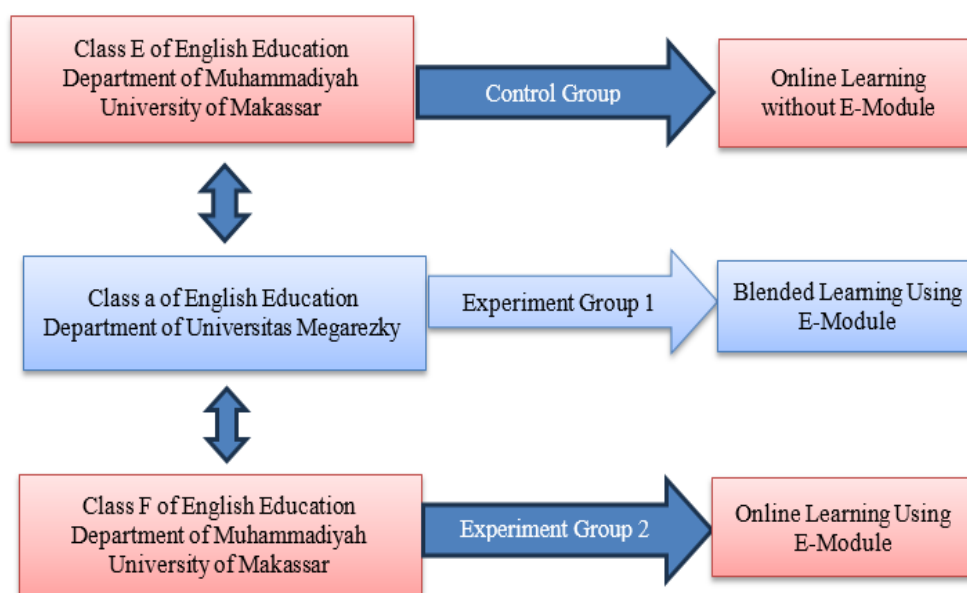To make clear description, it could be shown from figure 1 as follow:

Figure 1: Group Treatment Comparisons in an experiment (Adapted from (Creswell, 2013).

Based on figure 1 show that the students (Class E of English Education Department of Muhammadiyah University of Makassar) can receive instruction of translation through online without using an interactive E-module (the control group). And Class F of English Education Department of Muhammadiyah University of Makassar receive instruction of translation through online by using an interactive E-module (experimental group 1), and instruction of translation through blended learning using an interactive E-module (experiment group 2) from Class a of English Education Department of Universitas Megarezky. In summary, experimental researchers manipulate or intervene with one or more conditions of a treatment variables.
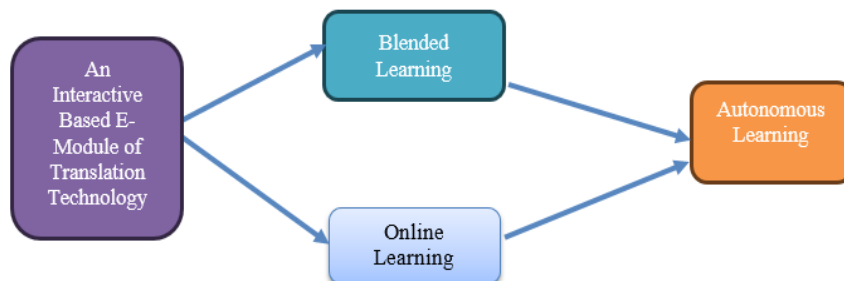
Figure 2: Conceptual Chart of Relationships between Research Variables

Based on figure 2, it can be clearly seen the relationship between research variables, both independent and dependent. Independent variable is an interactive e-module of translation technology. Dependent variable is autonomous learning. While online learning and blended learning are called intervening variables.

3.3 Data Analysis

3.3.1 Structural Equation Models – Partial Least Square (SEM - PLS)

Analysis for research will be done with Structural Equation Models (SEM) – Partial Least Square using path analysis by looking at the direct influence of variables studied. Based on theoretical basis taken from Porter (1985) and further developed with other factors as described. Partial Least Squares (PLS) is a multivariate statistical approach developed by Herman Wold in 1960. PLS is currently one approach used in Structural Equation Modeling (SEM) based on variants developed for resolve problems in analysis multiple linear regression when it occurs issues such as sample size small research, there is limited data missing, and multicollinearity (Hair et al., 2021). Among the reasons for using PLS are (1) This statistical method is appropriate to use in testing the predictive effects of relationships between variables in a model, (2) PLS can be run on samples with small amount, does not require on various assumptions, and can test research model, with a weak theoretical basis, and (3) information produced with Using PLS is more efficient and easier.

3.3.2 Evaluation of the Research Hypothesis Model

Model evaluation in SEM-PLS is carried out by evaluating the outer model and inner model. The evaluation of the outer model model is divided into two, namely the reflective and formative models. In the reflective model, the measurement model is to assess the validity and reliability of the model. Meanwhile, the inner model is a structural model to predict causal relationships between variables (Hair et al., 2021)

3.3.3. Reflective Outer Model Evaluation

The measurement model is used to test the validity of variables and the reliability of indicators. Validity tests are carried out to determine the ability of research indicators to measure what they should measure.

Table 1: Validity and Reliability Test Parameters in SEM-PLS

Validity Test	Parameter	Rule of Thumbs
Convergent	Loading Factor	>0.5- 0.7
	Average Variance Extracted (AVE)	>0.5
Discriminant	AVE roots and latent variable correlation	AVE roots > latent variable correlation
	Cross loading	More than 0.7 in one Variable
Realibility Test	Cronbach's alpha	More than 0.6
	Composite reliability	More than 0.7

4. RESULTS AND DISCUSSION

Results

The study consisted of three groups: one experimental group, one control group and one comparison group. The academic success of these groups was compared. The control group consisted of fifteen students who received instruction only through online method without using an interactive E-module of translation technology. The first experimental group comprised fifteen students who were taught using using an interactive E-module of translation technology in online learning. The third comparison group consisted of fifteen students, they were taught using a combination of face-to-face instruction and online learning, known as blended learning.

The researcher analyzed data by using Structural Equation Model based on Partial Least Squares (SEM-PLS) in the control class of Universitas Muhammadiyah Makassar which is shown in figure 1.

Figure 3: Structural Model of online learning without E-Module

Figure 3 shows of the effect of translation technology on autonomous learning through online learning without an interactive E-module of translation technology. Translation technology is as exogenous variable. Then, online learning without interactive E-module of translation technology is intervening variable. Last, autonomous learning is as endogenous variable.

Variable of autonomous learning has 7 indicators, but variable of online learning without E-Module and transalation technology have 5 indicators. To measure the validity analysis, it can be founded by loading factor. This loading factor is used to measure the significance of correlation between the score of variables and score of a question item (indicator). (Hair, J.F., Ringle, C.M. and Sarstedt, 2011) stated that a loading factor of roughly 0.3 is assumed to have

met the minimum criterion, a loading factor of roughly 0.4 is seen as better, and a loading factor more than 0.5 is typically regarded as significant. Thus, a maximum loading factor of 0.5 is utilized. Table 1 below shows the findings of the loading factor of online learning without E-Module by using SEM PLS 3.0. In addition to discriminant validity, the outer model can be evaluated by assessing construct reliability as shown by composite reliability scores. The recommended value has range from .70 to .90 ((Hair, J.F., Ringle, C.M. and Sarstedt, 2011). The result of the composite reliability analysis can be found in Table 2.

Table 2: Composite Reliability Value of Online Learning by Using E-Module

No	Variables	Composite Reliability
1	Autonomous Learning	0.906
2	Blended Learning	0.923
3	Interactive E-Module	0.850
4	Online Learning by Using E-Module	0.871

Table 2 indicates that autonomous learning has composite reliability of 0.906. Next, blended learning has a higher composite reliability than 0.70. It is 0.923. In addition, interactive E-Module has also composite reliability of 0.850. Last, online learning by using E-Module has composite reliability of 0. 871. The result of variables implies good reliability within a higher value than 0.7. In addition, the inner model can be measured through r square. This step is used to assess the model's predictive accuracy. (Hair, J.F., Ringle, C.M. and Sarstedt, 2011) suggest the value range of R square from 0 to 1 that categorized into three categories 0.75 as high, 0.50 as moderate and 0.25 as low. The higher the r-square value, the better the prediction model of the proposed research model.
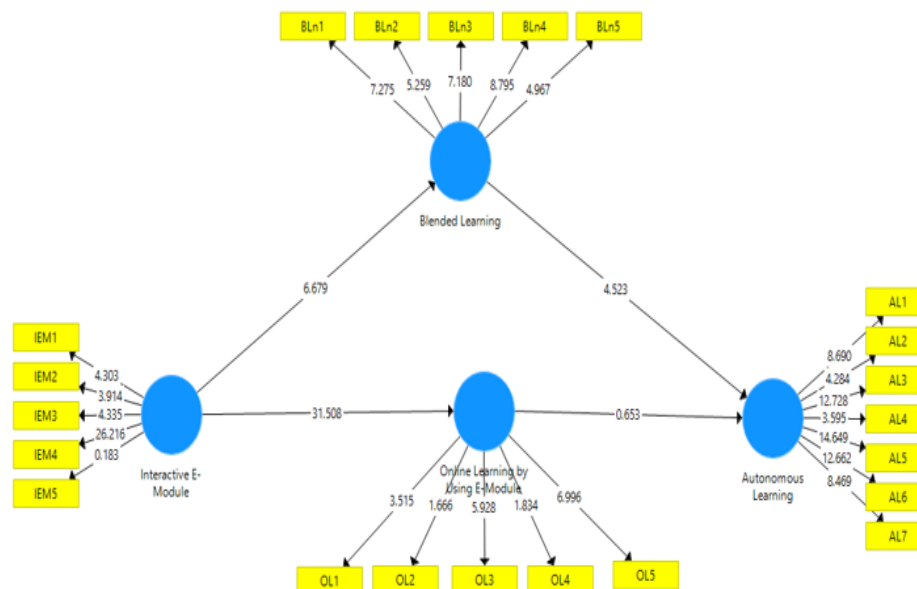

Figure 4: SEM Analysis of Research Model Generally

Figure 4 above indicates that the effect of interactive E-Module on blended learning proven by T-statistics is 6.679. It is higher than t-value of 1.96. Then, T-statistics of blended learning on autonomous learning is 4.523 in which it is higher than 1.96. In addition, T-statistic of interactive E-module on online learning by using E-module is 31.508 and T-statistic of online learning E-Module on autonomous learning is 0.653. It means that interactive E-Module has significant effect on blended learning. Blended learning has the significant effect on autonomous learning and interactive E-Module has the significant effect on online learning by using E-Module. Nevertheless, online learning by using E-module has not significant effect on autonomous learning.

Table 3: Path Coefficient Result of Research Model Generally

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-Statistics (|O/STDEV|)	P-Values
Blended Learning_ -> Autonomous Learning	0.819	0.790	0.135	6.061	0.000
Interactive E-Module -> Blended Learning_	0.770	0.793	0.142	5.409	0.000
Interactive E-Module -> Online Learning by Using E-Module	0.814	0.843	0.108	7.545	0.000
Online Learning by Using E-Module -> Autonomous Learning	0.169	0.195	0.162	1.047	0.296

Table 3 indicates that original sample is 0.819 in which there is a strong positive effect of blended learning on autonomous learning. The sample mean is 0.790 that indicates direction of positive correlation consistently. Standard Deviation is 0.135. T-statistics is 6.061. P-value is 0.000 with $p < 0.05$ so that there is the significant direct effect statistically of blended learning on autonomous learning. Then, interactive E-Module shows a strong positive effect on blended learning which is proven by original sample of 0.770. The sample mean is 0.793 that indicates direction of positive correlation consistently. Standard deviation is 0.142. T-statistic is 5.409. P-value is 0.00 with $p < 0.05$ so that there is the significant direct effect of interactive E-Module on autonomous learning with confidence level of 95% statistically.

Next, interactive E-Module shows a strong positive effect on online learning by using E-Module which is proven by original sample of 0.814. The sample mean is 0.843 that indicates direction of positive correlation consistently. Standard deviation is 0.108. T-statistic is 7.545. P-value is 0.00 with $p < 0.05$ so that there is the significant direct effect of interactive E-Module on online learning by using E-Module. Last, online learning by using E-Module shows a strong positive effect on autonomous learning which is proven by original sample of 0.619. The sample mean is 0.195 that indicates direction of positive correlation consistently. Standard deviation is 0.162. T-statistic is 1.047. P-value is 0.296 with $p > 0.05$ so that there is not significant direct effect of online learning by using E-Module on autonomous learning with confidence level of 95% statistically. In addition to direct effect, indirect effect of variables is shown in table 3.

Table 4: The Specific Indirect Effect of Online Learning by Using E-Module

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
Interactive E-Module -> Blended Learning_ -> Autonomous Learning	0.631	0.624	0.168	3.757	0.000
Interactive E-Module -> Online Learning by Using E-Module -> Autonomous Learning	0.138	0.168	0.140	0.983	0.326

Table 4 indicates that original sample is 0.631 in which there is a strong positive effect of Interactive E-Module on autonomous learning through blended learning. The sample mean is 0.624 that indicates direction of positive correlation consistently. Standard deviation is 0.168. T-Statistics is 3.757 in which it is higher than 1.96. In addition, P-value is 0.00 with $p < 0.05$ so that there is the significant indirect Interactive E-Module on autonomous learning through blended learning.

In addition, original sample is 0.138 in which there is a strong positive effect of Interactive E-Module on autonomous learning through online learning by using E-Module. The sample mean is 0.168 that indicates direction of positive correlation consistently. Standard deviation is 0.140. T-Statistics is 0.983 in which it is lower than 1.96. In addition, P-value is 0.326 with $p > 0.05$ so that there is the significant indirect Interactive E-Module on autonomous learning through online learning by using E-Module.

Discussion

T-Statistics is 3.757 in which it is higher than 1.96. In addition, P-value is 0.00 with $p < 0.05$ so that there is the significant indirect effect of interactive E-module on autonomous learning through blended learning. In addition, T-Statistics is 0.983 in which it is lower than 1.96. P-value is 0.326 with $p > 0.05$ so that there is not significant indirect effect of Interactive E-Module on autonomous learning through online learning by using E-Module.

It can be concluded that the effect of interactive E-module translation technology on autonomous learning through blended learning is significant statistically. But, the effect of interactive E-module translation technology on autonomous learning through online learning by using E-Module is not significant statistically.

The results reveal that the concepts of teaching presence and its sub-constructs, as articulated in the community of inquiry framework can be utilised to offer instruction that supports basic psychological needs and promotes autonomous motivation in blended learning environments (Mohamed Shameem Adam, Junainah Abd Hamid, Ali Khatibi, 2023). The research findings indicate that implementing an optimised blended learning approach can enhance the motivation of foreign language learners and develop their ability to learn autonomously.

This leads the construction and improvement of their autonomous learning behaviour (Wang, X., & Zhang, 2022). The design elements of blended learning, including the quality of technology, online tools, and face-to-face support, along with student characteristics such as

attitudes and self-regulation, were found to be predictors of student satisfaction. The findings demonstrate that certain student characteristics/backgrounds and design features are important factors in predicting student learning outcomes in blended learning (Kintu, M.J., Zhu, C. & Kagambe, 2017). The advancement of Blended Learning also results in the use of teaching resources, including electronic modules.

Web-based learning utilises electronic models referred to as independent teaching materials or packaged teaching materials, which allow students to engage in autonomous learning. In self-paced instructional resources, students are provided with activities to assess their learning progress. In blended learning, apart from electronic module teaching materials, there is a further advancement in teaching materials through the incorporation of media or technology.

An aspect of web-based learning is the incorporation of various media such as text, audio, video, and multimedia to enhance learning materials and reinforce students' understanding of a particular topic. Blended learning involves the digital packaging and web-based access of instructional materials. The independent learning phase incorporates the utilisation of text, audio, video, and multimedia. Text, audio, video, and multimedia content is stored utilising specific storage medium.

Autonomous learning skills are crucial in settings where learning is extremely autonomous in order to get success. Thus, it is crucial to develop a self-regulatory habit through consistent practice. Engaging in this activity will allow students to develop favourable learning habits and behaviour, thereby enhancing their non-academic achievements. One way to address digital learning issues is by enhancing the implementation of autonomous learning methodologies. By comprehending this, educators and students may determine the most effective ways to employ autonomous learning methodologies in order to achieve favourable student results in digital learning within the higher education blended learning environment (Hsieh & Hsieh, 2019).

Therefore, it is imperative for future research to thoroughly investigate empirical studies in order to gain a deeper understanding of how all aspects of self-regulated learning strategies might improve non-academic results in higher education. This will also contribute to the development of more robust empirical evidence when evaluating the non-academic achievements of students. Overall, the use of Self-Regulated Learning methodologies allows students to attain improved non-academic results in a blended learning setting (Anthonysamy et al., 2020).

English language usage and a wider range of resources were mandatory for socially integrated students. The participants' viewpoints on learner autonomy in the context of learning translation through an interactive e-module indicated that while they accept their potential to become autonomous learners, they have a preference for doing so within interactive and communicative environments. It is contended that in this study, blended learning can directly enhance students' English ability and their learning experience by using online, offline, and face-to-face classes. The students perceive both online and offline learning as a method to foster autonomy in information acquisition, enabling them to learn at their convenience. The blended learning method in this study provides online students with a high degree of freedom, such as access to

recorded lectures, discussion boards, and online resources (Broadbent, 2017). Conducting in-person sessions in the classroom is seen as a method of creating space for collaboration, which promotes interactive involvement among peers. Although the study involved independent and collaborative learning experiences, it is important for students to understand from the outset that they should not depend on others or the teacher for the responsibility of their own learning.

This study recognises that technology can be utilised to augment teaching methods for educators and facilitate knowledge acquisition for students. It is important to emphasise in this study that blended learning is not just reliant on technology, but rather emphasises the collaboration between technology and the teacher to optimise student learning. While students may have their own preferences in learning method and sources for supplementary information, it is still crucial for teachers to provide guidance in the selection of course content that can be presented both online and offline (Herlina et al., 2019).

The university students' autonomous learning activities still require improvement. Teachers can foster a positive learning environment by utilising interactive learning platforms and tools, such as an interactive e-module on translation technology. Additionally, they can create diverse blended learning activities and implement positive motivation and reward systems to enhance students' engagement and motivation to participate in these activities. In addition, teachers must provide clear instruction to students on how to create blended learning plans, establish learning objectives, efficiently allocate time and resources, and effectively manage both online and offline assignments (Hua et al., 2023).

A substantial majority of students in a Chinese university translation course find blended learning to be an efficient method for promoting learner autonomy (Chen, 2022). The blended course enhances the translation skills of participants, including their knowledge, technological proficiency, and professional expertise (Peng et al., 2023). This will empower students to take charge of their own learning process. Teachers can also foster students' ability to prioritise and organise learning activities, evaluate their learning methods, recognise their strengths and areas for growth, and encourage regular introspection and self-evaluation of the learning process through guided questioning, writing, or conversations. Enhancing the good teaching experience of university students is crucial. Blended learning necessitates a proficient amalgamation of online and in-person training. Therefore, the teachers must sufficiently prepare and strategize course content, learning activities, and resources to guarantee a seamless and orderly teaching procedure.

Blended learning allows teachers to utilise a range of teaching methods and resources, including lectures, case studies, group discussions, practical tasks, simulated experiments, and multimedia materials, to accommodate the diverse learning needs and styles of students.

Blended learning is the integration of online and offline teaching methods, combining the advantages of both while reducing the limitations of traditional teaching approaches (Ma, 2023). By combining face-to-face and online teaching, this relatively new method aims to achieve optimal teaching outcomes. In terms of the learning environment, blended instructional models can effectively facilitate students' impartial acquisition of knowledge through mobile

devices (such as cell phones and computers) (Ma et al., 2024). The learning activities are not confined to the classroom alone, but also enable students to learn at their own time and location. In traditional teaching methods, learning resources typically consist of teaching materials, books, and tutorials.

However, in blended teaching, the resources expand to include online materials such as audio and video resources, images, pictures, and animations. This broader range of resources offers a rich and diverse learning experience beyond just books and teaching materials. This format is better suited for promoting students' active learning and independent creation of information.

Autonomous learning is a crucial aspect for success in blended learning contexts since learners have more flexibility and autonomy (Van Laer, S., & Elen, 2016). Successful participation in blended learning courses necessitates the possession of many self-regulation abilities, including organisation, discipline, time management, proficiency in utilising technology to facilitate learning, and self-efficacy to exert control over one's own learning processes (McDonald, 2013). Multiple studies have shown that high achievers or students with autonomous learning skill tend to benefit greatly from improved flexibility and learner control. However, low achievers may not yet have the necessary skills for autonomous learning.

5. CONCLUSION AND SUGGESTION

This study aims to investigate the effect of an interactive based e-module of translation technology on autonomous learning through online learning, blended learning both private universities in Makassar. It can be found that there is negative effect of interactive based e-module of translation technology on autonomous learning through online learning by using e-module and positive effect of interactive based e-module of translation technology on autonomous learning through blended learning. By integrating traditional face-to-face instruction with online teaching, an innovative method is developed with the goal of attaining optimal educational results. Blended learning approaches can efficiently enable students to acquire knowledge impartially using mobile devices and an offline model.

As suggestion for further researchers to apply appropriate electronic module for all teachers should get instructional guidance during the creation and execution of online or blended courses, especially those who are teaching translation through the use of an interactive E-module. And utilize a larger sample to obtain different results.

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