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Differences in the Experience of Lecturers and Students on Distance Learning In Higher Education in Indonesia: Case Study in the Pandemic of Covid-19

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ABSTRACT

The pandemic of Covid-19 has radically changed the learning systems among higher educational institutions, especially in Indonesia. Before the Pandemic, the learning activity is implemented face to face, and it suddenly turns into a distanced learning.

The main objective of this research is to analyze the differences in the lecturers' and students' experiences in distanced education due to the Covid-19 pandemic. It employs a quantitative research design. Data are collected through a direct survey of the lecturers and students. The number of respondents is 123 lecturers, and 404 students. The instrument used is a questionnaire. Data are analyzed by using two approaches, index categorization and difference test with Branded Response Model.

The study results show that the distanced learning process is measured under three categories, and significant differences are found in the thesis supervising activity. It concludes that the supervision for the students' thesis cannot be implemented in the distance because it necessitates interactive communication and in-depth discussion. Be-sides, it also needs an emotional connection between the lecturer and the student. Therefore, the supervising process should be ideally implemented face to face. Meanwhile, differences in the lecturers' and students' experiences are not found in the learning and assessment activities. They can be easily conducted in distance or other approaches, including Blended Learning.

Keywords: Difference in Experience, Learning Process, Distanced Education, Covid-19 Pandemic.

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INTRODUCTION

Covid-19 pandemic has radically changed the order of the learning system in most universities in Indonesia. Before the pandemic, the learning processes in Islamic Religious Higher Education (PTKIN) are implemented face to face. However, the pandemic, which was confirmed level 2 on March 2, 2020, and declared as a non-natural national disaster, suddenly altered the learning system into a 100% distance education. Distanced and face-to-face learning systems are two different modes. The distanced mode of education implemented in a sudden let the students, lecturers, and all of the involved parties shocked. They are shocked due to their lack of experience. They did not have any experience in a distanced education.

The learning system, based on the previous study results, still faces many obstacles and challenges. Obstacles and challenges burden the learners, lecturers, and education providers. They are low motivation and ability to learn, lack of access to technology, financial barriers, and learning time [1], [2]. It requires a change of learning style, technical skills, learning participation, learning expectations [4], [5], and adaptation to the environment and time of learning [5]. The obstacles and challenges of educators lie in the changes of roles and the transition in the learning process, which requires changes in the learning styles and methods [4]. Educators cannot control ethics, attitude, behavior, progress, learning outcomes, and feedback [5], the change of role, the loss of the educational process, and the need towards creativity for better learning materials [6]. The challenges of the institution are the changes in service and learning system administration [1], [3]. It necessitates a new policy in the learning system, technological support, infrastructure, and an increase in lecturers' professionality [4]. Therefore, the implementation of distanced education in PTKIN in Indonesia provides a new either positive or negative experience.

PTKIN is a higher educational institution under the auspices of the Ministry of Religious Affairs of the Re-public of Indonesia. There are 58 higher educational institutions in Indonesia, consisting of 17 State Islamic Universities (UIN), 34 State Islamic Institutes (IAIN), and State Islamic Higher School (STAIN) (https://span-ptkin.ac.id/prodi). The teaching and learning processes in PTKIN have been enforced face to face before. Covid-19 pandemic has forced the Ministry of Religious Affairs to change the policy of higher education among PTKIN through the Circular Letter of Director General of Islamic Education Number 657/03/2020 regarding the Prevention of Covid-19 Spread around Islamic Religious Colleges.

Both policies have different spectrums [7], [8]. There have been three learning modes: face to face, blended learning, and fully online learning [9]. Face-to-face learning mode is characterized to be centered on the educators, conducted face to face, and direct interaction between educators and learners in the same place. The weakness is that students are lack of understanding diverse sources, lack of critical thinking, and low motivation [10], [7], [11], [12]. It has been one of the learning modes verified and practiced in higher schools around the world [13]. Online learning is a

learning model of distance education which is not conducted in the class-rooms or within the campus [9]. One of the characteristics of online learning is that students can access the learning resources and the processes through electronic media and the internet network [7], [8]. State that when the interaction between lecturers and students is mediated by electronic media, focusing on the students, the success is dependent on the students. Lecturers and students should not have to meet at the same time and place. It applies an independent learning concept that emphasizes written communication. Therefore, both lecturers and students are required to be capable of using electronic media. According to [5], learning online is different from learning face to face. Thus, distanced education gives a new experience to lecturers and students throughout the learning process due to the Pandemic of Covid-19.

The main objective of this research is to explore the different experiences of lecturers and students upon implementing the distanced learning processes. This study is divided into three attributes: the experiences of the lecturers and students during learning and teaching, thesis supervising, and assessment implemented in distance. This objective is highly prominent for higher education stakeholders in Indonesia to ensure that the educational system in the era or post-pandemic of Covid-19 can be implemented effectively without any intervention with the educational goals that have been set.

RESEARCH METHOD

The current study employs quantitative research with a survey approach. The survey was conducted in the colleges around PTKIN in Indonesia because they applied full face-to-face or offline learning systems before the pandemic. Due to the Covid-19 pandemic, the learning process should be executed in distance. It resulted in a new experience for the lecturers and students upon learning, thesis supervising, and assessment. Data were obtained from primary sources, the lecturers, and students directly through the dissemination of a questionnaire with a survey approach.

The research instrument is a questionnaire based on the theory of distance education [14], [15], [16], [17], the theory of Heutagogy [18], and the theory of self-reliance in learning [19]. The measurement used a Likert scale (1=strongly disagree until 5=strongly agree). The questionnaire was provided in the Google Form spread through Whatsapp groups of the lecturers and students of PTKIN in Indonesia. The distribution of the questionnaire was conducted in May and June 2020 or the end of the semester 2019/2020. The number of the participants involved in this study is (N) = 527 respondents consisting of (n) = 123 or 23, 24% lecturers and (n) = 404 or 76,66% students. There were 41.50% of lecturers with a doctoral degree and 81.30% had less than 20 years of work experience. Meanwhile, the respondents from the students were 65.84% in the second and four-semester and 64.16% of them were semesters six and above.

The data were analyzed by using two approaches, descriptive analysis and test of difference. A descriptive analysis approach employed an index categorization approach with three categories [20]. The difference test used the Graded Response Model approach [21]. Within the model, before the analysis of the difference test, data transformation was made, from a Likert scale (ordinal) to an interval scale with a probability of (0-1). Probability was used to identify the respondents' answers (1, 2, 3, 4, or 5) in stages. Every attribute of the re-search scale (-3-3) followed the standard score (M = 0, SD = 1). To gain the same measurement scale, the lecturer group was used as a reference in the estimation of the third attribute of the study. Thus, both groups were on the same scale. Furthermore, to examine the homogeneity of the score distribution variance between groups in every attribute, the Levene test was conducted. Homogeneity was a requirement to meet before the test of difference.

RESULT AND DISCUSSION

As described in the methods, two approaches in the analysis of the data were employed: 1) categorization index, which aimed to describe the experiences of the lecturers and students by category; 2) test of difference, which measured the difference of experience between the lecturers and students upon implementing the distanced learning.

The Categorization Index of Experiences in the Learning Activities

Experience in the learning activities is the experience of an individual obtained during teaching and learning or training. Learning is a process formally or deliberately designed to create learning activities [22]. Learning is a process of interaction between an educator and learners supported with learning resources in the learning environment [23], about the National Education System. The results of the analysis of the experience categorization in the learning activities are presented in Table 1.

Table 1. The frequency of the lecturers' and students' experience during the distanced learning activities

NO	Measurement Aspects	Category, Std. Deviation, and Variance	Experience (Frequency)	
			Lecturer	Students
1.	The effectiveness of the learning material delivery by the lecturers online	Not effective	21.10	12.90
		Less effective	69.10	68.60
		Effective	9.80	18.60
		Std. Dev. (*s*)	0.55	0.56
		Variance	0.30	0.31
2.	The students' level of understanding in receiving the materials given by the lecturer online.	Low	0.80	12.90
		Average	96.70	70.80
		High	2.40	16.30
		Std. Dev. (*s*)	0.18	0.54
		Variance	0.03	0.29
3.	The level of the students' participation in following the online learning process.	Low	7.30	7.90
		Average	88.60	85.60
		High	4.10	26.50
		Std. Dev. (*s*)	0.34	0.56
		Variance	0.11	0.31
4.	The lecturers'/students' level boredom with the online learning	Bored	25.20	29.00
		Less	69.90	67.30

NO	Measurement Aspects	Category, Std. Deviation, and Variance	Experience (Frequency)	
			Lecturer	Students
	process.	comfortable		
		Fun	4.90	3.70
		Std. Dev. (*s*)	0.51	0.51
		Variance	0.26	0.26
5.	The effectiveness of the online lecture implementation.	Not effective	3.30	12.60
		Less effective	94.3	74.50
		Effective	2.40	12.90
		Std. Dev. (*s*)	0.24	0.51
		Variance	0.06	0.26
6.	The effectiveness of online tasks for students.	Not effective	86.20	8.40
		Less effective	13.80	54.70
		Effective	0.00	36.90
		Std. Dev. (α)	0.35	0.61
		Variance	0.12	0.37

Table 1 shows that most responses towards the statements remain in the second index category, yet they have a different opinion on the sixth item. The first group (lecturer) states that the students' tasks are not effective if they are given online, but the second group (students) view the other way around. The statistical value of the variant and the deviation standard is almost 0 (zero). It means that they have relatively homogeneous experiences during online learning.

The Categorization Index of Experiences in Thesis Supervising Activities

One of the student activities is to write scientific work (mini-thesis, thesis, or dissertation). Upon writing it, a lecturer, commonly called supervisor, assists the student. A supervisor is responsible to supervise or guide the students during the writing of the paper. The analysis results of the categorization index of experience are presented in Table 2.

Table 2. The frequency of the lecturers' and students' experience during the online supervision for thesis writing

NO	Measurement Aspects	Category, Std. Deviation, and Variance	Experience (Frequency)	
			Lecturer	Students
1.	The implementation of online supervision for thesis writing	Disagree	29.30	22.00
		Less agree	63.40	70.50
		Agree	7.30	7.40
		Std. Dev. (*s*)	0.57	0.52
		Variance	0.32	0.72
2.	The level of students' understanding of feedback (advice and direction) of the lecturers upon online supervision	Low	3.30	16.30
		Average	92.70	65.60
		High	4.10	18.10
		Std. Dev. (*s*)	0.27	0.59
		Variance	0.07	0.34
3.	The effectivity of online supervision for thesis writing	Not effective	5.70	19.10
		Less effective	89.40	68.80
		Effective	4.90	12.10
		Std. Dev. (*s*)	0.33	0.56
		Variance	0.11	0.31

Table 2 shows that the first group (the lecturer) is mostly in the medium category. However, the second group (students) relatively varies. The standard deviation and variants of both groups are almost 0 (zero), which means that they have relatively homogeneous experiences.

The Categorization Index of Experiences in the Assessment Activities

Informal education, one of the students' responsibilities is taking the assessment to measure the learning out-comes. The results of the categorization index analysis on the experience of every group are presented in Table 3.

Table 3. The frequency of the lecturers' and students' experience during the online assessment

NO	Measurement Aspects	Category, Std. Deviation, and Variance	Experience (Frequency)	
			Lecturer	Students
1.	The implementation of the online assessment	Disagree	20.30	6.90
		Less agree	72.40	71.30
		Agree	7.30	21.80
		Std. Dev. (*s*)	0.51	0.52
		Variance	0.26	0.27
2.	The level of interaction and understanding between lecturers and students during the online	Low	0.80	5.70
		Average	91.10	60.40
		High	8.10	33.90

NO	Measurement Aspects	Category, Std. Deviation, and Variance	Experience (Frequency)	
			Lecturer	Students
	assessment	Std. Dev. (*s*)	0.29	0.56
		Variance	0.08	0.32
3.	The effectiveness of the online assessment implementation	Not effective	2.40	7.40
		Less effective	92.70	65.60
		Effective	4.90	27.00
		Std. Dev. (*s*)	0.27	0.55
		Variance	0.07	0.31

Table 3 shows that the first group's (the lecturer) experience in the implementation of the online assessment is in the second category. Meanwhile, that of the second group (students) also includes in the second category, but it tends to be in the third category. Every member of the second group has a relatively similar experience as the standard deviation and variance are heading to 0 (zero).

Difference Test with Graded Response Model Approach

The difference test aims to reveal the differences of the lecturers' and students' experience during the process of the online learning outlined into three research attributes: activities of learning and teaching, thesis super-vising, and learning assessment. Table 4 presents the estimation results of the experience of every attribute of the two groups of respondents referring to the lecturer group.

Experience Attributes	Group	Min	Max	*M*	*SD*
1. Teaching and Learning	Lecturer (*N* = 123)	-3.011	3.023	0.000	0.894
	Student (*N* = 404)	-2.244	2.012	-0.112	0.840
	Total (*N* = 527)	-3.011	3.023	-0.086	0.853
2. Thesis Supervising	Lecturer (*N* = 123)	-2.763	2.267	0.000	0.934
	Student (*N* = 404)	-2.051	2.890	-0.262	1.004
	Total (*N* = 527)	-2.763	2.890	-0.201	0.993
3. Learning Assessment	Lecturer (*N* = 123)	-2.307	2.270	0.000	0.896
	Student (*N* = 404)	-2.276	2.710	-0.032	0.874
	Total (*N* = 527)	-2.307	2.710	-0.024	0.879

Table 4. The description of experience score upon learning and teaching activities, thesis supervising and learning assessment

Note: Min = Minimum, Max = Maximum, *M* = Mean, *SD* = Standard Deviation

Table 5: The Results of the Levene Test

Experience Attribute	*p*
1. Teaching and Learning	0.237
2. Thesis Supervising	0.446
3. Learning Assessment	0.914

Table 4 shows that the average value of the students, in general, is negative, which proves a lower experience than that of the lecturers. Table 4 also shows that the data are homogenous with parameter $p > 0.05$. The anal-ysis results on the average experience difference of the learning activities between the lecturers and students are d = 0.111 (95%CI: -0.061, 0.284), t (525) = 1.270, $p > 0.05$. The activities of the thesis supervising are d = 0.262 (95%CI: 0.063, 0.462), t (525) = 2.580, $p < 0.05$, and the assessment activities are d = 0.032 (95%CI: -0.146, 0.210), t (525) = 0.349, $p > 0.05$. The data indicate that the significant difference in average happens to the experience of thesis supervision. The difference level of significance is provided in Figure 1.

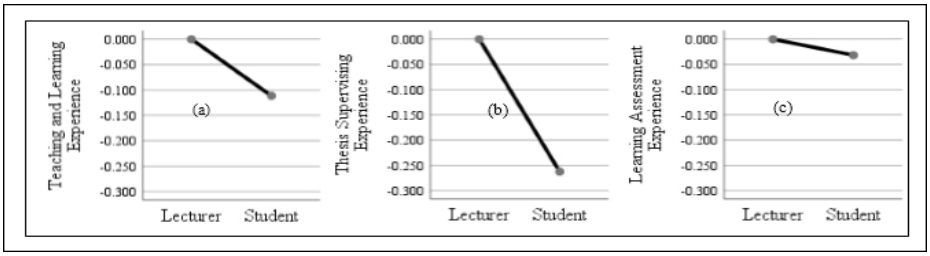

Figure 1. The difference score between Lecturer's and student's Experiences on (a) Teaching and Learning, (b) Thesis Supervising, and (c) Learning Assessment

The analysis of the different tests through the Graded Response Model concludes that the attribute of thesis supervision has significant difference inexperience. It statistically shows that the difference between d=0.262, $p < 0.05$, and t-test is 2,580 at a Confidence Interval of 95%. Therefore, it visually indicates a relatively long-range (see

figure 1b). The difference is found due to the different experiences of lecturers and students during the thesis supervision. The difference might occur due to miscommunication, different perspectives between lecturers and students during delivering and receiving the feedback, different expectations, limited interaction, and obvious differences of knowledge and experience in writing a thesis. It means that the thesis supervision process conducted online is not effective. Although distanced education is a formalized instructional learning system, the time and geographical condition limit the direct communication [14], which is now only mediated by electronic and/or printed media [15], [24], [25].

During the thesis writing process, a student needs supervision through interactive communication and in-depth discussion, which allow an intense dialogue between them. The dialogue is expected to bring together the view of the students and the direction of the lecturer as the supervisor. The direction and advice of the supervisor can be directly addressed by the student. Therefore, the supervision of thesis writing, which is a part of the learning process in higher education, is less effective once conducted online. This is contrary to the objective of distance education, which is to give and establish the independence of the learners in learning [26], [18], even though it is carried out in the different place and time between the lecturer and the student [16]. Therefore, the thesis supervising activities by the lecturers must be conducted face-to-face that the students understand well the thesis writing process.

The statistics of the other two attributes, which are learning and assessment activities described with $p > 0.05$ and t-test=1.270, and the difference value is relatively small, which is 0.111. The attribute of the assessment activities is evidenced by $p > 0.05$ and t-test=0.349 on the Confidence Interval of 95% and the difference is only d=0.032. It means that there is no significant difference in the two attributes of the current study. Even if a difference is found, the significance level is very small (see figure 1a and 1c). Implicitly, this study concludes that the learning and assessment activities provide the same experience in both offline and online implementation. This result is in line with the view of [26], [18] that the objective of distanced education is to provide and establish the independence of students in learning. Therefore, to achieve an effective online learning system, we can refer to [16], [17], [4] that higher education stakeholders must issue a new policy and support of infrastructure for the proportional implementation of distanced education. [18], [24] propose an appropriate learning approach to distance education by which effective learning processes could be achieved. [18] proposes the use of Heutagogy theory, while [24] to the theory of Equality in learning.

The theory of Heutagogy suggests that students are required to determine the learning outcomes independently. They need to understand that the environment of distanced education is different from that of traditional learning (face to face). The approach of Heutagogy emphasizes the independence of the students and the development of the capacity and capability of the learners to prepare the students to face the complexity of the workplace. The theory employs a holistic approach to develop an active and proactive learning process. Stu-dents serve as the main agents of learning, and the learning outcomes are their personal experiences [18], [27]. Meanwhile, the theory of Equality in distanced education emphasizes the aspect of interactive communication and learning design that can provide the same experience among the students upon what is observed, felt, listened to, and done by the students. There are five key elements in the theory of Equality, which are equality, learning experience, an appropriate application, learners, and outcomes. Because the places of the learners are fundamentally different [28]. Therefore, both approaches need to be considered for distanced education.

Based on table 1, table 2, and table 3, the majority of the lecturers' and students' statement items are in the medium category. It proves that lecturers and students do not find any obstacles or difficulties upon implementing distanced learning which has been suddenly during the pandemic of Covid-19. Although the distanced and face-to-face learning processes have a different approach [5] lecturers and students are already accustomed to using electronic media in learning. 81.30% of the lecturers have been working in less than 20 years, or they have been living in the era of information technology. Therefore, universities need to consider the future education system. There have been three learning modes: face to face, blended learning, and fully online learning [9].

Referring to table 1, table 2, and table 3, the right approach of the future learning system for the colleges is Blended Learning. Blended learning is an approach that combines face-to-face learning with distanced education [29], [30], [31]. Blended learning with 30-70% proportion of learning materials delivered online [30], one-semester materials are delivered face to face on campus, and two-semester materials are provided in distanced learning [9]. Blended learning aims to enhance the students' experience in learning through the use of information technology and communication (the University of Calgary, the Learning Centre [29].

CONCLUSION

The main objective of this research is to explore the different experiences of lecturers and students upon implementing the distanced learning processes. The findings show that distanced education implemented in a sudden by colleges due to the Covid-19 pandemic does not provide significant challenges or difficulties in the learning process for both lecturers and students. They can adapt quickly with the learning processes carried out separately in distance. They interact only through electronic media supported by the internet network. Electronic media use is no longer a problem for the lecturers and students because they are already accustomed to using them. However, there has been no policy for higher education institutions related to distanced education. Therefore, it has not been a responsibility for the lecturers to implement the distanced learning process. Covid-19 pandemic brings a new experience for them in carrying out the learning process and challenges for universities which still apply an offline learning system to evaluate and consider new policies related to the learning system.

Although the sudden implementation of distanced education does not bring about difficulty or obstacles, there found one attribute that shows very significant differences, which is the thesis supervising process. Thesis supervising, which is a part of the educational process in a college, cannot be done online. It requires interactive communication and in-depth discussion because it needs a common understanding and emotional relations between the lecturers and students. Therefore, distanced education should not be applied in the learning practice among universities. There needs to be a moderate approach in their learning system. Thus, distance education applied by most higher schools due to the Covid-19 pandemic provides a new experience. However, they

possess new challenges to formulate a wise educational system in the future.

The results of this study recommend the use of the Blended Learning approach in the learning and assessment activities, and the thesis supervision needs to be conducted face to face. Besides, further researches are expected to conduct a thorough investigation related to the new policy, learning system re-design, leaders' commitment, and the readiness of universities in providing higher education with a Blended Learning approach.

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