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The Use of Digital-Based Hadith in Learning the Science of Hadith in Islamic Higher in Indonesia

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Abstract

The aim of this study was to assess the impact of digital-based Hadith in Islamic universities in Indonesia. The research is descriptive quantitative. Observation, questionnaires, and simple regression analysis were used to collect data. The population was IAIN Pontianak students, and the sample was 125. The study was conducted at Islamic universities in Indonesia to observe and learn about the impact of digital-based hadith in Hadith learning at Islamic universities in Indonesia. This study found a positive and significant influence on the use of digital-based Hadith in Islamic universities in Indonesia. This means that better use of Digital-Based Hadith will improve Hadith learning at Islamic universities in Indonesia. This study's qualitative findings from observations and interviews with respondents revealed that "Learning hadith using digital hadith still requires adaptation because many features are confusing. Also, choosing authentic hadiths requires care due to the abundance of advices called Nabawiyah traditions scattered throughout countless books ". This digital hadith also eliminates the need for lecturers to receive training or workshops on the use of digital hadith because lecturers are increasingly proficient in mastering the application, whether it is software or a website. So that learning can be done more efficiently with technology.

Keywords

the use of hadith; digital; learning; hadith science

INTRODUCTION

Indonesia's education system is heavily influenced by technology. Teaching and learning are greatly aided by the use of ICT (information and communication technology). Modern technology has had a noticeable impact on Islamic education, both in the classroom and at home. Hadith and its sciences are one of the most important and popular Islamic subjects. ICT is a major factor in the development of

high-quality educational programs. Improved teaching, learning, and management in schools can be achieved through the use of technology (Livingstone, 2012).

With the advent of 4.0 technology, ICT is becoming more widespread and contributing to the nation's development and economic growth (Mardan, 2000). The help of ICT applications like websites, digital libraries, mobile applications, and software, Islamic knowledge has been easily and effectively conveyed including the study of hadith (Zulkipli & Suliaman, 2013). A major influence of this technology on religious studies, especially the Qur'an and Hadith Muslims includes digitizing the Qur'an, Hadith and Islamic books, with translations, sounds, and interpretations from renowned scholars. However, hadith digitization lags behind Qur'an digitization partly because the hadith is more than the Qur'an in terms of ICT (Batubara, 2017).

Hadith studies have recently shown developments in Indonesia, and even in the current situation, Hadith has seen rapid progress, both in terms of quantity and quality. This can be seen in the growing number of Hadith Science (IH) study programs at various UIN/IAIN in Indonesia, curriculum and syllabus, as well as the development of thesis titles, theses, dissertations, and published books. As a result, the new phenomenon of Hadith study in Indonesia is worth researching, analyzing, and projecting into the future (Wahid & Masri, 2018; Rocha et al., 2021).

A new generation of hadith scholars emerged in the 14th century H to discuss the sciences of hadith and link them to the development of knowledge in the modern world as a result of Islamic-West contact. A review of the process of standardization of hadith is necessary without the need to alter modern society's way of life. Al-Qasimi, Mamad 'Ahhn, Abi uhbah, Subs al-alah, Muammad 'Ajjaj al-Khatab, Musafi al-ib'a MM Azam, Nr al-Din 'Itr, and Na'iruddn al-Alban are among the Middle Eastern scholars (Saputra, 2017). Because their time is so distant from the books of hadith and various knowledges, Muslims must be careful in choosing hadiths that truly come from the Prophet (Khon, 2014). Takhrijul-hadith activities are efforts to search for hadith in hadith books by tracing the lafaz (matan) of hadith is based on the lafaz of the hadith he is looking for (Ismail, 1991). Al hadith tradition must always maintain the sunnah, explore what muhaddisin do (Fayyad, 1998; Turan et al., 2022; Zou et al., 2022).

LITERATURE REVIEW

Hadith in the Digital Age

The development of hadith began to be encouraged again by hadith scientists with an attractive packaging. What makes hadith scientists want to include hadith studies in this digital era is to develop hadith studies more accessible. With this in mind, hadith goes global in the internet, more interesting, simply to access, practical and fast. In addition, various new hadith products have emerged in the global media, or in the form of certain software initiated by individuals and other hadith observers, such as Maktabah Syamilah software, Maktabah Alfiyah li al-Sunnah Alnabawiyyah (Suryadilaga, 2014).

The digitization of hadith is nothing but to attract public interest, especially millennial youth, so as not to rule out hadith studies among many other disciplines. This way, the role of hadith as the second source of Islamic teachings after the Qur'an will be manifest through the involvement of hadith in aspects of life and in solving social problems other than the Qur'an. This is where the real role of the millennial generation get involved and make the best possible use of digitization in hadith so that gradually the study of hadith will return to its peak of glory.

Printing of hadith in the form of text from paper media to digital or electronic form requires very careful planning, commitment and in-depth observation and research (Zulkipli, 2012). However, the efforts and persistence of Muslim scholars to preserve the hadith in printed form may encounter problems if there are errors from the reading point of view, placement of lines or dots, writing procedures and so on. This problem will also occur in the process of copying text hadith into electronic form because of human limitations. Najeeb (2015) highlights that the process of transferring hadith requires deep Arabic language skills to maintain the authenticity of the text, especially in digital form.

Learning

Learning is a process of interaction between students and educators and learning resources in a learning environment. Learning is assistance provided by educators so that the process of acquiring knowledge and knowledge, mastering skills and character, and forming attitudes and beliefs in students can occur. In other words, learning is a process to help students learn well. Gagne (1977) defines learning is a set of external events designed to support several internal learning processes. Furthermore, Gagne (1985) put forward his theory more fully by saying that learning is intended to produce learning, external situations must be designed in such a way as to activate, support, and maintain the internal processes contained in each learning event.

Trianto (2010:17) says "Learning is an activity that intentionally modifies various conditions that are directed at achieving a goal, namely the achievement of curriculum goals". Learning can simply be interpreted as a product of continuous interaction between development and life experience. Learning in a complex sense is a conscious effort from a teacher to teach his students (directing student interaction with other learning resources) in order to achieve the expected goals (Hardini & Puspitasari, 2012). Uno (2013) revealed the results of their study in several studies which revealed that 7 learning indicators were said to be effective, namely: 1) good material organization; 2) effective communication; 3) mastery and enthusiasm for the subject matter; 4) positive attitude towards students; 5) fair value provision; 6) flexibility in learning approach; 7) good student learning outcomes. Of the seven indicators, the indicators for giving fair scores and indicators for the flexibility of the learning approach are classified as measurable indicators. The meaning of fair is essentially difficult to realize, compared to when the assessment is carried out objectively and transparently. Meanwhile, flexibility in the learning approach is an indicator that is difficult for every teacher to realize, because being flexible has something to do with personality and habits.

Technology-Based Learning for Hadith Studies

In an e-learning environment, e-learning content is delivered through e-learning tools which can be divided into two types; synchronous and asynchronous learning. Nikolopoulou & Gialamas (2016) classify the challenges of using ICT in the learning process from three aspects, namely: lack of support, lack of trust, and lack of equipment.

1. Lack of Support

Teachers in secondary schools often feel a lot of pressure from school leaders to use of ICT in their teaching (Wikan & Molster, 2011). To have a successful integration of ICT in teaching, principals need to provide proper support to teachers. First, integrating the use of ICT into the curriculum and teachers must have a clear plan for using ICT in teaching. Second, school leadership needs to have a clear vision and mission to integrate technology, and have a plan to make it happen and invest in ICT for classroom learning.

Meanwhile, the lack of availability of networks, electricity and other supporting facilities, which includes the availability of computers, laptops and infocus, is an obstacle to lack of equipment. Actually network problems can be included in the category of lack of support from school management. Schools should provide a budget to provide internet facilities in schools. When associated with the school literacy movement program, the indicator that the school is already running a digital literacy program is the availability of internet facilities in schools.

2. Lack of Trust

Teachers face many challenges when trying to integrate ICT in their teaching and some of them are their knowledge, skills, beliefs and attitudes (Papanastasiou & Angeli, 2008). According to Papanastasiou & Angeli (2008), beliefs and attitudes are important factors in how teachers use ICT in teaching activities. Thus, the teacher's attitude towards ICT is an important factor when applying ICT in teaching. Empirical evidence to claim that teachers' beliefs about teaching practice is important in explaining why teachers adopt digital technologies for teaching.

Ward & Parr (2010) show that teachers who understand the benefits of using digital technology for teaching and learning are more likely to use digital technology in schools. According to Basak & Govender (2015), one attitude that teachers have, at all levels, is a lack of confidence in using ICT in their teaching. Many teachers are afraid to use ICT in their teaching and become anxious when it comes to using their ICT knowledge. In addition, many teachers also lack knowledge about the benefits of ICT in education (Mirzajani et al., 2016).

3. Lack of Equipment

It was found that most of the institutions had computers. But computers are very few and most of the time they are being used by students offering computer science and information technology (IT) leaving the rest of the students and

teachers in a dilemma. Various studies show several studies the reasons for the lack of access to technology. In the Sicilia study, teachers complained about how difficult it was to have access to a computer. Teachers identified insufficient numbers of computers, insufficient peripherals, and number of copies of software, and lack of simultaneous internet access as major barriers to the implementation of ICT in educational institutions.

METHOD

Research Design

This study aims to determine and describe the effect of using Digital-Based Hadith in Hadith Learning in Islamic universities in Indonesia. Based on the purpose of this study, the research design used was a quantitative research design combined with qualitative research. The quantitative approach was chosen because this study aims to test theory based on data from the field (Craswell, 2014). The research location is in an Islamic college or to be precise at IAIN Pontianak.

Respondent

Participants in this study were students and lecturers at non-PTKI universities in Indonesia. The number of samples taken in this study was 125 using random sampling technique.

Data and Sources of Data

The data of this study consisted of primary and secondary data. Primary data is data obtained directly through interviews with respondents. Secondary data is obtained directly from the distribution of questionnaires that have been shared with respondents. Thus, the data collection methods in this study include: 1) distributing questionnaires, 2) interviews, and 3) documentaries.

Table 1. Questionnaire grid

Variable	Variable Operational Definition	Indicator	Scale
Information and Communication Technology (ICT)	Information and Communication Technology (ICT) is a technology related to the retrieval, collection, processing, deviation, dissemination, and presentation of information.	1. Access 2. Output 3. Impact	interval

Variable	Variable Operational Definition	Indicator	Scale
Learning	Learning is a complex aspect of human activity, which cannot be fully explained.	1. Good and correct material organization 2. Effective and efficient communication 3. Mastery and enthusiasm for the subject matter 4. Positive attitude towards students 5. Fair rating 6. Flexibility in learning approach 7. Good student learning outcomes.	interval

Validity and Reliability of the Instrument

Table 2. Information and Communication Technology Questionnaire Validity Test Results (X)

Correlations					
		btr_1	btr_2	btr_3	total_score
btr_1	Pearson Correlation	1	,699**	,712**	,908**
	Sig. (2-tailed)		,000	,000	,000
	N	125	125	125	125
btr_2	Pearson Correlation	,699**	1	,700**	,887**
	Sig. (2-tailed)	,000		,000	,000
	N	125	125	125	125
btr_3	Pearson Correlation	,712**	,700**	1	,891**
	Sig. (2-tailed)	,000	,000		,000
	N	125	125	125	125
total_score	Pearson Correlation	,908**	,887**	,891**	1
	Sig. (2-tailed)	,000	,000	,000	
	N	125	125	125	125

** . Correlation is significant at the 0.01 level (2-tailed).

From the table above, it can be seen that each statement item has rcount > rtable and has a positive value. Thus, the statement item is declared valid.

Table 3. Learning Questionnaire Validity Test Results (Y)

Correlations							
		item_1	item_2	item_3	item_4	item_5	total number
Item_1	Pearson Correlation	1	,283**	,087	,323**	,251**	,591**
	Sig. (2-tailed)		,001	,333	,000	,005	,000
	N	125	125	125	125	125	125
Item_2	Pearson Correlation	,283**	1	,194*	,551**	,266**	,723**
	Sig. (2-tailed)	,001		0.030	,000	,003	,000
	N	125	125	125	125	125	125
Item_3	Pearson Correlation	,087	,194*	1	,224*	,382**	,542**
	Sig. (2-tailed)	,333	0.030		0.012	,000	,000
	N	125	125	125	125	125	125
Item_4	Pearson Correlation	,323**	,551**	,224*	1	,256**	,730**
	Sig. (2-tailed)	,000	,000	0.012		,004	,000
	N	125	125	125	125	125	125
Item_5	Pearson Correlation	,251**	,266**	,382**	,256**	1	,671**
	Sig. (2-tailed)	,005	,003	,000	,004		,000
	N	125	125	125	125	125	125
Total number	Pearson Correlation	,591**	,723**	,542**	,730**	,671**	1
	Sig. (2-tailed)	,000	,000	,000	,000	,000	
	N	125	125	125	125	125	125

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

From the table above, it can be seen that each statement item has rcount > rtable and has a positive value. Thus, the statement item is declared valid.

Table 3. Information and Communication Technology Reliability Test Results (X)

Reliability Statistics	
Cronbach's Alpha	N of Items
,874	3

From the table above, the results of the above analysis found the cronbachs alpha value of 0.874. So it can be concluded that the items of the research instrument are reliable, because they are greater than 0.6.

Table 4. Learning Reality Test Results (Y)

Reliability Statistics	
Cronbach's Alpha	N of Items
,666	5

From the table above, the results of the above analysis found the cronbachs alpha value of 0.666. So it can be concluded that the items of the research instrument are reliable, because they are greater than 0.6.

Data Analysis

Data analysis is an attempt to organize data, sort it out to find patterns, and synthesize them into meaningful units (Miles, et. al., 2014). The analysis includes to proceed the quantitative data in the form of simple linear regression, and qualitative data analysis from interview results. Qualitative data analysis was carried out in four stages. First, collect data using observation, interview, and documentary methods. The data collected is adjusted to the research theme, namely the influence of ICT and learning. Second, the data that has been collected is then reduced, namely summarized, sorted, and focused on the main research problem. The goal is that the reduced data is able to provide a clearer picture and make it easier for researchers to present the data. Third, after the data has been reduced, the researcher presents the data arranged in a relationship pattern so that it is better described and understood. Fourth is drawing conclusions and verifying data.

In drawing conclusions, researchers provide detailed explanations so that they are relevant to the research objectives. The technique of checking the validity of the data is done by using the technique of checking the triangulation data by comparing and checking back the degree of confidence of the information that has been obtained from each informant to ensure the truth of the information submitted by the participants. Researchers also compared data sources with a review of the existing literature so that the degree of confidence in the data can be valid.

RESULTS AND DISCUSSION

Results and Discussion of Quantitative Data Analysis

Classic assumption test

Table 5. Kolmogorov-Smirnov Test . One-Sample Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		125
Normal Parameters, b	Mean	0E-7
	Std. Deviation	2.25187729
Most Extreme Differences	Absolute	,074
	Positive	0.054
	Negative	-,074
Kolmogorov-Smirnov Z		,832
asympt. Sig. (2-tailed)		,493

- a. Test distribution is Normal.
- b. Calculated from data.

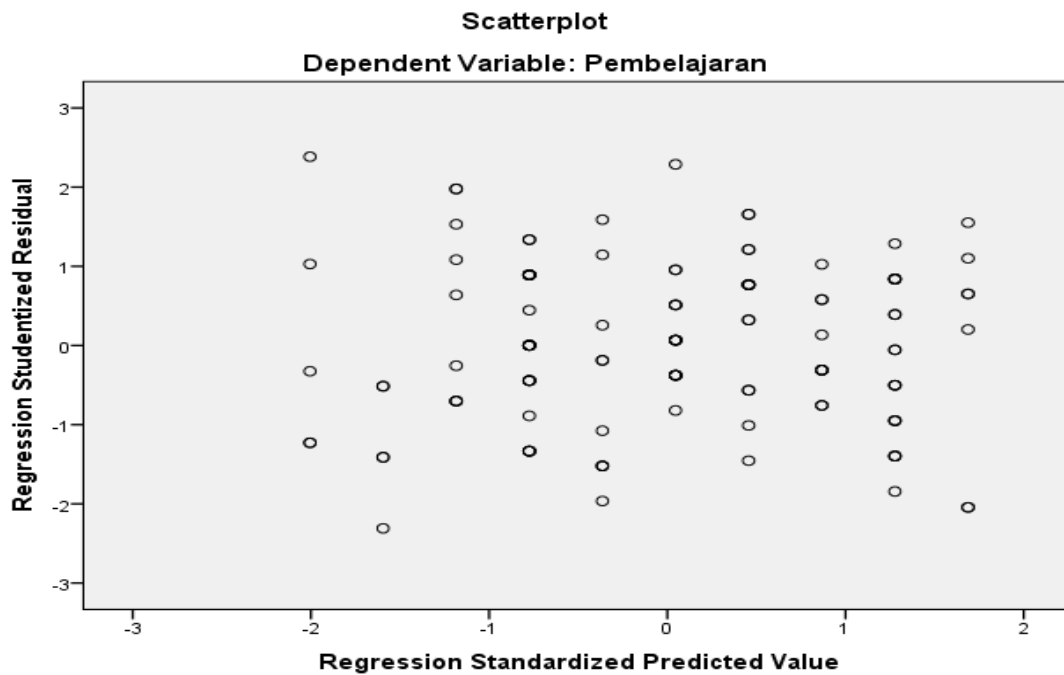
Based on the normality test table above, the value of the Kolmogorov Smirnov Test is 0.832 with a probability of 0.493. The constant value = 0.05 indicates that the data is normally distributed.

Table 6. Linearity Test Results

ANOVA Table			Sum of Squares	df	Mean Square	F	Sig.
Learning * Information and Communication Technology	Between Groups	(Combined)	221.548	9	24,616	5,238	,000
		Linearity	133.202	1	133.202	28,343	,000
		Deviation from Linearity	88,346	8	11.043	2,350	,022
	Within Groups		540.452	115	4,700		
	Total		762,000	124			

Based on the Significance Value (Sig) of the output above, the Deviation from Linearity Sig value is 0.00 less than 0.05. So, there is a significant linear relationship between the Information Technology variable (X) and the Learning variable (Y).

Table 7. Heteroscedasticity Test Results



The graph shows that the dots spread randomly, do not form a clear pattern, and are spread both above and patterned. The number 0 (zero) on the Y axis, then there is no heteroscedasticity.

Hypothesis testing

Table 8. Partial t-test results

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15,169	,929		16,321	,000
	Information and communication technology	,425	,083	,418	5,104	,000

a. Dependent Variable: Learning

The t-test is said to be influential if the t-test value is greater than $t_{table} > 1.65714$. If the t-test is less than $t_{table} < 1.65714$, the t-test is said to have no effect. This study finds that ICT (X) affects variable individually/partially on Learning (Y) at 5.104 ($t_{count} 5.104 > t_{table} 1.65714$).

Table 9. Coefficient of Determination Test Results R2

Model Summaryb				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,418a	,175	,168	2.26101

a. Predictors: (Constant), Information and Communication Technology

b. Dependent Variable: Learning

The regression calculation shows that the coefficient of determination (adjusted R square) is 0.164. Variable of ICT and Learning 0.836 means to contribute an amount of 83.6% in the learning process.

Table 10. Simple Linear Analysis Results

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	15,169	,929		16,321	,000
	Information and communication technology	,425	,083	,418	5,104	,000

a. Dependent Variable: Learning

Table 10 suggests that the regression coefficient for the Information Technology variable is 0.425 and also produces a constant of 15.169 so that the simple regression equation in this study is as follows:

$$Y = + 1X1 +$$

$$Y = 15.169 + 0.425 X_1 +$$

The regression equation above means that: ICT variable has a positive direction coefficient towards learning with a constant value of 0.425. This result proves that the use of digital hadith has a positive and significant effect on learning hadith science, providing t-value 5.104 greater than ttable of 1.65714 ($p = 0.000 < 0.05$). This shows that ICT variables affect the learning of hadith science in Islamic Universities in Indonesia.

The result of hypothesis test is 0.418, which means the learning of hadith science increases by 4.18%. In other words, ICT improve learning results. Students can easily access hadith books digitally in the form of applications and Pdf. Digitization has been able to provide products or services into digital variants. Studies related to digitalization and technology have been carried out previously by several researchers. Digitization has the main goal to improve and maintain the preservation of library collections. Digitization has been able to turn documents and works of art into digital products to provide online services. The impact of online media has enabled increased digitization of manuscripts resulting in effective digital publications such as digitizing the Quran and Hadith.

Results and Discussion of Qualitative Data Analysis

Findings suggest that "hadith learning using digital hadith still needs adaptation because many features of the application are not easy to understand. It is necessary to be careful in choosing authentic hadiths because of the large number of advices called Nabawiyah traditions scattered in various and countless volumes of books". On the other hand, some respondents argued that "the existence of this digital hadith makes it very easy for students, because it can be easily accessed either through laptops and smartphones" so that in the current era it is very supportive in the learning process. From this explanation, there is also a need for training or workshops for lecturers related to the use of digital hadith because the lecturers are increasingly expert in mastering the application, whether it is software or in the form of a website. So that learning can be carried out more efficiently using this information technology.

Hadith is characterized with language problems, such as "Arabic proverb", and language terms that are non-negotiable (Buchari, 1999). Returning to the original book is very difficult, whether to open it book by book and page by page (Hadi, 1994). This makes the need for understanding hadith both in the book and digitally where hadith software for Islamic Religious Colleges (PTKI) is a necessity or necessity.

This way, technological developments also affect the study of hadith. The history of the development of hadith studies from time to time is interesting to discuss considering the role of hadith as the second source of Islamic law after the Koran which is very important for Muslims. In the classical era, if someone wants to study hadith, then that person must have a large collection of printed hadith books that are all manual and with limited access. As a result, it can hinder the ease of accessibility where they have to carry hadith books everywhere. In addition,

the number of hadith books from the codification of classical scholars is certainly very limited, and not everyone can have them.

In the digital era academics can easily access hadith books through digital forms in the form of applications and Pdf files so that they can access various references from hadith books easily by downloading applications provided by the internet. Digitization has been able to provide products or services into digital variants. Studies related to digitalization and technology have been carried out previously by several researchers. Digitization is used in an educational context. Regarding that, this digitalization has changed teaching and learning practices which means that teachers have a major role in improving digital technology. Digitization has the main goal to improve and maintain the preservation of library collections. Digitization has been able to turn documents and works of art into digital products to provide online services for Islamic literature globally. The impact of online media has increased digitization of manuscripts resulting in effective digital publications such as digitizing the Quran and Hadith.

CONCLUSION

In summary, this study concludes that ICT has a positive and significant effect on learning Hadith Science in Islamic universities in Indonesia. It can be described that the higher the Islamic religious colleges in increasing the use of digital hadith, the higher the effectiveness of learning hadith science at Islamic universities in Indonesia. This study has a novelty in that the use of digital tools to learn hadith is new in this study. The inclusion of technology in practices and theories are part of a new learning management. This study however has a limitation in that the sample is short. Future research is suggested to add more sample and explore hadith in a more details of exploration.

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