STUDENTS’ READING STRATEGIES DURING THE PANDEMIC IN HIGHER EDUCATION

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Abstract

The purpose of this article is to analyze the perceptions and experiences of undergraduate students in using strategies for reading texts during the Covid-19 pandemic. Researchers chose to use qualitative research in this study with a case study approach. The participants involved were 14 undergraduate students at the State Islamic University of Sultan Maulana Hasanuddin, Banten, West Java, Indonesia where participants were selected using the snowball sampling method. Data was collected through in-depth interviews which were then transcribed in which the names of participants were written pseudonymously. The collected data is then analyzed by the thematic analysis method. This study found that reading activities during the pandemic have their challenges and advantages and students have started to tend to get used to reading texts on a screen rather than reading in printout form, although some of them still prefer to read in printout form. The five main strategies in reading texts that are commonly used by students during the Covid-19 pandemic are memory association, retelling, previewing, identifying the main idea, and habituation. Researchers conclude that the effects of the Covid-19 pandemic have forced undergraduate students to get used to reading texts in on-screen form and reading strategies are still varied. Therefore, this research implies that the teaching and learning process should accommodate many strategies in reading texts based on proficiency in English and not dominate just one strategy.

Keywords: Reading Strategies, Covid-19 Pandemic, Undergraduate Students.

Abstrak

Tujuan dari artikel ini adalah untuk menganalisis persepsi dan pengalaman mahasiswa sarjana dalam menggunakan strategi membaca teks-teks di masa pandemi Covid-19. Peneliti memilih menggunakan penelitian kualitatif dalam penelitian ini dengan pendekatan studi kasus. Partisipan yang dilibatkan berjumlah 14 mahasiswa sarjana di Universitas Islam Negeri Sultan Maulana Hasanuddin, Banten, Jawa Barat, Indonesia dimana partisipan dipilih menggunakan metode snowball sampling. Pengumpulan data dilakukan lewat wawancara mendalam yang kemudian ditranskrip dimana nama partisipan ditulis secara pseudonim. Data yang terkumpul kemudian dianalisis dengan metode analisis thematik. Studi ini menemukan bahwa aktivitas-aktivitas membaca di masa pandemi memiliki tantangan dan kelebihan tersendiri dan mahasiswa sudah mulai memiliki kecenderungan untuk terbiasa membaca teks-teks pada layar diiringi membaca dalam bentuk print out, meskipun juga sebagian dari mereka masih lebih memilih membaca dalam bentuk print out. Lima strategi utama dalam membaca teks yang biasa dilakukan mahasiswa di masa pandemi Covid-19 adalah memory association, retelling, previewing, identifying the main idea, dan habituation. Peneliti menemukan bahwa efek dari pandemi Covid-19 telah membuat mahasiswa kecenderungan untuk membaca teks-teks di layar dan membaca dalam bentuk print out, meskipun masih ada sebagian yang masih lebih memilih membaca dalam bentuk print out. Oleh karenanya, penelitian ini menunjukkan bahwa proses pembelajaran dan pengajaran harus terbuka terhadap banyak strategi dalam membaca teks-teks agar tidak terlalu menekankan pada satu strategi saja.
Retelling, previewing, identifying the main idea dan pembiasaan. Peneliti menyimpulkan bahwa efek pandemi Covid-19 telah memaksa mahasiswa sarjana untuk terbiasa membaca teks-teks dalam bentuk on-screen dan strategi-strategi membaca masih bervariasi. Maka dari itu, implikasi dari penelitian ini adalah bahwa proses belajar mengajar seharusnya mengakomodasi banyak strategi dalam membaca teks dengan didasarkan kemahiran dalam berbahasa Inggris dan tidak mendominasikan satu strategi saja.

**Kata Kunci:** Strategi Membaca, Pandemi Covid-19, Mahasiswa Sarjana.

**INTRODUCTION**

Since the existence of the COVID-19 pandemic has spread all over the world, it has affected all territories and countries fully. According to Ciotti, et al, the virus has affected 4,806,299 people along with 318,599 death cases since it was found in Wuhan, Hubei province, China in 2019. There is no choice for each country in responding to this pandemic, but they should take responsive care by empowering all resources. Massive action for the sake of survival, such as wearing face masks, handwashing, physical distancing, and avoiding gatherings and assemblies, has been done for a longer period. The pandemic has also disrupted all sectors of human activities, including education.

The policy to lockdown which was implemented since COVID-19 announced in Indonesia, including for the education sector, had supposed to be followed by a maximum preparation. In fact, many schools were not ready to apply this. It was different from schools in developed countries such as the US or the UK where online classes were implemented well. This problem relates to learning facilities, family environment, etc. Mulyani, at al mentioned that in the pandemic situation, learning facilities played a stellar role in supporting students’ motivation. The more supported and comfortable facilities they have, the more students’ motivation to learn.

In other words, the schools’ shutdown creates a new challenge both for teachers and students. In the teaching and learning process, traditional classrooms have been replaced with online activities. These phenomena came up with its challenges which needed to be solved. In maintaining the effectiveness and best quality services, teachers had to think about the amount as well as the duration of learning, activities, and assessment. In addition, from another point of view, the students had to think about their performance when they sometimes struggled with the difficulties. In particular, students are worried as to disadvantages for a longer period of time. Therefore, it requires special attention in terms of finding the best solution. In this case, several strategies are really needed in order to overcome this difficult nuance. Equally important, an extra effort to support the education sector is essential.

It is crucial to develop reading comprehension skills for students in order to understand textbooks, journals, and other more complex texts in an academic setting. Along with the

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1 Marco Ciotti et al., “The COVID-19 Pandemic,” *Critical Reviews in Clinical Laboratory Sciences* 57, no. 6 (2020): 365–88.
2 Eva Astuti Mulyani, Mahmud Alpusari, and Elpri Darta Putra, “The Effect of Learning Facilities and Family Environment on Motivation to Learn of Prospective Elementary Teacher Education on Online Learning,” *JOURNAL OF TEACHING AND LEARNING IN ELEMENTARY EDUCATION (JTLEE)* 4, no. 1 (2021): 86–94.
3 Sir John Daniel, “Education and the COVID-19 Pandemic,” *Prospects* 49, no. 1 (2020): 91–96.
difficult situation faced by students, it is a must to be a “strategic’ reader”. Song in one study stated that the existence of training for reading strategy improved the reading proficiency at higher education level⁴. Furthermore, the ability to find main ideas and make inferences was totally improved. In the context of today’s learning for second language learners, the challenge is not only about sharpening the ability to read well but also how to acquire the skill in digital literacy⁵. Equally essential, doing several training sessions for different types of reading strategies is considered challenging and needs more time for students. Therefore, a point that is essential the most is to determine one specific strategy based on the students’ needs, genre of the texts, or English proficiency level.

Ali and Razali mentioned that most of the teachers, English language teachers, sometimes have a preference to apply one specific strategy, but it makes students read better for sure instead of applying different types of strategies⁶. Equally important, students probably know the strategies, but they do not realize the strategies. They do not utilize those strategies to sharpen their reading comprehension skills. Therefore, they need to be aware as to the use of the strategies and their implication as well⁷.

Various studies that have been carried out recently are still very limited which focus on strategies for reading texts based on the preferences of undergraduate students during the Covid-19 pandemic. This research is specifically to explore the experiences of undergraduate students in the use of reading strategies during a pandemic where the teaching and learning process in higher education conducts online. Undergraduate students' perceptions and understanding of the selected reading strategies have important roles as feedback for the implementation of reading strategies in education and in teacher selection in the use of reading strategies in the classroom.

**METHOD**

This study focuses on analyzing the strategies of undergraduate students in reading learning materials during the Covid-19 pandemic. This study aims to analyze the preferences of undergraduate students’ strategies in reading activities during online learning. Researchers also explored the challenges experienced by students in reading activities during the Covid-19 pandemic. This research is qualitative research with a case study method. Data collection was carried out by in-depth interviews with first semester undergraduate students of the English education study program at the Faculty of Teacher Training and Education, State Islamic University (UIN) Sultan Maulana Hasanuddin, Banten, Indonesia. The Rector at UIN Sultan Maulana Hasanuddin Banten has several times issued a policy on the learning process to be carried out online to avoid the spread of the Coronavirus. On December 28, 2020, through

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⁴ Mi-jeong Song, “Teaching Reading Strategies in an Ongoing EFL University Reading Classroom,” *Asian Journal of English Language Teaching* 8, no. 1 (1998): 41–54.

⁵ John Gilbert, “A Study of ESL Students’ Perceptions of Their Digital Reading,” *The Reading Matrix: An International Online Journal* 17, no. 2 (2017): 179–95.

⁶ Aziza M Ali and Abu Bakar Razali, “A Review of Studies on Cognitive and Metacognitive Reading Strategies in Teaching Reading Comprehension for ESL/EFL Learners,” *English Language Teaching* 12, no. 6 (2019): 94–111.

⁷ Dohra Fitrisia, Kok-Eng Tan, and Yunissrina Qismullah Yusuf, “Investigating Metacognitive Awareness of Reading Strategies to Strengthen Students’ Performance in Reading Comprehension,” *Asia Pacific Journal of Educators and Education* 30, no. 1 (2015): 15–30.
decree number 4924/Un.17/R/HM.01/12/2020, the campus also implemented the Work from Home (WFH) system where learning activities, office and academic activities were also carried out online. Lecturers and staff also need the dean’s permission if they need access to campus.

Interviews were conducted on 14 undergraduate students of the English study program consisting of men and women with an age range of 18 - 20 years. Interviews were conducted face-to-face and online via the Zoom application. Their names were written pseudonymously in this study. The presentation of the data was carried out using a thematic analysis approach to find important themes from the results of the interviews. Several steps in thematic analysis include introducing the researcher to the results of interview data and coding the data, developing themes in the data, evaluating, and determining the themes to be selected and completing the report. The following Table 1 is the demographic data of participants in this research.

| No | Pseudonym | Age (years) | Gender | Interview date (2022) |
|----|-----------|-------------|--------|----------------------|
| 1  | Wilda     | 20          | Female | January, 24th 2022   |
| 2  | Rayi      | 18          | Male   | January, 26th 2022   |
| 3  | Ratu      | 19          | Female | January, 26th 2022   |
| 4  | Neng Yulia| 19          | Female | January, 24th 2022   |
| 5  | Navis     | 20          | Male   | January, 24th 2022   |
| 6  | Nandi     | 18          | Female | January, 26th 2022   |
| 7  | Nanda     | 19          | Female | January, 24th 2022   |
| 8  | Mahesa    | 19          | Male   | January, 26th 2022   |
| 9  | Lisna     | 18          | Female | January, 24th 2022   |
| 10 | Hadid     | 19          | Male   | January, 26th 2022   |
| 11 | Eko       | 18          | Male   | January, 26th 2022   |
| 12 | Eidel     | 18          | Female | January, 24th 2022   |
| 13 | Azra      | 20          | Female | January, 26th 2022   |
| 14 | Adam      | 18          | Male   | January, 24th 2022   |

**RESULTS AND DISCUSSION**

In general, four main themes in this section of the findings and discussion are first, reading activity during the Covid-19 pandemic which has many advantages and several challenges; secondly, the comparison of reading activities in the form on the screen and print out; thirdly, reading strategies which include memory association, retelling, previewing, identifying main ideas, and habituation; lastly, implementation for pedagogy improvement.

**Reading activities in the pandemic era**

Reading activities during the Covid-19 pandemic, apart from bringing benefits, also have their own challenges.

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8 Gareth Terry et al., “Thematic Analysis,” *The SAGE Handbook of Qualitative Research in Psychology* 2 (2017): 17–37.
Advantages

From the teaching and learning setting, online learning has drawn its own strengths indeed. The proper situation has been disrupted by the pandemic of COVID-19; therefore, online learning soon became one of the best methods of instruction that is ready to apply. As one student, Adam said that online learning process provides a huge flexibility, even when he was in Bandung, he could study normally. It was quite comfortable when there was internet connection. He brought his laptop and soon he could study well. Another student, Eidel, shared the same view that she prefers online than offline, so she really enjoy her course. This information confirmed what was claimed by Mukhtar, et al that online learning is perfect in terms of flexibility and student-centered initiative. Asynchronous setting led them to study anywhere and at any time. The fact is also supported by Lin and Lin in Ayu mentioning that online learning settings can be pictured as an innovative way which is designed properly, student-centered, and creating a learning environment so that students can access it easily. Furthermore, in relation to the online reading perspective, the role of teachers/lecturers is essential as well. They are expected to provide sufficient online reading strategies that finally bring students to obtain online reading speed and comprehension by understanding the specific challenges of online reading.

Challenges

In relation to teaching and learning online in the pandemic era, some challenges can be divided into several factors. First, the readiness of the online environment. It also relates to the conducive learning situation. A participant mentioned that her challenges when learning online was the difficulty to understand the materials which embedded with bad signal. Another participant stated that unconducive situation as well as unable to understand the material in detail. According to Muthuprasad, et al indicated that the problem of connectivity is the major challenge in online learning. It is potentially even worse for those who live in remote areas.

Next, it can be the lack of motivation. Some students mentioned that it is difficult to focus because no one to discuss with. Also, students tend to be unmotivated. They are already familiar with having face to face in a real situation (offline learning). A participant, Azra, shared one insight as such having hard time to adjust the situation. She tended to feeling laziness if she does not do it all together with her classmates. A kind of lack of motivation. The fact is also confirmed by Gustiani that students are sometimes frustrated by and feeling demotivated. This

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9 M Nurul Ikhsan Saleh, Ratna Sari, and Puji Alim, “University Students’ Perception on The Implementation of Online Learning During The Covid-19,” Nazhruna: Jurnal Pendidikan Islam 4, no. 1 (2021): 1–17.
10 Khadijah Mukhtar et al., “Advantages, Limitations and Recommendations for Online Learning during COVID-19 Pandemic Era,” Pakistan Journal of Medical Sciences 36, no. COVID19-S4 (2020): S27.
11 Mutiara Ayu, “Online Learning: Leading e-Learning at Higher Education,” The Journal of English Literacy Education: The Teaching and Learning of English as a Foreign Language 7, no. 1 (2020): 47–54.
12 Nicole Brun-Mercer, “Online Reading Strategies for the Classroom,” in English Teaching Forum, vol. 57 (ERIC, 2019), 2–11.
13 Thiyaharan Muthuprasad et al., “Students’ Perception and Preference for Online Education in India during COVID-19 Pandemic,” Social Sciences & Humanities Open 3, no. 1 (2021): 100101.
14 Sri Gustiani, “Students’motivation In Online Learning During Covid-19 Pandemic Era: A Case Study,” Holistics 12, no. 2 (2020).
student has been familiar and comfortable with traditional face to face learning situations. Some obstacles like signals, electricity, delay messages tend to shape the student to be amotivation.

Reading on-screen vs reading in print form

Nowadays, it is easy for students to have access to a number of reading aids which are from screen selections of print options. This sometimes encourages them to experience their studying preferences. According to Pardede, printed texts have long been utilized to promote reading. Otherwise, the existence of digital texts and the massive use of digital learning devices currently have changed the ways student’s read and construct, process and communicate insights.

Reading web pages sometimes make students not feel free to make footnotes in order to create a better understanding towards the text itself. Adam said that for web text, he did not feel free to scribble. While in printed text, he could make simple note on it. Even though it was generally considered to make a book looks dirty, but it helped him a lot in building a comprehensive understanding.

In practical point of view, the fact above relates to deep reading and scanning, where students are able to locate specific information on the text which will make them more engaged as well as more concentrated. Evans noted that students who prefer printed text due to a particular focus such as health issues, say, eyestrain and headaches from using electronic devices too much. In addition, whenever students find difficult words or phrases, she/he has to rewrite them in her/his notebook. Eko said that to read a web text, the problem was unrecognize some words so he tried to re-write a particular word the he did not know in the notebook.

On the other hand, some students find that reading web text is much better than printed text. In terms of flexibility, it sometimes is boring to bring printed text everywhere they go. Here, reading web text is easier because it can be done even through their smartphone. A student said that a printed text is difficult to bring everywhere, especially in the current pandemic situation. Carrying books was the most boring activity. Otherwise, a web text can be accessed through smartphone easily. This finding clarified Manalu’s finding that reading digital texts makes students comfortable, exciting, and motivating. Another student noted that he read book. However, he reads more on website during the pandemic.

At last, students prefer reading web text only in a particular situation, for example, there is no printed text available. Lisna said that she reads book in printed format. Otherwise, if she does not have a book she wants to read, then she read from web text. Again, she prefers to read book in printed version. Also, they like reading printed text because it helps them to understand easily and stay focus significantly. As Yulia mentioned that printed text is sometimes too troublesome to carry everywhere, but the advantage is that printed books are easier to understand because we can focus more when reading. Students tend to read course material

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15 Parlindungan Pardede, “Print vs Digital Reading Comprehension in EFL,” *Journal of English Teaching* 5, no. 2 (2019): 77–90.
16 Pardede.
17 Ellen Evans, “Learning from High School Students’ Lived Experiences of Reading E-books and Printed Books,” *Journal of Adolescent & Adult Literacy* 61, no. 3 (2017): 311–18.
18 Benny Hinn Manalu, “Students’ Perception of Digital Texts Reading: A Case Study at the English Education Department of Universitas Kristen Indonesia,” *Journal of English Teaching* 5, no. 3 (2019): 191–203.
using printed text compared to electronic text\textsuperscript{19}. Furthermore, Myrberg mentioned that since not all of us were born as digital readers, there will be a moment when we feel more comfort by reading printed text\textsuperscript{20}. Although some facts proved that reading printed text is much more helpful for students related to reading comprehension etc, Margolin, et al noted that there is no significant difference among those types of text\textsuperscript{21}.

**Reading Strategies**

**Memory Association**

First strategy is about the use of previous knowledge to associate with the material he/she reads at the moment. When they find a relation between one and another, the experience helps them to have a better understanding or appropriate reading comprehension. A student, Adam claimed that memory association from his previous knowledge. Whenever he read a text, he always finds out the implications of previous insight to the text he reads at the moment. When he finds they are both have relation, then he can have a comprehensive understanding because both experiences are relevant. According to Salmeron, et al readers can actually experience these phenomena better as long as they fulfill two criterias such as selecting the most interesting reading material and selecting material which is semantically similar\textsuperscript{22}. In contrast, Meyer & Poon stated that when readers choose material which is similar to what they read previously, this helps them better in understanding the text\textsuperscript{23}. This applied even for low-knowledge readers. On the other hand, readers with an intermediate-knowledge background can have better understanding for both opting the similar or coherence material and material based on their preference.

**Retelling**

Retelling is an activity or strategy that is used by students to have a better reading comprehension. The activity gives students an opportunity to manage information they obtain from the text and share it properly. Lisna said that the best strategy is retelling. Because with retelling, students can know their ability to the material discussed. Another student, Azra, mentioned that the best strategy is retelling. For her, the process of retelling showed that students understand what actually they read. According to Marpaung and Sinaga, there was a significant difference in reading comprehension for students who applied Read, Cover, Remember, and Retell (RCRR) strategy\textsuperscript{24}. In comparison to other strategies, this approach was more effective in shaping students to enjoy reading activities, fulfill the learning goal as well as

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\textsuperscript{19} Basim Alamri, “Reading Preferences of ESL Students: Electronic Texts vs. Printed.,” *International Journal of Emerging Technologies in Learning* 14, no. 4 (2019).

\textsuperscript{20} Caroline Myrberg and Ninna Wiberg, “Screen vs. Paper: What Is the Difference for Reading and Learning?,” *Insights* 28, no. 2 (2015).

\textsuperscript{21} Sara J Margolin et al., “E-readers, Computer Screens, or Paper: Does Reading Comprehension Change across Media Platforms?,” *Applied Cognitive Psychology* 27, no. 4 (2013): 512–19.g

\textsuperscript{22} Ladislao Salmerón et al., “Comprehension Processes in Digital Reading,” *Learning to Read in a Digital World*, 2018, 91–120.

\textsuperscript{23} Bonnie J F Meyer and Leonard W Poon, “Effects of Structure Strategy Training and Signaling on Recall of Text.” *Journal of Educational Psychology* 93, no. 1 (2001): 141.

\textsuperscript{24} Marlin Steffi Marpaung and Risnawaty Sinaga, “The Use of Read, Cover, Remember, Retell (RCRR) Strategy in Improving Students’ Reading Comprehension Ability,” *Acuity: Journal of English Language Pedagogy, Literature and Culture* 4, no. 2 (2019): 153–76.
improve vocabulary. Furthermore, one study related to students’ reading interest development through independent reading-retelling activity showed the result that students obtained the increase of their reading interest after participating in the activity. This activity can actually contribute more for students because sharing sessions once they finish reading can be implemented and adjusted based on the needs of the students itself.

**Previewing**

Previewing is one of the strategies used by ESL students to find out the main idea of the paragraph as well as other detailed information. One student, Hadid, said that he preferred previewing strategy. He felt comfortable with this strategy, so he did not use any other strategy. Neng Yuli mentioned that she usually applied previewing strategy by reading some basic information as to the text such as synopsis, prologue, and conclusion. One study related to analysis of previewing reading strategy revealed that most students preferred answering questions directly without taking a previewing strategy. Another study also stated a similar result that students did not even read the title or subtitle. There was so little if any previewing behavior.

**Identifying the main idea**

Identifying the main idea was the strategy used by students as well. A student finds the strategy works well with her. Then it is followed by writing a summary of what it is read. Lisna said that in reading, she applied identifying the main idea strategy as well as summarization. Otherwise, the first one was work well to her. According to Yu, students tend to rewrite the essential information to get a deeper understanding of the reading text. They also prefer to take note when selecting information which is so beneficial for them. The fact is proved by a student, Nanda, who mentioned that in her views, making notes of essential points in the book is the best strategy. It made the information were easy to remember and were never be forgotten.

**Habituation**

Having a reading habit also influences reading comprehension. Navis proved that actually, the real strategy was making it into habit. Because students were not used to reading, it made the activity did not work well. It was difficult to understand, students tended to be lazy etc. So, the strategy is to get used to it. This evidence is similar to Sartika, et al that proved exactly there was significant correlation between reading habit and reading comprehension. Otherwise, other aspects such as intellectual capacity, the skills of language, psychology, and environment might be considered as important as well.

**Implications for pedagogy improvement**

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25 Rusma Noortyani, “An Exploratory Study on Students’ Reading Interest Development through Independent Reading-Retelling Activity,” *Arab World English Journal (AWEJ)* Volume 9 (2018).

26 Wuriy Handayani and Nunung Widijantie, “An Analysis of Previewing Reading Strategy in Business Texts: A Think Aloud Protocol Study,” *International Journal of English and Cultural Studies* 4, no. 1 (2021): 30–38.

27 Caleb Prichard and Andrew Atkins, “Evaluating L2 Readers’ Previewing Strategies Using Eye Tracking,” *The Reading Matrix: An International Online Journal* 16, no. 2 (2016): 110–30.

28 Jinhong Yu, “Analysis of Critical Reading Strategies and Its Effect on College English Reading,” *Theory and Practice in Language Studies* 5, no. 1 (2015): 134.

29 Fitri Dewi Sartika, Nurul Affah, and Yentri Anggraini, “The Correlation Between Students’reading Habit and Their Reading Comprehension,” *Jurnal Basis* 7, no. 1 (2020): 207–16.
Having insights of how students experience the reading course during the pandemic situation have led the researchers to the conclusions related to how those facts contribute to the pedagogy aspect. Wilda suggested that in order to avoid the process of teaching and learning monotonously, lecturers had to have varying of reading strategies. Here, the need for strategy is not only required by the students but also the lecturers. Implementing appropriate strategies are potentially able to improve the intensity of students-teacher interaction. Another student, Nandi, has a similar sound. For her, the lecturer should conduct the class with an interesting teaching strategy and understandable students easily.

The aspects of clearness and systems are also considered important. Lecturers are hoping to deliver the material in a simple way or language used, or even the use of technological support. Eko said that delivering materials should be systematic, and clear, and describe them with simple language or instruction. Added some humor and applied the latest technology products. Here, lecturers should make sure that students are able to understand the material that is offered and have an open-minded way of thinking to serve student needs. Furthermore, Nanda suggested that lecturers should take control and pay more attention to students who had not understand the material fully. In addition, they had to be more open to students who want to ask more. Next, the firmness of the lecturers in giving instruction for students to have their cameras on is needed to be paid attention to. One student imagined that there is not such a classroom situation when everybody turns their camera off.

CONCLUSION

The global wave of the Covid-19 pandemic has changed the learning process from offline to online. The pandemic wave brought many positive and negative impacts for undergraduate students in undergoing the learning process in higher education. The positive impact is the habit of learning from anywhere, anytime, with anyone, where the learning process is more flexible. One other impact is how students flexibly access reading materials online and read them anywhere. However, some undergraduate students also considered that these changes had a negative impact on how the teaching and learning process became less conducive, internet signals were less supportive, students' understanding levels were quite low, and learning motivation decreased.

In reading activities during the online learning period, undergraduate students apply various strategies in reading texts. Some of the strategies found in this study are a memory association strategy, in which students associate previous understandings and experiences with the reading material being read. Retelling is also a strategy in reading texts favored by undergraduate students in the reading process because this strategy can see the level of understanding of undergraduate students in reading skills. Previewing is another strategy that has been chosen by undergraduate students to see the main discussion points in the reading text. The next strategy in reading the text is identifying the main idea which is a strategy that is also of interest to undergraduate students in reading which is then followed by the step of writing down the important points. The last strategy is reading with habituation where undergraduate students get used to reading texts in their daily activities.

The recommendation from this research is how universities and teachers can make the following five reading strategies; memory association, retelling, previewing, identifying the main
idea, and habituation as priorities in the application of text reading strategies to create a non-monotonous learning process. These five strategies are at least the student's preferences in the findings of this study. Reading materials in universities also need to consider mainstreaming these five strategies in improving the reading skills of undergraduate students. In addition, reading materials in universities need to be improved in the form of on-screen because undergraduate students already tend to read in non-printout form. This is a positive step to reduce paper use and a step to reduce global warming due to tree-cutting activities to produce paper.

REFERENCES

Alamri, Basim. “Reading Preferences of ESL Students: Electronic Texts vs. Printed.” *International Journal of Emerging Technologies in Learning* 14, no. 4 (2019).

Ali, Aziza M, and Abu Bakar Razali. “A Review of Studies on Cognitive and Metacognitive Reading Strategies in Teaching Reading Comprehension for ESL/EFL Learners.” *English Language Teaching* 12, no. 6 (2019): 94–111.

Ayu, Mutiara. “Online Learning: Leading e-Learning at Higher Education.” *The Journal of English Literacy Education: The Teaching and Learning of English as a Foreign Language* 7, no. 1 (2020): 47–54.

Brun-Mercer, Nicole. “Online Reading Strategies for the Classroom.” In *English Teaching Forum*, 57:2–11. ERIC, 2019.

Ciotti, Marco, Massimo Ciccozzi, Alessandro Terrinoni, Wen-Can Jiang, Cheng-Bin Wang, and Sergio Bernardini. “The COVID-19 Pandemic.” *Critical Reviews in Clinical Laboratory Sciences* 57, no. 6 (2020): 365–88.

Daniel, Sir John. “Education and the COVID-19 Pandemic.” *Prospects* 49, no. 1 (2020): 91–96.

Evans, Ellen. “Learning from High School Students’ Lived Experiences of Reading E-books and Printed Books.” *Journal of Adolescent & Adult Literacy* 61, no. 3 (2017): 311–18.

Fitrisia, Dohra, Kok-Eng Tan, and Yunisrina Qismullah Yusuf. “Investigating Metacognitive Awareness of Reading Strategies to Strengthen Students’ Performance in Reading Comprehension.” *Asia Pacific Journal of Educators and Education* 30, no. 1 (2015): 15–30.

Gilbert, John. “A Study of ESL Students’ Perceptions of Their Digital Reading.” *The Reading Matrix: An International Online Journal* 17, no. 2 (2017): 179–95.

Gustiani, Sri. “Students’ Motivation In Online Learning During Covid-19 Pandemic Era: A Case Study.” *Holistics* 12, no. 2 (2020).

Handayani, Wuriy, and Nunung Widijantie. “An Analysis of Previewing Reading Strategy in Business Texts: A Think Aloud Protocol Study.” *International Journal of English and Cultural Studies* 4, no. 1 (2021): 30–38.

Manalu, Benny Hinn. “Students’ Perception of Digital Texts Reading: A Case Study at the English Education Department of Universitas Kristen Indonesia.” *Journal of English Teaching* 5, no. 3 (2019): 191–203.

Margolin, Sara J, Casey Driscoll, Michael J Toland, and Jennifer Little Kegler. “E-readers, Computer Screens, or Paper: Does Reading Comprehension Change across Media Platforms?” *Applied Cognitive Psychology* 27, no. 4 (2013): 512–19.
Marpaung, Marlin Steffi, and Risnawaty Sinaga. “The Use of Read, Cover, Remember, Retell (RCRR) Strategy in Improving Students’ Reading Comprehension Ability.” Acuity: Journal of English Language Pedagogy, Literature and Culture 4, no. 2 (2019): 153–76.

Meyer, Bonnie J F, and Leonard W Poon. “Effects of Structure Strategy Training and Signaling on Recall of Text.” Journal of Educational Psychology 93, no. 1 (2001): 141.

Mukhtar, Khadijah, Kainat Javed, Mahwish Arooj, and Ahsan Sethi. “Advantages, Limitations and Recommendations for Online Learning during COVID-19 Pandemic Era.” Pakistan Journal of Medical Sciences 36, no. COVID19-S4 (2020): S27.

Mulyani, Eva Astuti, Mahmud Alpusari, and Elpri Darta Putra. “The Effect of Learning Facilities and Family Environment on Motivation to Learn of Prospective Elementary Teacher Education on Online Learning.” JOURNAL OF TEACHING AND LEARNING IN ELEMENTARY EDUCATION (JTLEE) 4, no. 1 (2021): 86–94.

Muthuprasad, Thiyaharajan, S Aiswarya, K S Aditya, and Girish K Jha. “Students’ Perception and Preference for Online Education in India during COVID-19 Pandemic.” Social Sciences & Humanities Open 3, no. 1 (2021): 100101.

Myrberg, Caroline, and Ninna Wiberg. “Screen vs. Paper: What Is the Difference for Reading and Learning?” Insights 28, no. 2 (2015).

Noortyani, Rusma. “An Exploratory Study on Students’ Reading Interest Development through Independent Reading-Retelling Activity.” Arab World English Journal (AWEJ) Volume 9 (2018).

Pardede, Parlindungan. “Print vs Digital Reading Comprehension in EFL.” Journal of English Teaching 5, no. 2 (2019): 77–90.

Prichard, Caleb, and Andrew Atkins. “Evaluating L2 Readers’ Previewing Strategies Using Eye Tracking.” The Reading Matrix: An International Online Journal 16, no. 2 (2016): 110–30.

Saleh, M Nurul Ikhsan, Ratna Sari, and Puji Alim. “University Students’ Perception on The Implementation of Online Learning During The Covid-19.” Nazhruna: Jurnal Pendidikan Islam 4, no. 1 (2021): 1–17.

Salmerón, Ladislao, Helge I Stromso, Yvonne Kammerer, Marc Stadtler, and Paul Van den Brock. “Comprehension Processes in Digital Reading.” Learning to Read in a Digital World, 2018, 91–120.

Sartika, Fitri Dewi, Nurul Affah, and Yentri Anggraini. “The Correlation Between Students’reading Habit and Their Reading Comprehension.” Jurnal Basis 7, no. 1 (2020): 207–16.

Song, Mi-jeong. “Teaching Reading Strategies in an Ongoing EFL University Reading Classroom.” Asian Journal of English Language Teaching 8, no. 1 (1998): 41–54.

Terry, Gareth, Nikki Hayfield, Victoria Clarke, and Virginia Braun. “Thematic Analysis.” The SAGE Handbook of Qualitative Research in Psychology 2 (2017): 17–37.

Yu, Jinhong. “Analysis of Critical Reading Strategies and Its Effect on College English Reading.” Theory and Practice in Language Studies 5, no. 1 (2015): 134.