Indonesian University Students' Likes and Dislikes about Emergency Remote Learning during the COVID-19 Pandemic

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Abstract: This study aimed to analyze what university students in Indonesia liked and disliked about the emergency remote learning process, which was implemented due to the COVID-19 pandemic. The case of Indonesia revealed what the majority of higher education institutions in developing countries faced during the COVID-10 period. This research used a qualitative phenomenological approach. There were 80 education students from the Faculty of Education state university in Jakarta, Indonesiawho participated in the study. The inquiry consisted of a thorough study of participants' diaries of day-to-day learning and reflective essays and an online focus group of discussions. The results revealed what the students liked about learning from home during the COVID-19 crisis, which was grouped into three overarching themes of flexibility and efficiency, self-care and self-development, and learning new technology. What they disliked was grouped into three main themes: lack of structure, technological difficulties, and financial barriers. By knowing what students liked and disliked, we can try to reduce obstacles to their learning experience, and further improve the activities and features they liked. As a result, the quality of remote learning in this pandemic could be enhanced, and students' ability to study in any circumstances could be increased.

Keywords: COVID-10, emergency remote learning, higher education, Indonesia, online learning

1. Introduction

The coronavirus has had a massive impact on employment, education, energy, agriculture, and many other areas of the global economy, including people's emotional well-being (Banks et al., 2020; Thompson, 2020; Tripathi & Amann, 2020). Fear of an unknown deadly virus is similar in its psychological effects to the reactions to biological and other threats of terrorism and causes a high level of stress, often with longer-term consequences (Hyams et al., 2002). The impacts of disease beyond mortality and morbidity have become apparent in a strongly connected and integrated world since the outbreak (McKibbin & Fernando, 2020).

The World Health Organization warned that COVID-19 would remain a problem for a long time. Governments have tried several different methods to minimize morbidity and associated mortality, avoid an epidemic peak that overwhelms the healthcare services, keep the effects on the economy within manageable levels, and flatten the epidemic curve while waiting for vaccine development and widespread manufacture (Chinazzi et al., 2020; Cowling et al., 2020; Davies et al., 2020; Flaxman et al., 2020; Imai et al., 2020). Avoiding large gatherings of people will reduce the number of super-spreading events (Anderson et al., 2020). Quarantine, social distancing, and the isolation of infected

populations can contain the epidemic. Quarantine measures and travel restrictions have also been implemented worldwide (Chinazzi et al., 2020).

Upon learning from previous influenza epidemic studies (Cauchemez et al., 2008, 2009), school closures were also introduced to help try to contain the virus. School closure is a non-pharmaceutical prevention program designed to reduce the number of cases and reduce the spread of the virus (Abdollahi et al., 2020; Cauchemez et al., 2008, 2009; Earn, 2012; Esposito & Principi, 2020; Jackson et al., 2016; Viner et al., 2020). During the outbreak of COVID-19, policies on school closures in different countries occurred in rapid and massive succession. In the first week of April 202, the UN Educational, Scientific, and Cultural Organization reported that 195 countries had enforced national school closures, affecting almost 91.3 percent of the world's student population, or 1.598.099.000 affected learners (UNESCO, 2020).

In Indonesia, national school closures began on March 23, 2020, and in some provinces, such as DKI Jakarta, Central Java, Banten, West Java, and Aceh, began on March 16, 2020 (CNN Indonesia, 2020; Kumparan, 2020). Education institutions shut down their physical campuses and quickly transferred their courses onto remote and online formats. In Indonesia, national school closures have affected 60.2 million learners and 2.3 million educators who study or teach at 425,451 educational institutions from early childhood to higher education institutions (Dikti, 2018; Ministry of Education and Culture, 2019, 2020a,b,c,d). These statistics are for educational institutions under the Ministry of Education and Culture's authority only, not including religious education institutions under the Ministry of Religious Affairs.

On June 15, 2020, the Ministry of Education and Culture, together with the Task Force for the Acceleration of Covid-19 Handling, the Coordinating Ministry for Human Development and Culture, the Ministry of Religion, the Ministry of Health, the Ministry of Home Affairs, the National Disaster Management Agency, and The House of Representatives Commission X announced that students in districts/cities in the yellow, orange, and red zones continue to learn from home (yellow is the low number of reported cases, orange is medium and red is high). Face-to-face learning for educational units in the green zone (zero cases of COVID-19) is permitted under very strict multi-layer requirements. As for the number of students, 94 percent of students were in these three zones in 429 districts/cities. The students currently in the green zone represent just about 6 percent (JPPN, 2020; Kamil, 2020a; Tribun Kaltim, 2020) .

After more than eight months of ERL, evaluation and optimization of learning needs to be carried out. Feedback from educators and students on making pandemic learning even better is essential to ensure the online learning process is as effective as possible. In this study, the researcher explored how remote learning has been implemented at the higher education level in Indonesia. The research question was: what do students like and dislike about the remote learning implemented during the COVID-19 pandemic? This study's key goals and objectives were to explore the obstacles and opportunities students faced during a period of ERL so that conclusions and suggestions for improved learning could be generated.

The researcher felt that it was important to understand the students' experience of how remote learning has been implemented during the pandemic in greater depth. The study results are not just a percentage of what students liked and disliked, but a description of their insights and observations of the ERL system. By understanding their insights and observation, we could eliminate aspects that were disliked which could become barriers to learning; and enhance or further develop the activities and features that they liked.

2. Literature Review

2.1 School Closure

School closure is one of the most common measures in the early weeks of the pandemic, which were implemented at rates ranging from individual schools to local school districts to national closures (Fumanelli et al., 2016; Miller et al., 2010; Qualls et al., 2017; Zylke & Bauchner, 2020). Most countries have enforced the strategy of school closure during the outbreak of COVID-19. The purpose

of school closure may be to reduce the number of students infected at the closed school, to reduce transmission from school children to those outside the school, and more generally, to monitor the spread of infection until further intervention methods (such as vaccination) are readily accessible or until changes in environmental factors, such as temperature and humidity, reduce transmission (Auger et al., 2020; Azevedo et al., 2020; Briscese et al., 2020; Earn, 2012)

The precise school closure approach to be followed depends on the nature of the disease, which will decide the period of school closure deemed appropriate and its transmissibility. For low-transmissibility (R0 < 2.0) and/or mild-severity epidemics, individual school closures will begin until the average group case count is surpassed. In the case of a severe, highly communicable epidemic (R0 > = 2.0), long-term school closure should start as early as possible and be integrated with others (Halder et al., 2010). In order to contain the spread of coronavirus, nationwide school closures have been taking place in more than 100 countries around the world from mid to the end of March 2020 and are continuing nationally and locally in many parts of the world by December 2020. A review of data from uncontrolled virological studies during the flu pandemic offers convincing proof that school closures may significantly impact the spread of the flu pandemic. School closure tends to be a viable way to delay pandemic influenza in countries with social contact networks, similar to those in Canada (Earn, 2012).

School closure is a mitigation strategy that focuses predominantly on school-aged children and can be paired with interventions addressing other age cohorts to deliver a more appropriate intervention strategy (Miller et al., 2010). School closures alone might not be sufficient to stop the outbreak but, if continued for at least eight weeks, could delay the epidemic peak by up to a week, allowing adequate time for a second potentially successful intervention, such as vaccination (Brown et al., 2011). School closures' efficacy to minimize transmission also depends largely on student/family behavior during closure (Miller et al., 2010). In Indonesia, school closure policy has become an integrated policy with a large-scale social restriction policy. The State has announced that teaching and learning programs in the yellow, orange and red zone schools cannot be carried out. No face-to-face learning is also allowed for all campuses in any district.

2.2 Emergency Remote Learning

For this study, the researcher used the term "Emergency Remote Learning (ERL)," not online or virtual learning, since well-planned online learning experiences are significantly different from those provided remotely in response to a crisis or disaster (Hodges et al., 2020).

Natalie Milman, a professor at George Washington University, has been teaching online for nearly 20 years. She explained that it takes a lot of time and energy to design and build effective, engaging online education. Well-designed online education can be as effective as face-to-face education. Amid the outbreak of COVID-19, educators were suddenly plunged into a situation where they were teaching remotely, and as a result, it became difficult for them to deliver their usual lessons (Milman, 2020). Milman described the situation as emergency remote teaching and learning — or, as some have called it, "pandemic pedagogy."

The ERL was not planned, and a large part of the school curriculum was not designed to be an online or distance learning experience. In addition, most teachers and staff have not been equipped with online education or how to use interactive resources. Similarly, many children and families did not have the opportunity to be prepared for this learning transition. Given all these constraints, everybody has done their utmost to make the situation a success. However, when we describe the learning process as simply online, distance, or virtual learning, we tend to compare it with the experiences that were planned for the creation of these courses (Juliani, 2020), when, in fact, the current COVID-19 is completely different.

Hodges et al. (2020) call it Emergency Remote Teaching (ERT). ERT is a temporary transition from in-person instruction to alternative delivery due to emergencies. This involves using completely remote teaching methods for teaching or learning, which would normally be delivered face-to-face or as blended courses, which would revert to that model after the crisis or emergency. The primary objective in this context is not to re-create a stable educational environment, but rather to provide

immediate access to education and training that is easy to develop and easily accessible during an emergency or crisis.

Schools and universities working to maintain instruction during the COVID-19 pandemic should understand these differences when assessing their ERT performance. If we understand ERL or ERT in this way, we can begin to distinguish it from online learning. We understand that this teaching-learning activity from home is a shift in classroom instruction that provides temporary access to education quickly and reliably. It may not be perfect, but students are resilient, the educator is resourceful, and everyone has to make the most of what they have (Juliani, 2020).

2.3 Survey on Remote Learning during COVID-19 Crises in Indonesia

Some surveys have been conducted to assess learning from home during COVID-19 at elementary and secondary levels in Indonesia. One survey was conducted by the Indonesian Child Protection Commission (KPAI) with student and teacher respondents from 20 provinces and 54 districts/towns in Indonesia. Data were obtained from 13 to April 21, 2020. The data showed that: 76.7 percent of students said they did not like remote learning because there was no teacher interaction and a lack of facilities. The remote learning method used to study at home during the COVID-19 pandemic also made the students feel stressed and tired (Harsono, 2020). Another survey conducted by the Ministry of Women's Empowerment and Child Protection showed that 58 percent of Indonesian children were unhappy about learning from home (al Ansori, 2020; Kementerian Pemberdayaan Perempuan dan Perlindungan Anak, 2020). The survey was conducted in 29 provinces, involving 717 children aged 7 to 17 years.

While a survey was conducted by the Directorate-General of the Ministry of Higher Education and Culture on college students' response to COVID-19 learning, the survey results showed that as many as 89.17 percent of the student respondents felt that face-to-face learning was better than online learning (Kamil, 2020b). Apart from connectivity or internet network issues, complaints from students were also on more costly spending on purchasing an internet data plan during distance learning. The percentage was obtained from 237,193 student respondents, 94.73 percent of whom had experienced online learning (data May 6, 2020). The internet network was reported as sometimes inadequate, and the tasks assigned by the teachers as excessive. As many as 89.17 percent of the students also felt that face-to-face learning was better than online learning. They had to spend between IDR10,000 to IDR 400,000 (USD 0.7 to USD 28) a month for internet access charges.

3. Methodology

This research examined what university students in Indonesia liked and disliked about the remote learning implemented during the COVID-19 crisis. The study discussed in this paper is part of a broader project on ERL in tertiary education in Indonesia during the outbreak of COVID-19 (Rahiem 2020a,b,c). The study's overall objective was to investigate the implementation of remote learning in tertiary education in Indonesia. The research used a qualitative method of phenomenological analysis. Using a phenomenological approach, researchers understand the subjective interpretation of the analysis's fundamental object by investigating the nature of their experience and identifying the particular interpretations underlying the given phenomenon (Casmir, 1983; MacDermott, 2002).

The research examined the individual experience of 80 university students who were studying social science education at a public university in Jakarta. They were all in the fourth semester, studying the same program, but with different concentrations, class 4A is sociology, while class 4B is geography. To protect the privacy of the participants and allow them to speak freely, their identities and the name of the university were all hidden. The researcher used the class name (4A & 4B), followed by a number to identify each individual in the data analysis and findings. Before collecting data, the researcher clarified the study's nature and purpose, and informed consent was signed by all students who agreed to participate in the research. If they felt uncomfortable, they were entitled to withdraw from the study without being questioned.

The researcher used a purposeful sampling technique in this research. Participants were selected for various purposes, such as access to data, duration of the study, the variety of backgrounds of the participants, and the program they were studying at the university. The researcher deliberately selected students from educational programs as they are being trained to become teachers and took training courses in learning strategies, educational media, and curricula. They could, therefore, relate their past courses to the situation they found themselves in.

Samples in a qualitative sample tend to be limited to uphold the depth of the case-oriented analysis central to this investigation (Boddy, 2016; Sandelowski, 1995; Shaheen et al., 2019). The sample in this research was 80, not a small number. There are many questions about the sample size used in qualitative research. Morse recommends between 30-50 participants for ethnography, 30-50 interviews for grounded theory (Merriam, 2009), and at least six for phenomenological studies, whereas Creswell recommends only 20-30 interviews for grounded theory and 5-25 for phenomenological studies (Creswell, 2007). Merriam noted that the sample size depends on the research questions, the data collected, the data analysis, and the availability of resources (Merriam, 2009). The qualitative sample size can be best determined by the time allotted, the resources available, and the study goals (Griffith et al., 2016; Patton, 1990, 2002; Vasileiou et al., 2018). Determining the appropriate sample size in qualitative analysis is a matter of experience and judgment in determining the source of the data collected for the purposes for which it will be used, the specific research approach and the purposeful sampling technique used, and the expected research result (Sandelowski, 1995).

The researcher chose to have samples from two classes, fearing that students would not be willing to write or would not complete the writing required, the researcher expected that she would have enough evidence by involving the two classes. This is how the sample size of 80 was finalized. The researcher was prepared to gather more data or further expand the sample if the research questions were not answered comprehensively.

The data was collected in creative ways due to the large-scale social restrictions that were in place in Jakarta at the time the research was conducted, which meant that the researcher was unable to conduct direct interviews. The methods of data collection were diaries and essays. The participants wrote a diary of their day-to-day learning activities for two weeks (4-18 May 2020). Subsequently, they were asked to conclude their thoughts and opinions in the form of a reflective essay about learning during the COVID-19 pandemic, collected on May 20, 2020. Patton (1999, 1990, 2002) stressed the need to incorporate data collection methods for data triangulation and to establish a detailed understanding of phenomena, so in addition to diaries and essays, the researcher conducted focus group meetings using the google meet program. Discussions were held twice, each meeting was held for 120 minutes, and 40 participants attended (26 and 27 May 2020). The focus group discussions were also targeted as a member check to increase the accuracy, reliability, relevance, and transferability of the results.

The researcher used the NVivo program to manage and analyze data. The researcher also created a memo in the NVivo program that allowed her to record ideas and evaluate the participants' views, viewpoints, and online learning experiences. This analytical memo was conducted continuously, each time a report (diary or essay) was submitted. Analytical memos provide a way for the researcher to document her thoughts during the analysis and to code memos as additional evidence for the thesis (Saldaña, 2009, 2016).

In analyzing the results, the researcher followed a two-stage coding model (Miles & Huberman, 1984; Miles et al., 2014). The first cycle coding was initially conducted for the data, followed by the second cycle codes for which initial codes were organized into meaningful categories, themes, or constructs. The two stages of coding are not a linear event; the qualitative analytical process is continuous. Through most of the process, the researcher coded each essay and diary independently in the first cycle. After that, the researcher compared the data and, if applicable, documented the code in a sub-set. In the second cycle, the researcher changed codes, added some new codes, and pulled a few codes to conclude the study results. When reporting the results, the researcher made summative synthesis assumptions based on the researcher's interpretations, supported by the data analysis.

4. Results

What do Indonesian university students liked about the ERL implemented during the COVID-19 pandemic? 1) flexibility and efficiency; 2) self-care and self-development; 3) learning new technology. What do they dislike? 1) a lack of structure; 2) technical challenges; and 3) financial barriers. The results of the study are shown in **Fig 1.**

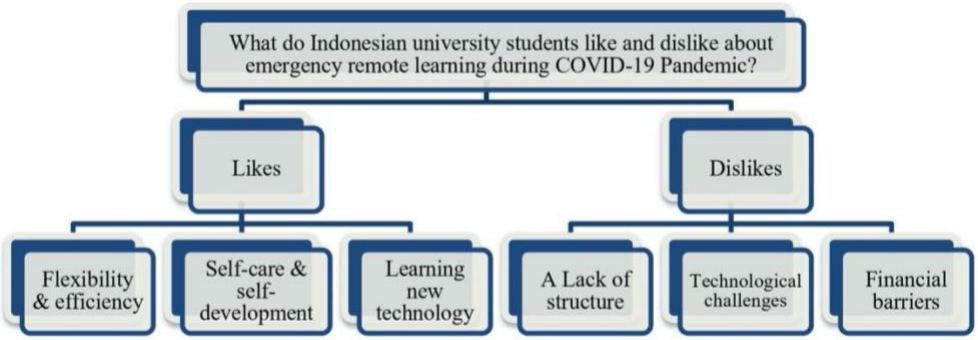

Fig. 1 Research Findings

4.1 Students' Likes

The researcher codified, categorized, found themes, and provided an explorative description and analysis of what students liked about the remote learning implemented due to the COVID-19 pandemic. The following **fig. 2** portrays the data analysis and process of asserting findings.

The researcher coded each of the diaries and essays in the first coding cycle. In the data display, the researcher displayed it into the two overarching groups of themes, likes and dislikes. The bars next to the codes (the 27 codes on the left bars) indicate frequency of codes that appeared in students' diaries and essays indicating "students' likes on remote learning." Subsequently, in the second coding cycle, the researcher grouped codes about students' likes that were similar in categories. The six categories developed were flexibility, savings, family time, relaxation and entertainment, new technology learning, and self-development. The researcher identified the three data-describing themes on students' likes of remote learning during the COVID-19 crisis: flexibility and efficiency, self-care and self-development, and technology.

During the pandemic, students benefited from remote learning because of its flexibility and efficiency. Flexibility itself was the most common reason for students to be fond of remote learning. Some excerpts from the student diaries and essays indicate that students like remote learning because they are able to be more flexible.

> In addition, I can manage my own study time without being constrained by the schedule. I am also not bound by any rules when I study online. (4B20)

Efficiency has emerged from the students' views on how they saved money, time, energy, and even paper during the remote learning period. These savings can be made because they do not need to leave home, do not need to buy gasoline or pay for transport to get to campus, or can even save paper because all the tasks are collected digitally.

> I don't have to spend money to go to campus, nor do I feel tired because I have to go to class. Now I can save time and energy by staying at home. (4B32)

> What I like about online learning is that all the assignments are not printed but sent via email, WhatsApp, google classroom, or other applications. I am saving lots of paper. (4C1)

Students were also happy to have time for themselves, to take care of themselves. They had more time to enjoy being with their family, resting, watching movies, and exercising. During the time of social restrictions, they also spent time on self-development, including a new hobby, or learning new things. A lot of female students said they learned to cook during the ERL period.

> Because now is the most comfortable time with my loving family. Therefore, my study time is more cheerful, and I am very excited to achieve my personal goals. (4B37)

> Not only things in education, but I can also learn a lot of new things at home, such as cooking. (4B29)

Students said that they learned to use new learning media while studying at home. Even before this pandemic, they rarely used Information Computer Technologies (ICT) when studying and that led to them using these new applications such as zoom, Google Classroom, digital maps, and others.

> Besides, online learning enables us to try new things and not become technologically illiterate, to make us more aware of the internet and to use advanced applications. (4B12)

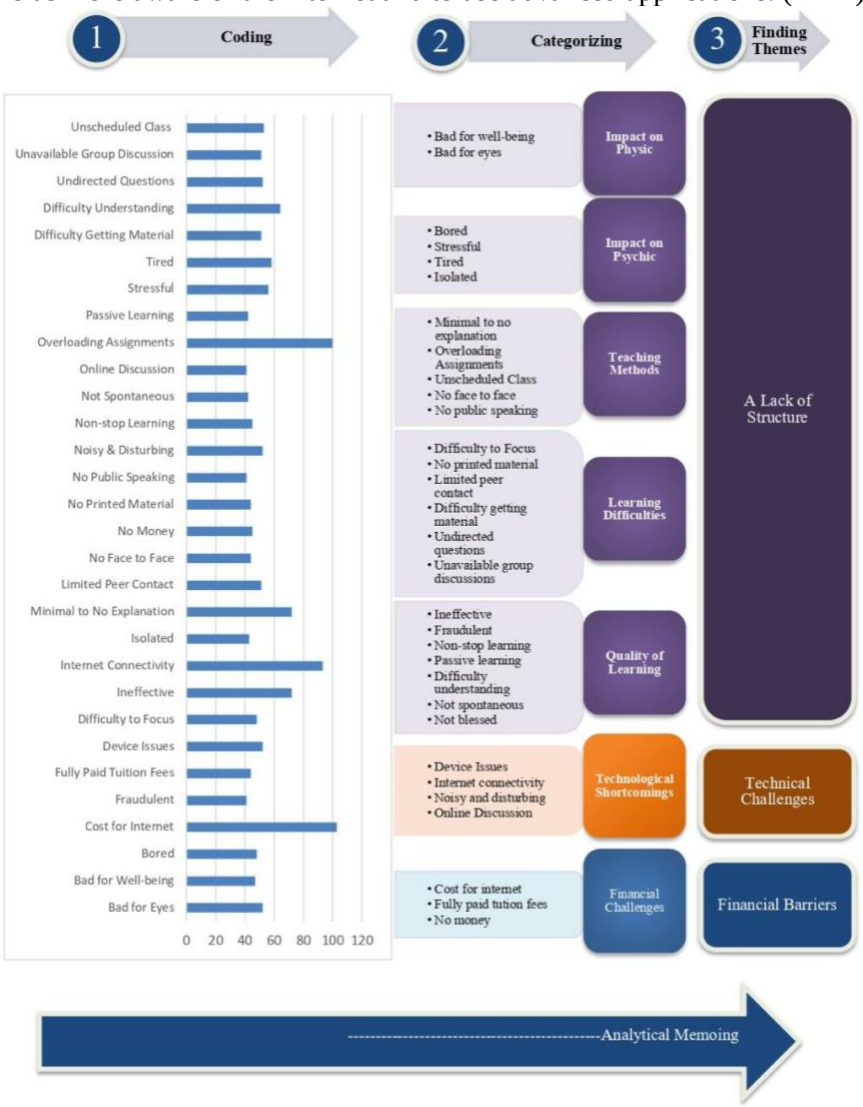

Fig. 2 What Students Liked about Learning from Home

4.2 Students' Dislikes

The following diagram indicates how data analysis is performed in groups of data that display students ' experiences and perceptions about their dislike of remote learning.

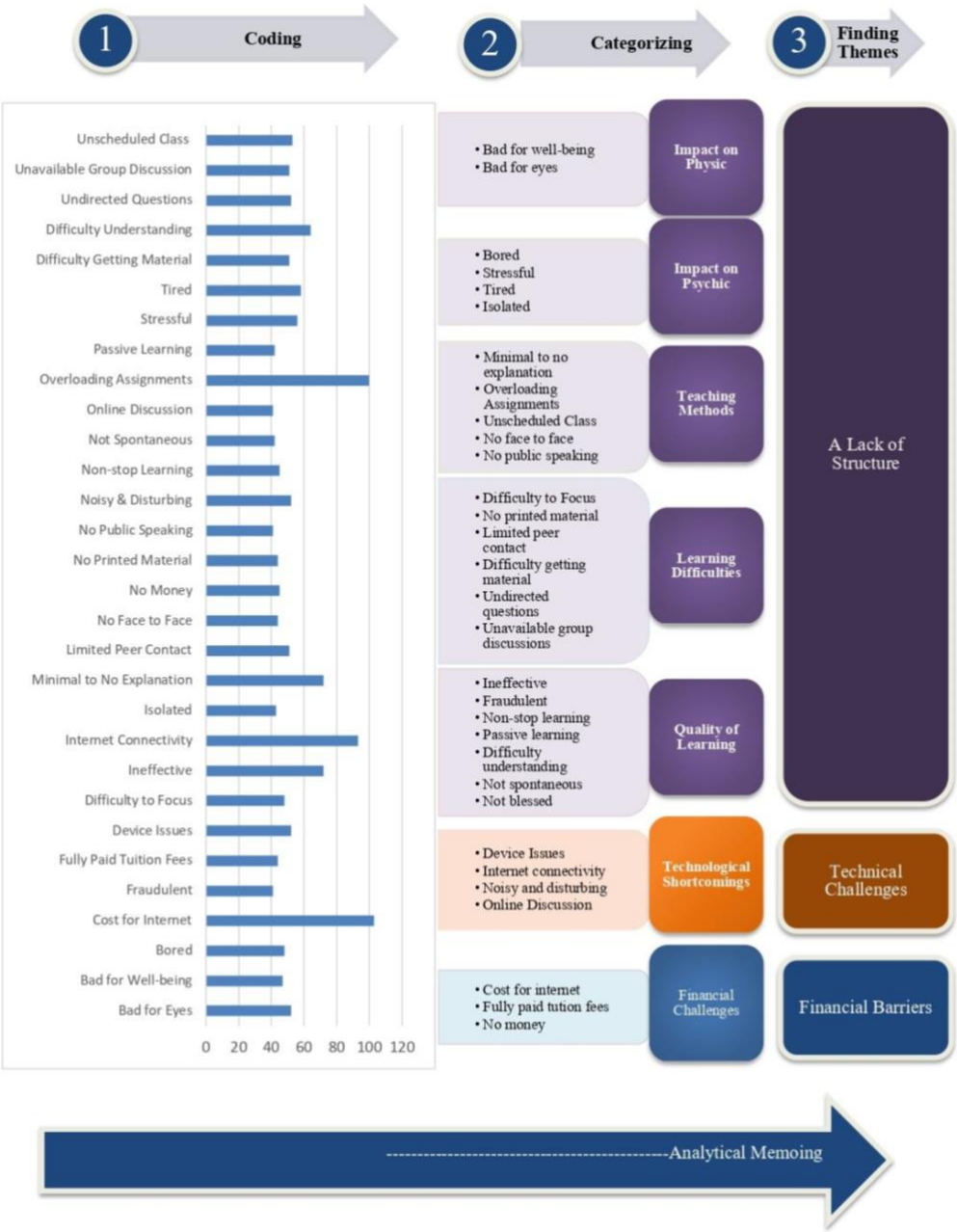

Fig. 3 What Students Disliked about Learning from Home

The fig. 3 above shows the data of what the students disliked, which was processed in two-cycle coding. There were 30 codes in the first cycle coding that the researcher used to classify students' dislikes (left bar graphs, with bars indicating their frequency). Later, in the second coding cycle, the researcher grouped codes about students' dislikes in categories. The seven categories identified were: physical impact, mental impact, financial challenges, learning difficulties, technical shortcomings, quality of learning, and teaching methods. Finally, the researcher identified the three

data-describing themes of students' dislikes of remote learning during the COVID-19 pandemic, which were lack of structure, technical challenges, and financial barriers.

Reading the student diaries and essays, the researcher outlined a few fears among students that learning online from home during a pandemic outbreak affected the students' physical and psychological health. They complained that it was not good for their eyes and their overall well-being to stay in front of a laptop for hours. Psychologically, they were bored, stressed, exhausted, and lonely. They also talked about the problems they encountered in studying and the nature of the schooling received. In the majority of students, they criticized the overloading tasks that had become a burden on them. They required lecturers to improve their teaching methods. The researcher discovered that the source of the problem was a lack of remote learning structure programmed during the coronavirus crisis.

The following are excerpts from students' diaries and essays on how remote learning during COVID-19 outbreak affected them physically and mentally:

> The lecturer gives a lot of tasks and makes the students emotionally stressed. We were initially delighted because it's like a vacation, but we don't like this holiday anymore. This reduces the immunity of the body, making it easier for students to get sick. At the time of the Covid-19 pandemic, we should boost the body's immunity to remain healthy, but growing weary of doing the assignments has left students mentally distressed. (4C40)

> Then there are bad habits, too. Quite often, I'm shut down in a room, isolated. (4B18)

In addition to physical and psychological issues, students have suffered learning difficulties due to trouble focusing, being unable to ask questions directly to the lecturer, lack of printed instructional resources, minimal contact with peers, difficulty in accessing information, and a lack of group discussion.

> And I don't like to study online because I can't meet my classmates. Learning doesn't feel real, there are no friends who can help boost my mood. (4C39)

> In comparison, learning resources are often minimal and can only refer to the internet and journals that are not generally reliable. I also prefer to read printed books (4B19)

Students criticized the quality of learning during remote learning as a result of the COVID-19 pandemic. They thought the learning is ineffective, allows students to cheat, involves passive learning, is challenging to understand, and is not spontaneous.

> In my view, online learning is less effective. Students are passive. The use of the Internet is costly and also less efficient. It is fraudulent, there is plagiarism, cheating, and so on. (4C17)

Teaching practices need to be improved, some lecturers do not give explanations, only give massive and constant assignments, classes are not scheduled — do not follow the calendar but follow the schedule of lecturers, there are no face-to-face lectures, and students cannot talk in public.

> Each lecturer who gave the assignment, no explanation, asked the students to collect it as quickly as possible. But the lecturers did not care about the internet connectivity issues we faced, and the students did not have the money to purchase a data plan. (4B2)

> Time in online learning is often inefficient because it is not the same as the class schedule, so each lecturer is free to decide the time for online discussion or group presentations. (4B22)

Students have been confronted with technological challenges that interfere with the remote learning process, such as device issues, internet connection issues, noisy and disturbing sounds in online discussions, and online discussions that are often disrupted by the connections.

> I've got to take turns using a laptop with my sister, my dad, because everything's online, everybody needs a computer. (4B32)

> Some lecturers do not know how to use the technologies comprehensively. Lecturers must be able to master the technologies or software used in distance learning. (4B5)

> As the lecturer explains at the Zoom conference, there are often distractions, such as signal interference or other noise disruptions, and the PPT cannot be presented due to technological difficulties, so the learning is not ideal. (4C30)

The students also said that the internet fees were costly and that they did not receive an allowance and had no additional income from the side jobs they used to do, which gave them additional earnings. One more thing that they complained about was that they had to pay the full tuition fees, but the learning was inadequate.

> It's very costly to spend money on internet data, I only get a limited allowance and I also don't get income from being a Scoutmaster during this crisis. What I'm supposed to do to get money to buy a data plan? (4B12)

> Students don't have the rights they should have. We have already paid the full tuition fees. Online learning consumes a lot of internet data, actually, a lot of students have objections. The campus is supposed to subsidize internet data to help students. (4C29)

5. Discussion

This ERL shift has brought challenges and opportunities for teaching and learning practices. Flexibility and efficiency, self-care and self-development, and learning new technology are the aspects that they liked. Three factors that have become a concern for students include the lack of a remote learning structure, the technological challenges they face, and the Internet's cost that could hinder their learning, which should be taken into account and addressed where possible.

Concerns about the lack of structure and technical challenges were also discussed in Zhang et al.'s research (Zhang et al., 2020) on China's education management strategy in the context of the COVID-19 epidemic, as well as in Cecilio-Fernandes et al. (2020) on the difficulty of using technology for medical education in low and middle-income countries with a case study from Brazil. Zhang et al. (2020) explored access to the Internet, especially in remote areas, which hampered learning transformation during the pandemic. The problems were also encountered by students in this research. The data has shown that even students who live in Indonesia's capital, Jakarta experienced connection issues; one can only imagine the number of problems encountered by students in more rural areas.

Following the government's decision to move to online learning, only 56 percent or 150 millions of Indonesia's 268 million population have access to the Web and many of those who cannot afford unlimited, stable and fast connectivity. Bandwidth and storage availability were also common problems raised by the respondents. 4G coverage is primarily clustered in Java, as market-driven mobile telecommunications operators generally prefer metropolitan areas over less densely populated rural areas (Azzahra, 2020). The regional closure of higher education in Indonesia has affected all campuses in 34 provinces. When we use the most recent comparative statistics on higher education in 2018, this closure affects 4,670 higher education institutions, 8,043,480 students and 294,820 lecturers under the Ministry of Education and Culture (Dikti, 2018). In addition, there were 866 Islamic higher education institutions under the Ministry of Religious Affairs, with a total number of students and lecturers for whom no details are identified. Those 4,670 institutions of higher education spread across the archipelago (see **Fig. 4**). They are situated not only in urban cities but in rural areas as well. The researcher made the map below, using data from the Higher Education Directorate (Dikti, 2018), which shows how tertiary institutions are distributed (excluding higher education under the Ministry of Religious Affairs).

There are two options to make online learning possible in this archipelago nation, extend the internet network, or provide alternative learning that does not necessarily have to be online for those who live in difficult areas to connect to the Internet. Therefore, it is very important to develop a remote learning model that is consistent with the skills of the lecturer, the condition of the student, the location of the learner, the contextual factors, and the availability of infrastructure in the area, as suggested by Zaharias and Polymenakou (2009)

Another restriction of remote learning during the pandemic is the proportion and productivity of online teaching services, which is still reasonably small in China (Zhang et al., 2020). The same has undoubtedly been the case for universities in Indonesia. Students in this research pointed out that some lecturers had little use and knowledge of online resources prior to the outbreak. These lecturers have struggled to conduct online learning, some of which have precipitously copied offline teaching materials into the network space, without making appropriate adaptations. Very close to the observations of Cecilio-Fernandes (2020), who outlined how educators tended to teach during the pandemic, some retained the same schedule and duration of lessons, only that they were online now. To a large extent, ERL during this pandemic depends on educators' online teaching skills and experience. Lecturers need to advance their knowledge and skills in information technology. Faculty development is key to ensuring that lecturers can effectively use different educational strategies to engage students in distance learning.

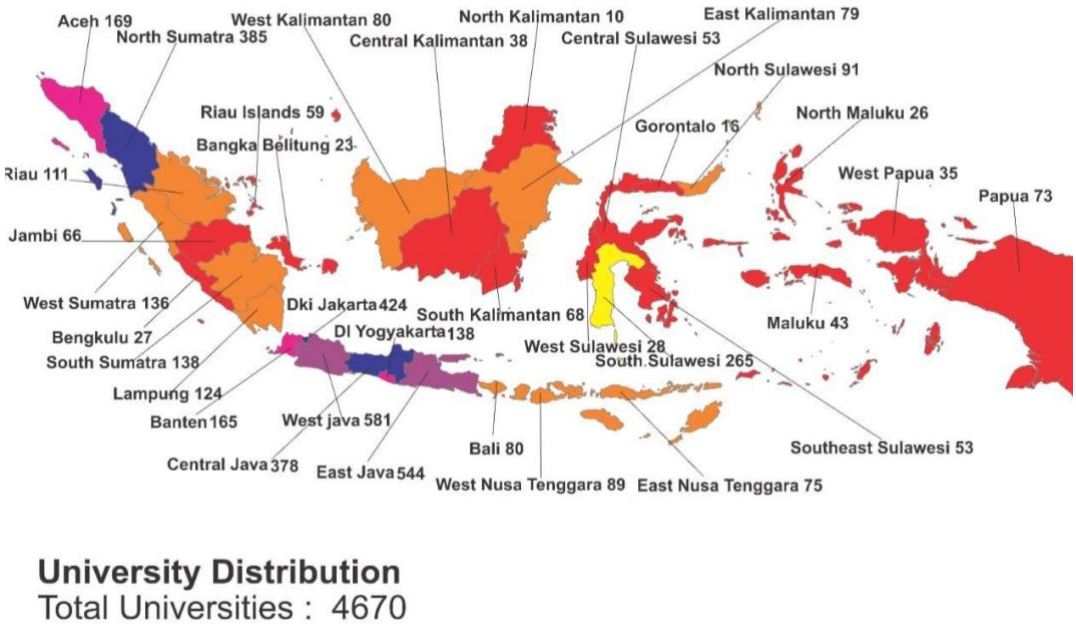

Fig. 4 The Distribution of Universities in Indonesia

In the Times Higher Education poll of 200 rectors from the top 1000 universities, 19 percent claim that modern media will have eradicated traditional lectures by 2030, compared to 65 percent who disagree (Matthews, 2018). This forecast happened faster than predicted. Drastic shifts happened when schools and colleges had to be closed to slow down and prevent the spread of coronavirus. The COVID-19 crisis had the side effect that online education was provided with an unexpected boost and was applied on a wide scale within only a few days (Ebner et al., 2020). All of a sudden, lecturers and students had to use technology in teaching and learning.

E-learning has been one of the most promising devices of the modern age. Many higher education institutions have shown interest in the implementation of e-learning, and E-learning readiness is a crucial aspect of successful implementation. Technology readiness, which plays a significant role in executing a successful and productive e-learning initiative, is one of the facets of e-learning readiness (Mosa et al., 2016). Another crucial prerequisite for successful e-learning is the need for thoughtful consideration of the underpinning pedagogy or how e-learning occurs (Zhang et al., 2020). E-learning

has been implemented in the COVID-19 pandemic, whether the institution, students or lecturers were ready or not ready. Due to an emergency, e-learning had to be moved quickly. This incremental transition from in-person to the online distribution of courses on a wide scale was daunting and challenging, and it is important to remember that this was not only an incredible feat but one that shows the versatility of higher education.

Teaching and learning during the COVID-19 pandemic have also been disrupted by insufficient facilities and an unstable network at home (Zhang et al., 2020). A case study in Brazil also highlighted the need for a laptop and the negative effect of inadequate internet connectivity or communication, with intermittent episodes of 'connect and disconnect' during the lecture (Cecilio-Fernandes et al., 2020). What these two cases have addressed relates to the student perspective in this study. Some students tend to share their computers with other family members, siblings and parents. Many students also access the Internet on their cell phones.

Moreover, when studying and learning at home, students and teachers may face a high workload and a home atmosphere that does not promote learning that could negatively affect their online teaching and learning (Zhang et al., 2020). Students in this research spoke about having problems with housework, the noise at home, and the obligation to help their younger siblings study. Not all teachers and students are able to find appropriate areas to teach and learn at home. Cecilio-Fernandes et al. (2020) also discussed this topic on their findings that studying in front of a computer for a few hours is a major challenge for students, particularly when they have a conventional online format class. Students can be quickly confused as most of them may not have a particular place to study at home. It is indeed necessary to note and address students' feelings towards online learning. 'Research in Malaysia identified a significant relationship between the student s intention and the successful use of online distance learning (Samat et al., 2020); and student motivation could strengthen their commitment to learning (Mat Halif et al., 2020).

Several students in this study have questioned the obsolete online teaching approaches and techniques implemented. They complained that learning was unstructured during the COVID-19 crisis. Structure and leadership have been perceived as important for online learners to take a positive and uplifting approach to learning (Garrison & Cleveland-Innes, 2005). Learning, which is not properly structured makes students bored, tired, and depressed. To make learning more structured, lecturers must follow the schedule of existing courses and develop learning strategies that pay attention to students' physical and mental health. Lecturers coordinate teaching so that they not only delegate assignments, discuss the subject effectively, and also include peer interaction and student engagement to lecturers. Interaction is seen as essential to a learning experience. Well-structured learning design has had a significant impact on the nature of the interaction and whether students have approached learning in a purposeful and lasting way (Garrison & Cleveland-Innes, 2005). University needs to provide more training to improve online teaching skills of academics to ensure that lessons are delivered more effectively (Chung et al., 2020).

A further overwhelming circumstance, many students have encountered economic problems in an emergency such as today. They could not afford the cost of learning online. Syamsul Arifin, a lecturer at the Institute of Technology Sepuluh November (ITS), calculated the amount of student expenditure on the Internet (Ramadhan, 2020). When a student takes 20-semester credit units in one semester, they spend 66.67 hours studying in one month. For Rp 3,820 (USD 0.27), an Internet data of 1 GB is equal to one hour. So, these students are going to spend on Rp. 254,000 (USD 18) a month. The nominal is quite expensive for students, especially if they have siblings who are also students. It is proposed that the educational operational expenditure that has not been used since the campus was closed may indeed be allocated to help students purchase Internet data. Circular number 302/E.E2/KR 2020 of the Directorate-General for Higher Education confirms that provision. Not all universities are enforcing this program. Students protested that they had to pay full tuition fees, even though they were studying at home.

Designing learning so that it does not necessarily require applications or programs that use high-bandwidth internet connections may minimize internet costs. Examples of high-bandwidth programs are video conferencing or synchronous online learning or watching educational videos. The delivery of materials or tasks asynchronously using the Learning Management System (LMS) is an

example of low bandwidth. The Higher Education Curriculum Development and Learning Team of the Ministry of Education and Culture (Dikti, 2020) explained that 40 percent synchronous and 60 percent asynchronous modes should be combined to enhance full online learning. Students will then be able to reduce their costs for Internet data. To make this a success, universities should improve their LMS, socialize the system and train lecturers and students to maximize their use.

6. Conclusion

The following are suggestions for enhancing ERL quality and increasing the students' readiness to study in any circumstances. Firstly, education through television and radio should be an alternative option in regions with little internet coverage. Secondly, supplying lecturers with standardized home-based teaching equipment and students with basic learning resources to enhance online learning during the pandemic. Thirdly, to provide teachers with comprehensive training on the use of high-quality online teaching platforms that do not require an expensive internet connection to function effectively, so that they would be better equipped for teaching in the next semester. Fourthly, to resolve student concerns about the lack of learning resources, an online library the educational institutions must be set up. Fifthly, considering that the COVID-19 crisis condition will not be brief, it is necessary to establish distance learning centers in the university, which can continue to grow after the COVID-19 pandemic has ended. Finally, to endorse and demand studies on online education at a national level to explore solutions to the issues that have been uncovered and inform strategies for successful online education during a crisis.

7. Suggestion for Future Research

The results of this analysis cannot be generalized since they are based on a fairly limited number of university students from one department in one university. However, we believe that this research portrays the perspectives and experiences of students towards ERL in many universities in Indonesia, and likely in other countries, especially developing countries. More work involving more students from various universities should be undertaken and the experiences and observations of the lecturers should also be discussed.

8. Author Contribution

The author affirmed that there is no conflict of interest in this article. The author conceived and designed the research protocols, performed the data collections, analyzed the data, prepared figures and/or tables, authored or reviewed drafts of the paper, and approved the final draft.

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