# METACOGNITIVE ONLINE ACADEMIC READING STRATEGIES PRACTICED BY EFL STUDENTS
## A THESIS

Submitted in Partial Fulfillment of the Requirements for

Gaining the Bachelor Degree of

English Language Education



by:

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*Assalamualaikum wr.wb*

I inform that I have given guidance, briefing, and correction to whatever extent of the following thesis identification :

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*Wassalamualaikum wr.wb*

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# DEDICATION

This thesis is dedicated to :

English Education Departemnt of UIN Walisongo Semarang, all English teachers, and everyone who supported me in accomplishing the thesis, especially my beloved parents and family who always give endless love, support, and motivation

# MOTTO

All is well.[1]

A simple sentence full of passion, optimism, patience, and
gratitude.

[1] Vidhu Vinod Chopra & Rajkumar Hirani, *Three Idiots,* (India : Vinod
Chopra Films,2009).

# ABSTRACT

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|---|---|
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The development of technology and internet has helped people in many aspects of life, including education. This change caused reading not only to be done by reading print books but also to be done online, and it is now becoming popular. Reading involves a variety of strategies that help the reader to understand the information of the text. Metacognitive strategies have many benefits that help readers understand the reading because metacognitive strategies are depicted as thinking processes applied to-self monitoring and self-regulating that the reader used to choose among different strategies in various contexts and various reading purposes. This research aims to explore the most preferable metacognitive online academic reading strategies and also to explain the implementation of this strategy practiced by EFL students. Descriptive qualitative research was used in conducting this research. The research participants were 100 EFL students of English education department at Walisongo State Islamic University in the academic year of 2021. Data were collected through the Online Survey Reading Strategies (OSORS) that spread using Google form link and online interviews using WhatsApp application. The result of this study revealed that Problem-solving was the most preferable strategy used by the students. The second dominantly used was Global reading strategies, and the last was Support reading strategies. The students were high users of metacognitive online reading strategies. They were highly aware and felt to be helped using metacognitive online reading strategies.

Keywords : *EFL students, metacognitive, online academic reading, reading strategies.*

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*Bismillahirrahmanirrahiim*

Praise and gratitude I pray to Allah SWT who has given his mercy and blessing so that I can compose and complete this research completely. *Sholawat* and *Salam* are also addressed to the Propet Muhammad SAW, who bring us from the darkness to the brightness.

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8. All of my friends PBI 2017 especially my classmates of PBI A 2017
9. Last but not least, those who can not be mentioned one by one, who had supported and helped me in every condition.

The researcher realizes that this thesis is still far from perfection. Therefore, the researcher needs suggestions and constructive criticism to make it better. The researcher hopes this thesis is useful for other researchers in particular and readers in general.

Semarang,23 August 2021

Researcher,

Ela Maryam Saraswati

1703046036

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# CHAPTER I
# INTRODUCTION

This chapter discusses several important points covering background of the research, questions of the research, objective of the research, and significance of the research.

## A. Background of the Research

Nowadays, technology is growing faster by the day, it is easier for people to do many things to support their lives for the better. One form of technological progress is the rapid use of the internet by many people in various sectors and fields. Internet provides unlimited information to access. This makes internet a profitable tool for developments in the field of education. Indonesia has become the country that uses the internet for educational development. Many schools and colleges have adopted technology into the curriculum to make learning activities easier. This fact makes students now seem to rely on the internet for their requirements of information. They lean toward going online to discover the information they need by reading online. Reading online is more challenging than reading papers. It is since in reading online, there's an extraordinary opportunity of being destructed by numerous hypermedia and hyperlinks that internet offers. Students tend to easily

lose their reading focus by keep moving from one source to another at the same time. This reality leads to the state where the reading comprehension gets to be susceptible.

Reading is one of the main four language skills that a learner needs to master in order to ensure success in learning English. [2] Through reading, students gain information, ideas, or messages are conveyed by the writer. It helps them to improve their knowledge and to optimize their education. According to Anderson reading is constructed as a mental representation of text or text information or meaning through the interaction between the reader's knowledge and text features.[3] When reading online the interaction takes place between the readers' cognitive knowledge and also the texts taken online from the internet. The text may still be read on the screen instead of being printed on the papers. This reading-online can provide probabilities to the students to change over from the reading task to a different activity on the screen such as open their social media, videos, music,

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[2]Siti Mariam, Improving Students' Skimming and Scanning in Reading Skill by Applying Metacognitive Strategy, (*Indonesian EFL Journal : Journal of ELT, Linguistics and Literature, 2016*), Volume 2 Issue 1, p.70

[3] Kirana, Sahiruddin, Online Reading Cultures Among Indonesian EFL Students at Tertiary Education Level, (*Jurnal Studi Budaya Nusantara, 2020),* Vol.4 No.2, p. 105

and the other pages that can be opened within the same time. The fact of change activities enabled the interaction between the readers' cognition and the text to become lessened. During the process of reading online, there are many information and features that satisfied people's knowledge needs. But accept a lot of debris and irrelevant information quickly leads to distraction (Ruixiang et al., 2017).[4]

Therefore, helping students focus requires appropriate strategies in order for students to understand the online reading. The strategy should prevent students from misreading the online literature and be able to help them to control themselves from the internet features that reduce focus. Considering the characteristic of strategies needed, metacognitive reading is a suitable strategy to apply. Metacognitive is derived from the word metacognition. It is the ability to control the cognitive domain, individual awareness of how a person learns, the ability to assess the hardships of a problem, the ability to discern the level of one's understanding, the ability to achieve one's purpose, and the ability to understand

[4] Ruixiang, Hui,& Yao, Research on Fragment Reading in Mobile Internet, (*Advanced in Social Science, Education and Humanities Research, 2017*), Vol. 119, p. 808

one's willingness to learn. Metacognitive strategies have been defined in various studies related to reading skills. Sheorey and Mokhatri (2001) defined metacognitive strategies as conscious and thoughtful procedures in reading, involving self-examination and self-regulation, such as making judgments about cognitive needs. [5] Metacognitive reading strategies are the notions of thinking about thinking and are defined as, planned, intentional, goal-directed, and future-oriented mental processing that can be used to accomplish cognitive tasks (Salataki & Akyel, 2002; Phakit,2003). [6] Furthermore, Metacognitive reading strategies play an important role in students' language learning process because students know how to organize their learning. Metacognitive strategies can be habitual strategies used by students as an effective strategy to improve reading comprehension.

By all of the explanations above, the researcher realizes that it is important to find out the metacognitive reading strategies used by Indonesian EFL university

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[5] Agus Rianto, Indonesian EFL University Students' Metacognitive Online Reading Strategies Before and During the Covid-19 pandemic, (*Studies in English Language and Education, 2021*), Volume 8 Issue 1, p.18

[6] Ahmadi, M.R., Ismail, H.N., & Abdullah,M.K.K., The Importance of Metacognitive Reading Strategy Awareness in Reading Comprehension, (*English Language Teaching, 2013*), Volume 6 No. 10, p.236

students when they reading online. So it can be the picture of how they used strategies during online reading using internet which becomes one of the great sources of the current era of information and easy to be accessed by students to fulfill their needs of academic materials. This research also realizes to find the students' awareness about metacognitive online reading strategies because they will be future teachers. If their way of growing up teaches them about hot topics in academia, they will become qualified teachers after graduation and train their future students accordingly.

## B. Research Questions

Based on background of the study, the researcher formulated the problem of the research as follows :

1. What are metacognitive online academic reading strategies that the most preferable to EFL students?

2. How is the implementation of metacognitive strategies in the online academic reading of EFL students?

## C. Objective of the Research

Regarding to the research questions above, the aims of the study are as follows :

1. To explore what kind of metacognitive online academic reading strategies are most preferable to EFL students.
2. To explain the implementation of metacognitive strategies in the academic online reading of EFL student**s**

D. **Significances of the Research**
This study is important for some reasons :

1. Theoretically significance

    This study is expected to give deeper information about metacognitive online academic reading strategies that are most preferable used by Indonesian EFL university students and their experiences applying those strategies. Hopefully, the result also can be used as one of the references for the next researcher who focuses on metacognitive online reading for EFL learners.

2. Practically significance

2.1 To the teachers

    Hopefully, this study can support the teachers to find appropriate materials for students' reading and can be a reference for teachers to teach students about

metacognitive in reading which is useful to let students think by themselves.

It helped the students to comprehend the content of their reading, so they can be skillful readers.

2.2 To the students

This study provides information about metacognitive reading online strategies which is expected to raise students' awareness of using metacognitive reading strategies in online reading as the tool to assist them to comprehend the reading materials better. This study is also expected to support the students to realize the importance of using the appropriate reading strategy for their online reading activities in order to set them as skillful readers who are facing the technology phenomenon of reading online.

2.3 To the next researchers

Hopefully, this study will be a useful reference and will be continued by other researchers whose results are better and more informative to support the development of research and education.

**E. Limitation of the Research**

This study is focused on the most preferable metacognitive online reading strategies practiced by EFL students and their experiences applying the strategies. In this case, the research participants are 100 English Education students of UIN Walisongo Semarang in the academic year of 2021. The reading context in this study is more about academic reading when students connect to the internet while online. It is about the reading done by students while searching for materials on the internet to support their academic study. In addition, the focus study dealt with the reading level of the students based on which strategy they choose.

# CHAPTER II
# REVIEW OF RELATED LITERATURE

This chapter describes the related literature that has contributed to this research including some previous research, theoretical review, and conceptual framework.

## A. Review of Previous Studies

Online metacognitive reading strategy is not a new study. Some researchers were investigating and discussing this topic. Therefore, in the process of writing this research, the researchers used some theoretical background and previous research as follows:

1. Moussa Ahmadian & Parastou Gholami Pasand (2017), in his study, *EFL Learners' Use of Online Metacognitive Reading Strategies and its Relation to their Self-Efficacy in Reading*.[7] This study implied that Iranian EFL learners mostly used problem-solving online metacognitive reading strategies when reading online, and the support strategies were the least strategies used. This study also reported

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[7] Moussa Ahmadian & Parastou Gholami Pasand, EFL Learners' Use of Online Metacognitive Reading Strategies and Its Relation to their Self-Efficacy in Reading, (*The Reading Matrix : An International Online Journal, 2017),* Volume 17.

that female students used more global online reading strategies, while males perceived themselves as more self-efficacious in reading online texts. The participants of this study were 63 participants, which made generalizations hard to maintain. That is the weakness of this study. While the strength of this research is the extra-curricular online reading task for one session used by the researchers to add more certainty to their assumption that the learners involved in online reading for a variety of purposes. The similarity between their study and mine is the same research about the mostly metacognitive online reading strategies practiced by EFL college students. While the difference, in their study, examines females' and males' strategies, and mine explaining about students' experiences applying the strategies.

2. Samed Yasin Öztürk (2018), in his study, *Use of Metacognitive Online Reading Strategies by Student Teachers of English.* [8] This paper detailed a study about metacognitive online reading strategies that

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[8] Samed Yasin Öztürk, Use of Metacognitive Online Reading Strategies by Student Teachers of English*, (European Journal of Foreign Language Teaching*, 2018) ,Volume 3 Issue 3

were conducted with 147 first-year students teachers of English in Turkey. The participants consist of 93 females and 54 males. He used the Online Survey of Reading Strategies (OSORS) by Anderson (2003) to measure the metacognitive online reading strategies among participants. This study revealed that problem-solving strategies were the most widely used strategies among the students teachers, and the least used strategies were support reading strategies. This study presented some demographic information related to the participants' online reading habits both in their L1 and L2. That is the strength of this research. The researcher of this study admitted that the instrument was administered to 158 participants, but there was some data missing so he reduced the data to 147 participants. It is important to keep the data because it's possible some of the data missed would affect the result. The data also only showed the mean score of each item of the strategies but it didn't show a chart or table that illustrates the comparative overall mean scores from each metacognitive reading strategies (problem-solving, global reading, support reading) used by the students. These are the weaknesses of the study. The

similarity between this research and mine is explaining the most metacognitive online reading strategies used by EFL students. While the differences are the participant of this study are fifth and seventh semester of English Education students. This study also explains about how the experience of Indonesian EFL university students apply metacognitive online reading strategies.

3. Kirana & Sahiruddin (2020), in their study, *Online Reading Culture Among Indonesian EFL Students at Tertiary Education Level.* [9] This study is about online learning during pandemic covid-19 that gives impact to the students to read online materials as to set up new online reading culture. This study revealed that the majority of the students use problem-solving strategies during reading online. The researchers discussed differences in online reading strategies (paper vs online). That is the strength of this research. While the weakness of the research is the participants of this study were 63 participants, which made generalizations hard to

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[9] Kirana, Sahiruddin, Online Reading Cultures Among Indonesian EFL Students at Tertiary Education Level, (*Jurnal Studi Budaya Nusantara, 2020),* Vol.4 No.2, p. 105-117

maintain. The similarity between this research and mine is explaining the mostly metacognitive online strategies used by the students, and also the participants are the college students that learning English. While the difference of this study explains more about reading online vs reading paper, and my study focuses on the experience of Indonesian EFL university students apply metacognitive online reading strategies.

## B. Theoretical Review

This theoretical review serves as the explanation about reading comprehension, online reading, and metacognitive online reading.

### 1. Reading Comprehension

Reading is one of the fundamental skills that every educated person needs to acquire to a considerable extent both in their native language and their second or foreign language. [10] Reading plays an essential role in students' life as it allows the access to knowledge and information about any phenomena happening across the globe, either in print format or

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[10] Muhammad Nafy Annury, The Use of Metacognitive Strategies in EFL Reading Comprehension, (*English Language and Literature International Confrence,2018),*Vol 2,p.7

digital online format.[11] Reading is more critical for language learners. (Levine et al.,2000:1) asserted that the ability to read academic English text is the most needed skill that should be mastered by university students especially for English as a second language (ESL) and English as a foreign language (EFL) students.[12]

The readers can be a success in their reading if they can comprehend the information over the text. Comprehension is a complex process of cognitive process. It requires thinking about our own reading process. Reading comprehension requires the coordination of multiple linguistic and cognitive processes including, but not limited to, word reading ability, working memory, inference generation, comprehension monitoring, vocabulary, and prior knowledge (Perfetti, Landi, & Oakhill, 2005).[13] In addition, Reading comprehension occurs when

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[11] Kirana, Sahiruddin, Online Reading Cultures Among Indonesian EFL Students at Tertiary Education Level, (*Jurnal Studi Budaya Nusantara, 2020),* Vol.4 No.2, p. 107

[12] Zailani Jusoh & Liza Abdullah, Online Survey of Reading Strategies (OSORS) : Students' Online Reading in Academic Context, (*Malaysian Journal of Distance Education*,*2015*), Volume 17 (2), p.16

[13] Amy M & Eric L, Reading Comprehension Research : Implication for Practice an Policy, (*Policy Insights from the Behavioral and Brain Sciences,2019*), Volume 6 (1)

readers extract and integrate various information from the text and combine it with known content (Koda,2005). Furthermore, based on Paris and Hamilton (2009) reading comprehension is only a subset of an ill-defined larger set of knowledge that reflects the author's intention, the content of the text/information, the abilities and purpose of the reader, and the context/situation of the interaction.[14]

Snow (2002) points out that there are three elements involved in the reading comprehension process. First, the reader who is doing comprehending. Second, the text that is to be comprehended. Third, the activity in which the comprehension is a part. [15] These elements are interrelationships and factors that construct the reading activity itself. The readers must have complex cognition to understand the text. The text also has a great influence on the reader's understanding. However, text may be easier if the reader has

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[14] Limei Zhang,2018, *Metacognitive and Cognitive Strategy Use in Reading Comprehension*, Singapore: Springer Nature Singapore, p.36

[15] Masruroh, SQ3R Implementation in Teaching Reading Comprehension A Case Study of Eight Grade Students at One State MTs in Sumedang, (*Journal of English and Education, 2015)*, Volume 3 Issue 1, p. 108

appropriate background knowledge of the subject. The third element is activity. It is related to what the readers do in comprehending a text. Reading comprehension is the main purpose of reading activity. It means doing activities for the purpose of reading and success makes readers get a good understanding.

Generally, reading comprehension has three important models they are: bottom-up, top-down, and interactive or integrated model. All of the three models help the students understanding the text. Below is the explanation for each model :

a. Bottom-Up Model

Bottom-up model refers to the reading process that is supported by each word in the text and a students decodes each word to understand the meaning. Students should identify linguistic signals such as as letters, morphemes, syllables, words, phrases, grammatical clues, or discourse markers. The bottom-up model emphasizes the linguistics clues, builds literal comprehension of a text. In other words, bottom-up processing happens when someone tries to understand language by looking at individual meanings or

grammatical characteristics of the most basic units of the text, (e.g. sounds for listening or words for a reading), and moves from these to try to understand the whole text.

b. Top-Down Model

Top-down model refers to the reading process that is supported by students' background knowledge and prior experience. In other words, the reading process is based on what is students have in their mind or brain. Background knowledge and build global comprehension are really important in top-down model. The top-down is also closely tied to the concept of schemas in second language acquisition.

c. Integrative Model

Integrative model refers to the reading process that is supported by an interaction between the text and the reader. This model is collaborative strategies between bottom-up and top-down strategies.[16]

Many factors that affect reading comprehension. These factors are grouped as internal and external

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[16] Ahmadi, M.R., Ismail, H.N., & Abdullah,M.K.K., The Importance of Metacognitive Reading Strategy Awareness in Reading Comprehension, *(English Language Teaching,2013).* Volume 6 No.10, p.238

factors. Everything that related to the readers called internal factor. The example of this factor is cognitive abilities, strategies, and background knowledge. This internal factor covers learners' linguistic knowledge such as grammatical and vocabulary knowledge. Learner's perception include feelings of interest, boredom, anxiety, sickness and discomfort due to personal problem are also the example of internal factors.

The external factors come from out of the readers. Text, context and writer variables are the external factors affect the reading comprehension. The text, includes printed or digital texts. The context consists of situational elements e.g the time and the place of reading as well as the larger socio-economic context. The writer is the author of the text who delivers meaning of the text. Other examples of external factors are teacher influence, family influence and environment. Teacher influence includes teaching methods, teaching materials, the content of reading lessons. Meanwhile, assistance, encouragement, and support are the external factors come from family. Supportive environment such as enough light, mild temparature, and tranquility will help the learners' understanding the reading text. While, the unsupportive environment such as insufficient light, extreme

temparature, and interrupting noises of courrse will distract learners from their reading activities[17].

A reading strategy is characterized by the reader's deliberate control, goal-directedness, and awareness of his/her reading behaviors, whereas reading skills are deployed out of habit and function automatically without the reader's consciousness.[18]

To get information from the texts readers must have reading strategies that will help them to comprehend the text. Singhal (2012) proposed six strategies in the broad context of reading comprehension strategies,. These strategies can be more appropriately called sub-strategies: cognitive, memory, compensation, metacognitive, affective, and social.

a. Cognitive strategies are used to transform or manipulate language. More generally, this includes note-taking, formal exercises on specific aspects of the target language, such as sound and sentence structure, summary, paraphrase, and translation.

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[17] Taladngoen,.et al, 2020, A Study of Factors Affecting EFL Tertiary Students' Reading Comprehension Ability,*(Rangsit Journal of Educational Studies, 2020)*, Volume 7 No.1, p.13

[18] Limei Zhang,2018, *Metacognitive and Cognitive Strategy Use in Reading Comprehension*, Singapore: Springer Nature Singapore, p.13

b. Memory strategies are used to help the learners remember and retrieve information.

c. Compensation strategies include skills such as reasoning, guessing while reading, adjusting or approximating information, creating words, using synonyms, and using reference materials such as dictionaries.

d. Metacognitive strategies help learners to plan, arrange and evaluate their own learning.

e. Affective strategies used to reduce anxiety and encourage learning.

f. Social strategies refer to strategies involving other individuals in the process of language learning. They refer to working with peers, questioning, requesting corrections, and accepting feedback. In other words, these strategies vary depending on the language field or skill to be mastered. Task requirements help to determine strategy choice.[19]

## 2. Online Academic Reading

The growth of technology makes the reading source not only in the form of printed text reading but

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[19] Meena Singhal, Reading Proficiency, Reading Strategies, Metacognitive Awareness and L2 Readers, (*The Reading Matrix, 2001*), Volume 1 No.1

also in form of digital or we called as online reading. Le, Kinzer, Coiro, and Cammak (2004) stated that Online reading is an academic activity that enables readers to surf the internet and solve problems in their minds by implementing certain strategies while reading online. [20] Online reading becomes more popular since the growth of technology. It is because the internet provides much information that can be accessed easily by the online reader.

Online reading is more challenging than reading papers. According to Nicole Brun- Mercer (2019) There are three challenges of online reading. First, Internet offers much information from many sources and easily to be accessed. This condition makes the online readers must be able to quickly evaluate whether a site will be useful, they must scan and skim the text efficiently to verify that the information is, indeed, pertinent. Second, many sources on internet may not be reliable, therefore online readers must be qualified to select and evaluate the credibility of a source. Third, online reading is generally nonlinear.

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[20] Heri Muda, Metacognitive Online Reading Strategies among Pre-Service EFL Teachers in Indonesia, (*Educational Process : International Journal,2018*), Volume 7 Issue 2, p. 152

Online readers not only have just one text in front of them, internet makes a web page offers multiple texts, pictures, videos, and advertisement. Hyperlinks, email, and social media that internet offers also make the online readers losing their focus. This challenge is one of the greatest challenges, an online reader who can not overcome this challenge, potentially increasing fatigue, putting down the speed, impeding comprehension, and ultimately enervating motivation. [21] Therefore. online readers need to be aware of what they need to know, what kind of information they are needed, and how the way they can find it, and how to evaluate what they search for.

3. **Students' Perceptions of Online Reading**

Perception is defined as a process of making inferences. Through inferences, people can construct their own vision of reality which may be distorted by past experiences, education, cultural values, and role requirements. [22] There are four steps of constructing perception such as reception, selection, , organization,

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[21] Nicole Brun, Online Reading Strategies for the Classroom, (*English Teaching Forum, 2019),* p. 3

[22] Rima Andriani Sari, Students' Perception Toward Their Reading Difficulties of Different Genres, (*Lingua Didaktika,2013)*, Volume 7 No.1, p.45

and interpretation. Reception is the process when someone receives the information through their senses. Selection is the process where the receiver select the information that has been received. Organization is the process where the receiver sorts the stimulation received into a meaningful thought. While in the interpretation process, the receiver construct the information that is sensed, selected, and organized.[23]

To optimize the use of digital text in learning, students' perceptions need to be considered. Students' learning outcomes are affected by their perception of the use of e-book or online text. Shelburne (2009) stated that undergraduated students tend to perceive digital texts positively because there are many sources where the readers can find spesific content more easily and more efficiently, and it helps them to get information.[24]

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[23] Ahmad Qusyaeri and others, The Perception of English Students' Reading Strategies at University Level, (*SELL Journal,2021*), Volume 6 No.1, p.6-7

[24] Rima Shishakly & Lilian, Perceptions Toward E-Book Usage in Universities A Case Study : Ajman University, (*International Journal of Engineering & Technology,2019*), Volume 8, p.24

### 4.   Metacognitive Reading Strategies

Metacognitive is derived from the word metacognition.[25]Metacognitive is the ability to control the cognitive domain. Flavell (1981) reveals that meta-cognition refers to both people's awareness and control, not only of their cognitive processes, but also of their desires and motivations as well. [26] Besides, according to Phakiti (2008) metacognitive strategies are conscious processes that regulate cognitive strategies, actions, and other processing including planning, monitoring, and evaluating strategies.[27]

Metacognitive reading strategies help the students to comprehend the text. When skilled readers decides to read, they usually have particular purpose in mind and they know there are various ways to decode and can do something on their decoding

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[25] Marsauli Sitindaon and others, 'Metacognitive Online Reading Strategy Practiced By English Students', <i>Jurnal Pendidikan Dan Pembelajaran</i>, 2.11 (2013), 1–10.2

[26] Ahmadi, M.R., Ismail, H.N., & Abdullah,M.K.K., The Importance of Metacognitive Reading Strategy Awareness in Reading Comprehension, (*English Language Teaching, 2013*), Volume 6 No. 10, p.236

[27] Limei Zhang,2018, *Metacognitive and Cognitive Strategy Use in Reading Comprehension*, Singapore: Springer Nature Singapore, p.12

activities. [28] Three main metacognitive reading strategies as distinguished by Mokhtari and Sheorey (2002) include global reading strategies, problem-solving strategies, and support strategies. Global reading strategies set the stage for reading acts and include readers' plans for reading, the preview of text content, etc. Problem-solving strategies are used when there are problems in comprehending a text, in which the reader rereads the text or tries to guess the meaning of unknown words. Support strategies, such as note-taking, highlighting a text, or the use of reference materials, act as tools and all basic support mechanisms aimed at helping the readers in the process of reading.[29]

There are several steps in using metacognitive strategies in reading comprehension teaching. Zhang and Sheepo (2013) classify metacognitive strategies into three categories: planning, monitoring, and evaluation. These steps are discussed below:

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[28] Muhammad Nafy Annury, The Use of Metacognitive Strategies in EFL Reading Comprehension, (*English Language and Literature International Confrence,2018),*Vol 2,p.9

[29] Vilhelmina Vaičiūnienė &   Daiva Užpalienė, Metacognitive Online Reading Strategies in Foreign Language Learning Context at University, (*Social Technologies ,2013),* Volume 3 No. 2, p.320

### *Planning*

Reading can be divided into three parts: pre-reading, mid-reading, and post-reading. As a metacognitive strategy, planning occurs in the pre-reading stage. In the planning process students use their background knowledge. The example of planning process such as students can preview the text through skimming, previewing a title, picture, illustration, heading or sub heading. Students preview the general information in the text and its structure and set the purpose for reading also the example of planning strategies.

### *Monitoring*

Monitoring process occur during reading.In this process, students monitor the level of their learning materials, which is a step in determining the current learning level or status. While reading activity students self-check their comprehension and monitor the text by asking question. Some examples of monitoring process are comprehension of vocabulary, self-questioning (reflecting on whether they understood what they have read so far), identify the key words, and determining which part of the passage can be emphasized or ignored.

### *Evaluating*

The next suggested metacognitive strategy is evaluation. Evaluating strategies are employed after reading. In fact, the evaluation itself has many purposes, such as collecting feedback, collecting data or information, and conducting evaluations. In addition, evaluating in reading serves several purposes. In addition, evaluation in reading has several purposes. Concisely defined as making judgments, evaluation helps readers determine:

1) The importance of the information obtained from the written text;
2) The accuracy and credibility of the content read;
3)  The appropriateness or usefulness of the idea.
4) The personal pleasure of reading texts.
5) Personal progress as a reader

Evaluation strategies are statements or behaviors that students can use to measure the quality or progress of their work.[30]

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[30] Bustami., Zulfadli., Nova., Improving Reading Comprehension Using Metacognitive Strategies,(*English Education Journal, 2017*), Volume 8 No.4, p.429-430

## C. Conceptual Framework

The conceptual framework is a set of concepts formed by researchers on the basis of literature review, through reviewing the compilation of theories and previous related studies, and the clarity of the relationships between these concepts.

Based on theory and some previous studies, Anderson metacognition theory was choosen for this study, because it is useful in examining metacognitive reading strategies. [31] Reading comprehension can be conceptualized as a complex activity that requires many different cognitive skills and abilities. This is one of the important skills that should be owned by the students, not only as a source of information and pleasant activity but also as a means of consolidating and expanding one's knowledge of the language. In addition, reading comprehension is an active cognitive process that can be influenced by internal factors and external factors. Internal factors include cognitive ability, background knowledge, and affective characters. While external factors refer to text, context, and author variables. Text

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[31] Anderson, Scrolling, Clicking, and Reading English : Online Reading Strategies in A Second/Foreign Language, (*The Reading Matrix, 2003*), Volume 3 No.3

includes text mode and text features, context is composed of situational elements and activities, author refers to the text maker.

One of the internal factors affecting students' reading comprehension is cognitive abilities. Cognitive process is an individual mental process that can be understood as the processing of information. To control the cognition process requires metacognitive consciousness. In addition, other factors that affect reading comprehension are the text itself, situational elements and activities. Nowadays the growth of technology makes reading not only possible through paper, but also available online. Students connect to internet by their smartphone, laptop, tablet, and other devices connected to internet. Their online reading activities can be disrupted by the many other fun features and activities the internet offers.

The consciousness of metacognitive, texts, situational elements, and activities affect reading comprehension. That is why it is important to know student consciousness in using the metacognitive strategy during online reading. If this map of the metacognitive strategy is obtained will help students be aware of what

needs to be improved and done, so that they can have good comprehension in reading.

To help the researcher in explaining the kind of metacognitive strategies used by the students, the researcher uses an interview and Online Survey of Reading Strategies (OSORS) questionnaire by Anderson. This questionnaire is related to metacognitive strategies, which are subdivided into three categories : global reading, problem-solving, and support reading. Through metacognitive strategies, the readers can control their reading activity by planning, monitoring, and evaluating it.

# CHAPTER III
# RESEARCH METHOD

This chapter discusses research design, research setting, source of data, and technique of collecting data, instruments, and data analysis.

## A. Research Design

According to Flick (2014) qualitative research is research that is interested in collecting and analyzing the social production of subjective meaning, or problems, events, or practices non-standardized data, and analytical text and images, not numbers and statistics. This definition emphasizes how people make sense of something in the world.[32]

The researcher used a descriptive-qualitative study to conduct research because the purpose of the study is to understand and describe the phenomenon that occurs to the subject being observed in natural contexts.

This study analyzes the most preferable metacognitive online academic reading strategies and also explains the implementation of this strategy

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[32] Shidur Rahman, The Advantages and Disadvantages of Using Qualitative and Quantitative Approaches and Methods in Language "Testing and Assessment" Research: A Literature Review",(*Journal of Education and Learning, 2017*); Vol. 6, No. 1.

practiced by EFL students. Improving English students' ability in comprehending the text is not that easy, especially understanding the online text. The students should have a proper strategy to master the materials and to be unaffected by the many features offered by the internet. This research reports what has happened or what is happening during the students reading online texts to support their academics. Descriptive research is used to explain something that happens to be analyzed. Therefore, the purpose of this study is to describe the behavior of students reading online texts through data collected from participants' explanations related to their opinions and experiences. The researcher conducted this study using descriptive qualitative design since it focused on obtaining information and description about students' strategies for reading online texts.

## B. Research Setting
1. Place and Subject of the Research

This research was conducted in Faculty of Education and Teacher Training of UIN Walisongo Semarang to explore the most preferable metacognitive online academic reading strategies that practiced by EFL students and their experiences applying the strategies.

The research participants were 100 students of the fifth and seventh semester English Education department in the academic year of 2021. The reason why the researcher took them as the subjects is because, they are non-native English speakers who are learning it as a foreign language especially in purpose to be English teachers, and they are also had taken basic, intermediate, and advanced reading courses in the previous semester.

2. Time of the Research

This research started from Juli until Agustus 2021.

## C. Source of Data

The data of this research was collected through the application of Google Form by distributing OSORS (Online Survey of Reading Strategies) questionnaire to the fifth and seventh-semester students of English Education UIN Walisogo Semarang in the academic year of 2021. Besides questionnaire, the data also was taken through an asynchronous semi-structured interview that related to students' experiences about applying the strategies. The researcher considered that the fifth and seventh-semester students were the appropriate source of data because they have gotten the basic knowledge of their concern related to English Education. They have

taken basic, intermediate, and advanced reading as their subject in the previous semester. The fifth and seventh semester of English Education also have taken some English subjects that obviously needed reading ability to support them in their search for materials resources. Researcher believed in the growth of technology. Many students choose their internet connection to look for the source of the materials.

### D. Data Collection Technique

The researcher used two techniques for collecting the data, as follows:

1. Questionnaire

Questionnaire is a technique of collecting data done through giving a series of questions for the purpose of gathering information from respondents.[33] In this study, the researcher used OSORS (Online Reading of Survey Strategies) questionnaire developed by Anderson. The OSORS questionnaire was adapted by Anderson from SORS (Survey of Reading Strategies) (Sheoray and Mokhtari, 2001). Anderson used OSORS to know the online reading strategies used by ESL, and also to know

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[33]Sugiyono,2017, *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*, Bandung: Alfabeta, P. 142

the difference of online reading strategies between English as a second language readers (ESL) and English as a foreign language. The OSORS consists of 38 items related to metacognitive reading strategies, which are subdivided into three categories: global reading strategies (18 items), problem-solving strategies (11 items), and support reading strategies (9 items).[34] OSORS consists of 5 points Likert scale (from 1=never to 5=always). The mean score 3.5 or higher is the high use of strategy. While the mean 2.5 to 3.4 is the moderate use of strategy, and the mean 2.4 or lower is the low use of strategy. The researcher made the OSORS using Google Form Application and distributed the link to the the fifth and seventh-semester students of English Education department. The instrument is in appendix I.

The obtained data was used for responding the research question number one related to the most preferable metacognitive online academic reading strategies practiced by EFL students.

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[34] Anderson, Scrolling, Clicking, and Reading English : Online Reading Strategies in A Second/Foreign Language, (*The Reading Matrix, 2003*), Volume 3 No.3

2. Interview

Interview is a technique of collecting data that is used by the researcher to get the data related to the implementation of metacognitive strategies in the academic online reading of Indonesian EFL university students. The researcher conducted a semi-structured interview about students' experiences applying the strategies through WhatApp in the asynchronous situation. The respondent was selected based on their good reading levels that could be seen from the score of their reading subjects. At last, the interview guideline of this research can be seen in appendix II.

E. **Data Analysis**

The method of analyzing data is about how to organize and classify data into patterns, categories, and basic unit descriptions. Data analysis in qualitative research is an ongoing activity that occurs throughout the investigation process rather than after the process.

The researcher gained the data through the questionnaire that spread using Google Form Application and the asynchronous semi-structured interview, then the researcher analyzed the gathered data. The gathered data from the questionnaire was presented in the form of

mean score and was described descriptively. The data from the interview was examined and comprehended to ascertain the deep meaning of each response before simplify and analyze it becomes conclusions.

In analyzing the data, the researcher used descriptive analysis with some steps based on Milles and Huberman model.[35] The steps are as follows:

1) Data Collection

The researcher collected the data using research instruments. As mention before questionnaire and interview were used to collect the data. The questionnaire was about metacognitive reading strategies that were grouped into three strategies, they were global reading, problem-solving reading, and support reading. The questionnaire using OSORS (Online Survey of Reading Strategies) that made by Anderson. It consists of statements and a Likert scale 1-5 related to the metacognitive online reading strategies practiced by the students in reading online. To know the most metacognitive online reading strategies used, the researcher transcribed the result of questionnaire by finding out the mean score. The scoring guidelines

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[35] Miles & Huberman, 1994, *Qualitative Data Analysis,* United States of Amerika : Sage Publications, p. 10-12

provided by Anderson were applied. They were three intervals mean score, start low into high. The interval mean score 2.4 or lower indicates low use of strategy, the interval mean score 2.5-3.4 indicates moderate use of strategy and 3.5 or higher indicates high use of strategy.

2) Data Reduction

The researcher applied data reduction, it was the process of shorting, focusing, simplifying, abstracting, and transforming the raw data. In this stage, firstly the researcher simplified the data gained through the questionnaire related to the metacognitive online academic reading practiced by the students. Then, the researcher found the dominantly metacognitive online reading strategies. The data gained through interview related to the implementation of metacognitive strategies in the online academic reading of Indonesian EFL university students were translated and transcribed. To have valuable and understandable data, interview analysis steps were employed. Then the data was examined and comprehended. After that, the researcher ascertained the deep meaning, simplified and analyzed it based on the objectives interview, then drew independent conclusions.

3) Data Display

Data display refers to a batch of information compiled that may give the possibility of withdrawal conclusions. The forms of data display in the qualitative study can be narrative text in the form of field notes, matrices, graphs, networks, and charts.

In this study, the researcher formed the data into short essay, table, graphic, matrix and chart. The data were displayed made the researcher easy to comprehend the categorized data. The data related to the most preferable metacognitive online academic reading strategies practiced by students displayed using tables and charts. The tables showed categories based on types of strategies and mean score. Then, the chart showed the result from the overall mean score of metacognitive online reading strategies. By showing it, the researcher described the result of the data descriptively. The gathered data related to the implementation of metacognitive strategies in the online academic reading was obtained from interview. It was displayed in simple sentences or short essays, as the conclusion that represents each response. The data shown helps to understand what was happening to the research.

4) Conclusion Drawing

The last process of analyzing the data was conclusions. The researcher concluded the data to answer research questions based on data findings. The conclusion is the data finding of the most preferable metacognitive online reading strategies practiced by EFL students and the implementation of metacognitive strategies in the reading online of EFL students. The conclusion integrated and elaborated cohesively and coherently in the form of words, phrases, and sentences through descriptive qualitative.

# CHAPTER IV
# RESEARCH FINDING AND DISCUSSION

This chapter deals with the research finding and the discussion. The research finding, the discussion and the interpretation of the data answer the research questions which had been formulated. In this chapter, the results of the data analysis are presented. The data were collected and then processed in response to the problems and elaborate the findings with the existing theory.

## A. Research Finding

The research findings provide for the research questions which are describing the most preferable metacognitive online reading strategies practiced by EFL students, and also describing the implementation of metacognitive strategies in the reading online of EFL students.

## 1) The Most Preferable Metacognitive Online Academic Reading Strategies Practiced by the EFL Students

The researcher analyzed the answer of questionnaire from 100 students of English Education department fifth and seventh semester who had taken the reading courses. It was done to identify the most

metacognitive strategies used by the students during online reading when they looked for journals, articles, and materials to support their academic. The results of questionnaire was grouped into three, they were : global reading strategies, problem-solving reading strategies, and support reading strategies. Each group of strategies has its items. There were 18 items of global reading strategies, 11 items of problem-solving reading strategies, and 9 items of support reading strategies. The participants were required to fill out the questions by choosing the frequency that they thought and employed the strategy while reading online text on a 5 point Likert scale. The results of the questionnaire were turned into digital format and analyzed based on the "mean" scores of each group and item. Then, to interpret the mean score a scoring guidelines provided by Anderson were used. The mean score 3.5 or higher is the high use of strategy. While the mean 2.5 to 3.4 is the moderate use of strategy, and the mean 2.4 or lower is the low use of strategy. The purpose of analyzing the answer to the questionnaire is to know which strategies are most used by the students during online reading. The

followings are the description of the answers to the questionnaire in the form of table.

## A. The Average for Each Item of Metacognitive Online Academic Reading Strategies Practiced by the EFL Students

In reading online texts, students need some strategies to help them get the message from the text and help them to control themselves facing the challenge while reading online. The description below explains the most metacognitive online reading strategies until the lowest metacognitive online reading strategies used by the students. These strategies are categorized as the most or the lowest based on 'mean' scores from each item of metacognitive online reading strategies.

The following table shows the high mean score from three online metacognitive reading strategies. To make simple the name of each strategy the researcher created three abbreviations. GRS is the abbreviation for Global Reading Strategies, PSR is the abbreviation for Problem Solving Reading Strategies, and SRS is the abbreviation for Support Reading Strategies.

**Table 1.1**
**The Mean Score for Each Item of Metacognitive**
**Online Reading Strategies**

| No. | Strategies | Type of Strategies | Mean |
|-----|-----------|-------------------|------|
| 1 | I try to get back on track when I lose concentration. | **PSR No.2** | 4.31 |
| 2 | I read slowly and carefully to make sure I understand what I am reading online. | **PSR No.1** | 4.27 |
| 3 | When online text becomes difficult, I re-read it to increase my understanding. | **PSR No.8** | 4.24 |
| 5 | I use reference materials (e.g. an online dictionary) to help me understand what I read online. | **SRS No.4** | 4.22 |
| 4 | I think about what I know to help me understand what I read online. | **GRS No.4** | 4.18 |
| 6 | When online text becomes difficult, I pay closer attention to what I am reading. | **PSR No.4** | 4.10 |
| 7 | When I read online, I guess the meaning of unknown words or phrases. | **PSR No.9** | 4.08 |
| 8 | I try to guess what the content of the online text is about when I read. | **GRS No.14** | 4.06 |
| 9 | I check to see if my guesses about the online text are right or wrong. | **GRS No.15** | 4.03 |
| 10 | I use context clues to help me better understand what I am reading online. | **GRS No.10** | 4.00 |

| 11 | I check my understanding when I come across new information. | **GRS No.13** | 4.00 |
|---|---|---|---|
| 12 | When reading online, I think about information in both English and my mother tongue | **SRS No.9** | 3.97 |
| 13 | I try to picture or visualize information to help remember what I read online. | **PSR No.7** | 3.96 |
| 14 | I adjust my reading speed according to what I am reading online | **PSR No.3** | 3.95 |
| 15 | I have a purpose in mind when I read online | **GRS No.1** | 3.94 |
| 16 | I read pages on the Internet for fun. | **GRS No.17** | 3.88 |
| 17 | I take an overall view of the online text to see what it is about before reading it. | **GRS No.5** | 3.81 |
| 18 | I think about whether the content of the online text fits my reading purpose. | **GRS No.6** | 3.80 |
| 19 | I use typographical features like bold face and italics to identify key information. | **GRS No.11** | 3.77 |
| 20 | I read pages on the Internet for academic purposes.. | **PSR No.5** | 3.72 |
| 21 | When reading online, I decide what to read closely and what to ignore | **GRS No.8** | 3.71 |
| 22 | When reading online, I translate from English into my native language. | **SRS No.8** | 3.71 |
| 23 | I can distinguish between fact and opinion in online texts. | **PSR No.10** | 3.70 |
| 24 | I use tables, figures, and pictures in the online text to increase my | **GRS No.9** | 3.69 |

| | | | |
|---|---|---|---|
| | understanding | | |
| 25 | I go back and forth in the online text to find relationships among ideas in it. | **SRS No.6** | 3.67 |
| 26 | I stop from time to time and think about what I am reading online. | **PSR No.6** | 3.60 |
| 27 | I ask myself questions I like to have answered in the online text. | **SRS No.7** | 3.58 |
| 28 | I paraphrase (restate ideas in my own words) to better understand what I read online | **SRS No.5** | 3.54 |
| 39 | I scan the online text to get a basic idea of whether it will serve my purposes before choosing to read it | **GRS No.16** | 3.54 |
| 30 | When reading online, I look for sites that cover both sides of an issue. | **PSR No. 11** | 3.53 |
| 31 | I critically evaluate the online text before choosing to use information I read online | **GRS No.18** | 3.49 |
| 32 | When online text becomes difficult, I read aloud to help me understand what I read. | **SRS No.2** | 3.45 |
| 33 | I take notes while reading online to help me understand what I read. | **SRS No.1** | 3.39 |
| 34 | I critically analyze and evaluate the information presented in the online text. | **GRS No.12** | 3.39 |
| 35 | I participate in live chat with other learners of English. | **GRS No.2** | 3.31 |
| 36 | I review the online text first by noting its characteristics like length and organization. | **GRS No.7** | 3.23 |

| 37 | I print out a hard copy of the online text then underline or circle information to help me remember it. | **SRS No.3** | 2.85 |
|---|---|---|---|
| 38 | I participate in live chat with native speakers of English. | **GRS No.3** | 2.62 |

The table above reflects the students' response to the varying degrees of usage of each strategy. The means of student strategy items ranged from a high of 4.31 to a low of 2.62. The strategy PSR No.2 *"I try to get back on track when I lose concentration"* with the highest mean score 4.31 was the most preferable strategy used by the students. The next highly used strategy was the strategy which has 4.27 as the mean score, it was PSR No.1 *"I read slowly and carefully to make sure I understand what I am reading online"*. Then, PSR No.8 "*When online text becomes difficult, I re-read it to increase my understanding*" with the mean 4.24 was the third most preferable strategy used by the students. Three strategies were had the smallest mean score GRS No.3 *"I participate in live chat with native speakers of English"* with the mean score 2.62, then SRS No.3 *"I print out a hard copy of the online text then underline or circle information to help me remember it"* with the mean score 2.85, and GRS No.7 *"I review the online text first by*

*noting its characteristics like length and organization"* with the mean score 3.23.

## B. The Average of Three Metacognitive Online Academic Reading Strategies Practiced by the EFL Students

The next findings are the calculation of mean score from three categories. It is done to investigate the frequency of students' most or least in using different metacognitive reading strategies. It is also followed by the measurement of the students' overall metacognitive awareness. The calculation of the statistics are presented in the form of following tables.

### a) Global Reading Strategies

Global reading strategies are those intentional, carefully planned techniques by which learners monitor or manage their reading. [36] They usually involve reflecting on what we are reading and why we are reading. Global reading strategies can be used for any type of reading. They often involve establishing a relationship with the text and reflecting on the information at hand. It contains eighteen questions

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[36] Par,L, The Relationship between Reading Strategies and Reading Achievement of the EFL Students, (*International Journal of Instruction,2020*), Volume 13 No.2, p.227

that involve reading preparation, such as pre-reading, skimming,and using background knowledge to understand the text. The table below is the result of the questionnaire in the form of average points showing some of the strategies that students use the most.

**Table 1.2**
**Global Reading Strategies**

| No | Strategies | 1 | 2 | 3 | 4 | 5 | Mean |
|----|-----------|---|---|---|---|---|------|
| 1 | I have a purpose in mind when I read online | 0 | 3 | 27 | 43 | 27 | 3.94 |
| 2 | I participate in live chat with other learners of English. | 6 | 12 | 37 | 35 | 10 | 3.31 |
| 3 | I participate in live chat with native speakers of English. | 15 | 32 | 36 | 10 | 7 | 2.62 |
| 4 | I think about what I know to help me understand what I read online. | 0 | 2 | 17 | 42 | 39 | 4.18 |
| 5 | I take an overall view of the online text to see what it is about before reading it. | 0 | 3 | 31 | 48 | 18 | 3.81 |
| 6 | I think about whether the content of the online text fits my reading purpose. | 0 | 3 | 35 | 41 | 21 | 3.80 |
| 7 | I review the online text first by noting its characteristics like length and organization. | 1 | 23 | 38 | 28 | 10 | 3.23 |
| 8 | When reading online, I decide what to read closely and what to ignore. | 2 | 7 | 35 | 30 | 26 | 3.71 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 9 | I use tables, figures, and pictures in the online text to increase my understanding | 5 | 10 | 23 | 35 | 27 | 3.69 |
| 10 | I use context clues to help me better understand what I am reading online. | 0 | 4 | 21 | 46 | 29 | 4.00 |
| 11 | I use typographical features like bold face and italics to identify key information. | 5 | 7 | 22 | 38 | 28 | 3.77 |
| 12 | I critically analyze and evaluate the information presented in the online text. | 1 | 14 | 36 | 43 | 6 | 3.39 |
| 13 | I check my understanding when I come across new information. | 0 | 3 | 23 | 45 | 29 | 4.00 |
| 14 | I try to guess what the content of the online text is about when I read. | 0 | 4 | 22 | 38 | 36 | 4.06 |
| 15 | I check to see if my guesses about the online text are right or wrong. | 0 | 2 | 20 | 51 | 27 | 4.03 |
| 16 | I scan the online text to get a basic idea of whether it will serve my purposes before choosing to read it | 3 | 11 | 36 | 29 | 21 | 3.54 |
| 17 | I read pages on the Internet for fun. | 1 | 11 | 21 | 33 | 34 | 3.88 |
| 18 | I critically evaluate the online text before choosing to use information I read online | 3 | 9 | 38 | 36 | 14 | 3.49 |
| **Overall Mean Score** | | | | | | | 3.69 |

The table above exhibits descriptive statistics for the participants' mean scores in global reading strategies. From the table above, the item of global reading strategy that was used most by the students in preparing reading the online text was item number 4 *"I think about what I know to help me understand what I read online"* with the mean score 4.18. Additionally, the students also guess the meaning of the text when they find the difficulties. This was proven by item number 14 *"I try to guess what the content of the online text is about when I read"* with the mean score 4.06. After guessing the students also check whether their guessing was right or wrong, it was item number 15 *"I check to see if my guesses about the online text are right or wrong"* with the mean score 4.03.

After the most global reading strategies widely used by the students, here is the explanation about the strategy which had the smallest mean score. Item number was 3 *"I participate in live chat with native speakers of English"* with the mean score 2.62. Even though the mean score was small, the strategy was still categorized as a moderate strategy used by the students because the mean score was between 2.5-3.4.

## b) Problem Solving Reading Strategies

Problem-solving strategies are the strategies that usually students use when they face the problem in comprehending the text. Losing concentration and increased difficulty are the example of the problems usually faced by the students. The table below shows which strategies are used the most by the students in facing and solving the problem when they reading online.

**Table 1.3**
**Problem Solving Reading Strategies**

| No | Strategies | 1 | 2 | 3 | 4 | 5 | Mean |
|----|-----------|---|---|---|---|---|------|
| 1 | I read slowly and carefully to make sure I understand what I am reading online. | 0 | 6 | 12 | 31 | 51 | 4.27 |
| 2 | I try to get back on track when I lose concentration. | 0 | 1 | 15 | 36 | 48 | 4.31 |
| 3 | I adjust my reading speed according to what I am reading online. | 0 | 4 | 28 | 37 | 31 | 3.95 |
| 4 | When online text becomes difficult, I pay closer attention to what I am reading. | 1 | 3 | 18 | 41 | 37 | 4.10 |
| 5 | I read pages on the Internet for academic purposes. | 1 | 8 | 33 | 34 | 24 | 3.72 |
| 6 | I stop from time to time and think about what I am reading online. | 0 | 9 | 36 | 41 | 14 | 3.60 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 7 | I try to picture or visualize information to help remember what I read online. | 2 | 7 | 18 | 39 | 34 | 3.96 |
| 8 | When online text becomes difficult, I re-read it to increase my understanding. | 0 | 4 | 18 | 28 | 50 | 4.24 |
| 9 | When I read online, I guess the meaning of unknown words or phrases. | 1 | 4 | 17 | 42 | 36 | 4.08 |
| 10 | I can distinguish between fact and opinion in online texts. | 0 | 4 | 36 | 47 | 13 | 3.7 |
| 11 | When reading online, I look for sites that cover both sides of an issue. | 1 | 14 | 31 | 39 | 15 | 3.53 |
| **Overall Mean Score** | | | | | | | 3.95 |

From the table above, the analysis of students' responses to the questionnaire especially in using problem-solving reading strategy indicates that all of the items have 3.50 or higher mean score. The means of students' problem solving strategy items ranged from a high of 4.31 to a low of 3.53. The first item which had the highest mean score in problem-solving reading strategies was item number 2 *"I try to get back on track when I lose concentration"* with the mean score 4.31. To make the students can understand the text they also use item number 1 *"I read slowly and carefully to make sure I understand what I am reading online"* with the mean

score 4.27 as the second most preferable problem-solving strategy that they used. The third problem-solving strategy that they usually use was item number 4 *"When online text becomes difficult, I pay closer attention to what I am reading"* with the main score 4.10. Even though item number 11 *"When reading online, I look for sites that cover both sides of an issue"* with the mean score 3.53 was the item of problem-solving strategy that had a smaller mean score than others, it's still categorized as high strategy used. This is because based on scoring guidelines made by Anderson, the mean score 3.5 or higher is categorized as the high strategy that is usually used by the students.

c) **Support Reading Strategies**

Support reading strategies are the strategies that is usually used by the students to support them while reading to increase their comprehension and retention. Support reading strategies contain nine items that can help the students make the connection and support a practical application of the knowledge that students are encountering. The next table shows the most support strategies used by the students in helping them in understanding the online text.

**Table 1.4**
**Support Reading Strategies**

| No. | Strategies | 1 | 2 | 3 | 4 | 5 | Mean |
|---|---|---|---|---|---|---|---|
| 1 | I take notes while reading online to help me understand what I read. | 5 | 13 | 36 | 30 | 16 | 3.39 |
| 2 | When online text becomes difficult, I read aloud to help me understand what I read. | 9 | 15 | 21 | 32 | 23 | 3.45 |
| 3 | I print out a hard copy of the online text then underline or circle information to help me remember it. | 14 | 29 | 26 | 20 | 11 | 2.85 |
| 4 | I use reference materials (e.g. an online dictionary) to help me understand what I read online. | 0 | 5 | 16 | 31 | 48 | 4.22 |
| 5 | I paraphrase (restate ideas in my own words) to better understand what I read online | 3 | 13 | 28 | 39 | 17 | 3.54 |
| 6 | I go back and forth in the online text to find relationships among ideas in it. | 1 | 7 | 34 | 40 | 18 | 3.67 |
| 7 | I ask myself questions I like to have answered in the online text. | 5 | 3 | 39 | 35 | 18 | 3.58 |
| 8 | When reading online, I translate from English into my native language. | 4 | 5 | 31 | 36 | 24 | 3.71 |
| 9 | When reading online, I think about information in both English and my mother tongue | 1 | 3 | 23 | 44 | 29 | 3.97 |
| **Overall Mean Score** | | | | | | | 3.60 |

The table above shows that students mostly use reference materials such as a dictionary to help them understand the text. This could be seen from item number 4 *"I use reference materials (e.g. an online dictionary) to help me understand what I read online"* with the mean score 4.22. Then, the students also think both in English and their mother tongue to know the information or the message in the text. This item was number 9 *"When reading online, I think about information in both English and my mother tongue"* with the mean score 3.97. The third support reading strategy they often used was item number 8 *"When reading online, I translate from English into my native language"* with the mean score 3.71. Besides the most support reading strategies used there was also strategy number 3 with the mean score 2.85 *"I print out a hard copy of the online text then underline or circle information to help me remember it"* that categorized as the strategy that had the smallest mean score. Even though it had the smallest mean score, the strategy was used moderately by the students, because the mean score it was between 2.5-3.4.

## C. Comparison of Three Metacognitive Online Academic Reading Strategies

After knowing the average of each item of strategies, the following chart shows the comparison of total mean score from three metacognitive reading strategies. They are global reading strategies, problem-solving reading strategies, and support reading strategies.

**Chart 1.1**
The Comparison of Three Metacognitive Online Reading Strategies



The chart above shows the illustration of students' metacognitive online reading strategies awareness in comprehending the text. The chart shows us that the students' level of problem-solving reading strategies is the highest strategies used by the students, with the total mean score 3.95. Then the next type of strategy that usualy used by the students was global

reading strategies with the total mean score 3.69. The last type used by the students was the support reading strategies with the overall mean score 3.6. From the explanation and the chart above it can be seen that all of three metacognitive reading strategies had a high mean score (3.5 or higher), it indicated that all of strategies are high use strategies.

2) **The Implementation of Metacognitive Online Academic Reading**

The researcher gathered, analyzed, and simplified the data from interview to answer the second research question related to the implementation of metacognitive strategies in the reading online of EFL students. The interview was done by using WhatsApp application. On Sunday 15th and Monday 16th August 2021, The researcher texted 10 respondents who got high mean score of reading subject during study to ask some questions. There were three questions related to students' opinions about online reading, students' difficulties in online reading, and students' strategies to comprehend the online text. Respondents' identities were initialized as A1-A10 to keep the privacy, their answers were also translated into English language, analyzed, and

simplified to ascertains the deep meaning and draws independent conclusions.

The explanations and descriptions below are about the implementation of students' metacognitive online academic reading.

a) **EFL Students' Perception of Online Academic Reading**

Internet has an important role in every aspect of life, one of the aspects is in education environment. Many people look for pictures, videos, texts, and information on internet that are related to their studies. Internet is really helpful for the students look for their materials. This statement had been agreed upon by all of the participants when they were interviewed. The reason why they like internet, because from it students can read much infromation from many sources. A1 said :

> Talking about the benefits I think it is useful for me. We can search any materials from any sources for our academic purpose such as online journals, online lectures, articles, etc. With so called search engine like Google and Microsoft Edge we are able to find any materials to support our academic tasks everytime and anywhere.

(Interview session with ATW on WhatsApp, 15th August 2021)

Similarly, A3 explained : "I can find a lot of materials that are useful for me to study besides materials I've gotten in class" (Interview session with A3 on WhatsApp, 15th August 2021).

The next reason they look for information in the internet it is because internet is easy to be accessed. So, it is efficient and effective for them looking and reading information. A2 said : "To read online, there are many benefits that can be obtained besides knowledge, namely saving time. If we usually have to go to the library, but by reading online we are more flexible and efficient" (Interview session with A2 on WhatsApp, 15th August 2021).

Besides the benefits, online reading also has disadvantages. One of the disadvantages of online reading is much infromation comes from unreliable sources. In the interview session, A4 occasions mentioned that she selected the source of the materials carefully, because there were many sources whose information could not be verified. Another disadvantage is reading online

makes the eyes of the reader more tired than reading paper. It is because reading online needs digital devices that produce blue light which affects eye health. A5 mentioned that she was a little uncomfortable when she did long hours of reading online using digital devices. However, the disadvantages of reading online does  not make the students avoid online reading activities.

## b) EFL Students' Difficulties in Online Academic Reading

Just as reading paper, reading online is not easy. Students have difficulties when reading online. The most difficulties faced by the students who had been interviewed was about lost focus and concentration. The loss of focus and concentration was due to digital social media notifications from the digital device they use such as WhatsApp application. The next difficulty faced by the students was meeting unfamiliar words. A6 stated that she found it difficult to meet words that were barely used. Similiarly, A10 explained : "It's hard to understand. While there may be some difficult meanings to understand. It also contains some language that difficult to understand because it may have academic terms" (Interview session with A10 on

WhatsApp, 15tyh August 2021). A1 in this occasions mentioned that he often got frustrated when he was looking materials for helped his study. He was confused to choose many websites that he thought fit his learning topic.

c) **EFL Students' Strategies for Online Academic Reading**

Students have their learning strategies to solve problems they faced during the learning process. Similarly when they are reading online text, they have their way of learning strategies. Ten of the students had been interviewed to share their strategies when reading online. Re-reading was the strategy they used when they did not understand the sentence or the topic of reading text. A7 mentioned that she read the online text over and over again if she did not understand the online text. Similarly, A6 also found difficulties and had to re-read from the beginning to get the information. The next strategy they used was took a time and try to get back on the reading text. A2 shared her experience when she took a rest from reading, she drank beverages as her way to get back on track. Another strategy was guessing the meaning of the words. Some of them also used online dictionaries to

make sure the meaning of the words they read. Take a note for the ideas also includes strategies used by the students to comprehend the text. A8 stated : "The strategy I use is scanning, skimming, and taking note the main ideas, then discuss with friends" (Interview session with A8 on WhatsApp, 16th August 2021). This strategy was also used by A3 when she found unfamiliar words. She wrote down unfamiliar words, then looked up the meaning in the dictionary, and learned it to remember. The interviewed students also mentioned other strategies they used, such as compared a text with another text which had the same topic, chose keywords that usually appeared as a highlight, bold or italic words before reading the whole text, read carefully step by step, read aloud the text, and interpret the information into the Indonesian language. All of the students realized their weaknesses in reading online, and they also knew how to overcome their problems in reading. They also agreed the strategies they used were really help them to comprehend the text well. They were not only using one strategy but also many strategies. They combined the strategies and used them to solve the problems they faced in reading online.

**B. Discussion**

The result of this study is to contribute to an understanding of how metacognitive online academic reading strategies practiced by EFL students. This study was conducted with fifth and seventh semester of English students to analyze their use of metacognitive online reading strategies when they read online. Even though this is not new research, the number of studies with the same issue from different perspectives, different contexts, different participant is very small. Practice and use strategy are important to help the students in their learning. When they are aware and employ the strategy effectively and appropriately they will be students which have meaningful learning and become self-directed, self-regulated, autonomous, and independent students.

The first finding of this study is to find out which metacognitive online reading strategies were practiced most by the students when they read online. The second finding describes about students' implementation of metacognitive online reading strategies. However, this study also proves that every reading strategy used by the students is useful and beneficial.

The scoring guidelines provided by Anderson helped to understand the average of the overall

metacognitive online reading strategies used by the students. The mean score result of the questionnaire was sought, then matched with scoring guidelines.When the mean score is 3.5 or higher it indicates the high frequency used by the students, while the mean score is 2.5 to 3.4 indicates moderate use of the strategies, and the last when the mean score is 2.4 or lower it indicates the low use of strategies. The following table shows the types, mean, and use of strategies.

**Table 1.5**
**Level of Metacognitive Reading Strategies**

| Types of strategy | Overall mean | Average used |
|---|---|---|
| Global Reading Strategies | 3.69 | High |
| Problem Solving Reading strategies | 3.95 | High |
| Support Reading Strategies | 3.6 | High |
| Overall Reading Strategies | 3.75 | High |

From the table above, it is found that problem solving strategies with overall mean score 3.95 were more frequently practiced by EFL students in their online reading. This could be seen from the high mean score obtained by all of the items of problem-solving

strategies. There were 11 items of problem-solving strategies and every item has mean score higher than 3.5. It indicates that the level of problem-solving strategies use is high. Trying to get back on track when students lose concentration, read carefully and slowly to make sure understanding the text, and re-read the text were the three most widely used problem-solving strategies. This is also supported by the students' admission of interview. They mentioned that they used those strategies to comprehend the text well. The finding of problem-solving strategies that were the most widely used by the students is consistent with the findings of several previous studies (Ahmadian & Pasand, 2017; Öztürk, 2018; Kirana & Sahiruddin,2020).

Another interesting finding to discuss here is the emergence of global reading strategies with the overall mean score 3.69 as a strategy category that was used more frequently after problem-solving strategies. From 18 items of global reading strategies, there were 13 items categorized as high use of strategies because the mean score higher than 3.5. The rest of the  strategy items were categorized as moderate use strategies.  The highest item of global reading strategies was thinking

about what students know to help them understand what they read online. It means students using their background knowledge to help them reading online. This is appropriate with previous studies about reading, that background knowledge plays an important role for the students understanding the text. The presence of rich schemata gives students a greater opportunity to build a strong understanding of the text they read.

The last strategy practiced by EFL students was support reading strategies. Although it was included the lowest overall mean score, the support reading strategies were still categorized as high use. Support reading contains 9 items. 6 items were categorized as highly use, and 3 items were categorized as moderately use. Using reference materials such as dictionaries was the highest use of support reading strategies. Students admitted that they were using dictionaries to help them understand the text. The dominance of using this strategy by the students is most likely due to the high use of basic support mechanisms to assit their reading comprehension. Moreover, the internet and digital devices make it easier for them to use online dictionaries or translator applications on their digital devices.

The overall reading strategies' mean score shows highly use of 38 items metacognitive online reading strategies. In general the mean score of each item ranged from 2.62 4.31 which was categorized as moderate and high-level usage. The mean score 3.75 also indicates that overall usage of metacognitive online reading is high. This is supported by the finding of interview that students are aware of their difficulties in reading online. They know which strategies that help to solve their problems. This study revealed that metacognitive strategies were highly being practiced by EFL students, really useful and helpful for them in reading online.

# CHAPTER V
# CONCLUSION AND SUGGESTION

This chapter presents the conclusion of the research and the researcher's suggestions for the teachers, learners, and other researchers who are going to conduct similar research.

## A. Conclusion

The conclusion is made based on findings and discussion in the previous chapter provided. There are several points from the research related to metacognitive online academic reading strategies practiced by Indonesian EFL University Students. The following draws are the conclusion of the research.

The result of this research shows that the most preferable metacognitive online academic reading strategies practiced by EFL students is Problem-solving strategies with the overall mean score 3.95. Then, it is followed by Global reading strategies as the second most widely used with overall mean score 3.69, and the last strategies is Support reading strategies with the mean score 3.6.

This research also shows that the implementation of metacognitive strategies improves the EFL students'

reading skills. Especially, in their online academic reading. EFL students aware metacognitive strategies can help them. Students feel every strategy is useful. They are aware of the difficulties such as facing unfamiliar words or sentences, losing concentration, and choosing reliable sources for their topic materials. They know which strategies should be used to tackle the problems of reading online. They not only use one strategy, but also use many strategies. They combine it based on their needs and their problems.

## B. Suggestion

The researcher would like to give some suggestions related to this research. The researcher hopes that the suggestions provided are useful for:

1) For English teachers and lecturers

From the result of this study, it can be indicated that EFL university students or English education students realize their weaknesses in reading online. Therefore they choose proper strategies to help them understand the text. It also means that they are ready for preparing their learning in tertiary education. However English teachers or lecturers should encourage them more to further improve their

learning quality. In this case, especially is the reading skills, so they will be students who master English well. Teachers or lecturers should raise awareness by simply informing students about effective reading strategies. Teachers or lecturers should begin to focus on creating comprehensive teaching. For example, provide various strategies that can be implemented in learning process. Language instructors in this context are teachers or lecturers should also include a training part of metacognitive online reading strategies in students' reading tasks. Teachers or lecturers also should provide nice guidance and a good learning environment which helps students be passionate about using metacognitive online reading strategies in learning a foreign language.

2) For the students

The result of this research shows that students are aware of metacognitive online reading strategies. However, students should not let their guard down and have to practice more often to understand literature far more. This will help them to understand the reasons, the time, and how to use appropriate strategies to solve their reading problems. If they keep practicing the steps and strategies of metacognitive in

their reading online texts or reading papers they will not only be good readers but also be self-directed, self-regulated, autonomous, and independent students.

3) For the next researchers

Thes result of this study shows the use of metacognitive online reading strategies in English education department students regardless of gender. The next researchers are suggested to replicate the study with students' gender. In order to gain more reliable results, the study could be conducted with participants from different universities. Last but not least, the next study is also suggested to investigate the differentiation or comparison between students' reading strategies in print and digital contexts.

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# APPENDICES

## APENDIX 1 . ONLINE SURVEY READING STRATEGIES (OSORS) QUESTIONNAIRE

**APPENDIX I**
**ONLINE SURVEY OF READING STRATEGIES**

Adapted from Anderson (2003)

The purpose of this survey is to collect information about the various strategies you use when you read **online in ENGLISH** (e.g., surfing the Internet, doing online research, etc.). Each statement is followed by five numbers, 1, 2, 3, 4, and 5, and each number means the following:

'1' means that 'I **never or almost never** do this' when I read online.
'2' means that 'I do this **only occasionally**' when I read online.
'3' means that 'I **sometimes** do this' when I read online. (About **50%** of the time.)
'4' means that 'I **usually** do this' when I read online.
'5' means that 'I **always or almost always** do this' when I read online.

After reading each statement *click the number* (1, 2, 3, 4, or 5) which applies to you**.** Note that there are *no right or wrong responses* to any of the items on this survey.

**Tabel A.1**
Global Reading Strategies

| No. | Statements | Likert Scale | | | | |
|---|---|---|---|---|---|---|
| 1 | I have a purpose in mind when I read online | 1 | 2 | 3 | 4 | 5 |
| 2 | I participate in live chat with other learners of English. | 1 | 2 | 3 | 4 | 5 |
| 3 | I participate in live chat with native speakers of English. | 1 | 2 | 3 | 4 | 5 |

| 4 | I think about what I know to help me understand what I read online. | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| 5 | I take an overall view of the online text to see what it is about before reading it. | 1 | 2 | 3 | 4 | 5 |
| 6 | I think about whether the content of the online text fits my reading purpose. | 1 | 2 | 3 | 4 | 5 |
| 7 | I review the online text first by noting its characteristics like length and organization. | 1 | 2 | 3 | 4 | 5 |
| 8 | When reading online, I decide what to read closely and what to ignore. | 1 | 2 | 3 | 4 | 5 |
| 9 | I use tables, figures, and pictures in the online text to increase my understanding | 1 | 2 | 3 | 4 | 5 |
| 10 | I use context clues to help me better understand what I am reading online. | 1 | 2 | 3 | 4 | 5 |
| 11 | I use typographical features like bold face and italics to identify key information. | 1 | 2 | 3 | 4 | 5 |
| 12 | I critically analyze and evaluate the information presented in the online text. | 1 | 2 | 3 | 4 | 5 |
| 13 | I check my understanding when I come across new information. | 1 | 2 | 3 | 4 | 5 |
| 14 | I try to guess what the content of the online text is about when I read. | 1 | 2 | 3 | 4 | 5 |
| 15 | I check to see if my guesses about the online text are right or wrong. | 1 | 2 | 3 | 4 | 5 |
| 16 | I scan the online text to get a basic idea of whether it will serve my purposes before choosing to read it | 1 | 2 | 3 | 4 | 5 |
| 17 | I read pages on the Internet for fun. | 1 | 2 | 3 | 4 | 5 |
| 18 | I critically evaluate the online text before choosing to use information I read online | 1 | 2 | 3 | 4 | 5 |

**Table A.2** Problem Solving Reading Strategies

| No. | Statements | Likert Scale | | | | |
|---|---|---|---|---|---|---|
| 1 | I read slowly and carefully to make sure | 1 | 2 | 3 | 4 | 5 |

| | I understand what I am reading online. | | | | | |
|---|---|---|---|---|---|---|
| 2 | I try to get back on track when I lose concentration. | 1 | 2 | 3 | 4 | 5 |
| 3 | I adjust my reading speed according to what I am reading online. | 1 | 2 | 3 | 4 | 5 |
| 4 | When online text becomes difficult, I pay closer attention to what I am reading. | 1 | 2 | 3 | 4 | 5 |
| 5 | I read pages on the Internet for academic purposes. | 1 | 2 | 3 | 4 | 5 |
| 6 | I stop from time to time and think about what I am reading online. | 1 | 2 | 3 | 4 | 5 |
| 7 | I try to picture or visualize information to help remember what I read online. | 1 | 2 | 3 | 4 | 5 |
| 8 | When online text becomes difficult, I re-read it to increase my understanding. | 1 | 2 | 3 | 4 | 5 |
| 9 | When I read online, I guess the meaning of unknown words or phrases. | 1 | 2 | 3 | 4 | 5 |
| 10 | I can distinguish between fact and opinion in online texts. | 1 | 2 | 3 | 4 | 5 |
| 11 | When reading online, I look for sites that cover both sides of an issue. | 1 | 2 | 3 | 4 | 5 |

**Table A.3** Support Reading Strategies

| No. | Statements | Likert Scale | | | | |
|---|---|---|---|---|---|---|
| 1 | I take notes while reading online to help me understand what I read. | 1 | 2 | 3 | 4 | 5 |
| 2 | When online text becomes difficult, I read aloud to help me understand what I read. | 1 | 2 | 3 | 4 | 5 |
| 3 | I print out a hard copy of the online text then underline or circle information to help me remember it. | 1 | 2 | 3 | 4 | 5 |
| 4 | I use reference materials (e.g. an online dictionary) to help me understand what I read online. | 1 | 2 | 3 | 4 | 5 |
| 5 | I paraphrase (restate ideas in my own | 1 | 2 | 3 | 4 | 5 |

| | words) to better understand what I read online | | | | | |
|---|---|---|---|---|---|---|
| 6 | I go back and forth in the online text to find relationships among ideas in it. | 1 | 2 | 3 | 4 | 5 |
| 7 | I ask myself questions I like to have answered in the online text. | 1 | 2 | 3 | 4 | 5 |
| 8 | When reading online, I translate from English into my native language. | 1 | 2 | 3 | 4 | 5 |
| 9 | When reading online, I think about information in both English and my mother tongue | 1 | 2 | 3 | 4 | 5 |

**APPENDIX 2. INTERVIEW GUIDELINES**

1. What do you think about online reading for academic purpose?

2. What types of difficulties do you encounter when reading academic texts online? Please explain!

3. What kind of strategies did you use during online reading?

# APPENDIX 3.  RESULTS OF QUESTIONNAIRES

| No. | Initial | Global Reading Strategies | | | | | | | | | | | | | | | | | | Problem Solving Reading Strategies | | | | | | | | | | | Support Reading Strategies | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| 1 | RPW | 5 | 4 | 3 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 3 | 5 | 4 | 5 | 4 | 3 | 4 | 5 | 5 | 5 | 4 | 3 | 4 | 2 | 4 | 3 | 4 | 4 | 3 | 5 |
| 2 | RPN | 4 | 3 | 2 | 5 | 5 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 5 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 4 | 4 |
| 3 | TH | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 2 | 3 | 4 | 4 | 3 | 2 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 2 | 4 | 3 | 4 | 2 | 3 | 4 | 3 | 3 | 4 | 4 |
| 4 | NNHAQ | 3 | 2 | 2 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 |
| 5 | HS | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 2 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 3 | 2 | 2 | 3 | 3 |
| 6 | SAR | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 5 | 4 | 4 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 5 | 2 | 4 | 4 | 4 | 4 | 4 |
| 7 | RBS | 4 | 4 | 3 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 5 | 4 | 2 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 5 | 4 | 4 |
| 8 | EM | 4 | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 5 | 5 | 3 | 4 | 3 | 3 | 4 | 5 | 2 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 2 | 3 | 3 | 4 | 4 |
| 9 | K | 3 | 2 | 2 | 5 | 4 | 4 | 3 | 3 | 3 | 4 | 2 | 4 | 5 | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 5 | 5 | 4 | 4 | 3 | 5 | 2 | 5 | 4 | 4 | 4 | 5 | 5 |
| 10 | MA | 3 | 2 | 1 | 3 | 2 | 4 | 2 | 2 | 5 | 4 | 5 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 3 | 2 | 3 | 4 | 4 | 3 | 3 | 1 | 3 | 4 | 1 | 4 | 1 | 3 | 1 | 3 | 1 | 3 | 1 |
| 11 | INIS | 3 | 4 | 5 | 5 | 3 | 4 | 2 | 3 | 5 | 4 | 5 | 5 | 5 | 3 | 3 | 2 | 4 | 3 | 5 | 5 | 5 | 5 | 5 | 4 | 3 | 5 | 5 | 4 | 4 | 4 | 3 | 5 | 3 | 5 | 3 | 4 | 4 | 4 |
| 12 | APNA | 4 | 3 | 2 | 5 | 4 | 3 | 2 | 3 | 4 | 3 | 4 | 3 | 4 | 5 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 5 | 4 | 5 | 3 | 4 | 4 | 4 |
| 13 | AF | 4 | 4 | 2 | 5 | 4 | 4 | 2 | 4 | 5 | 4 | 2 | 2 | 4 | 4 | 4 | 2 | 2 | 2 | 2 | 4 | 5 | 3 | 3 | 4 | 4 | 5 | 4 | 2 | 1 | 2 | 2 | 5 | 2 | 4 | 1 | 5 | 5 | 5 |
| 14 | USC | 4 | 4 | 4 | 5 | 3 | 5 | 4 | 5 | 4 | 5 | 5 | 4 | 4 | 4 | 4 | 5 | 4 | 3 | 3 | 5 | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 3 | 3 | 5 | 4 | 5 | 4 | 4 | 4 | 5 | 5 | 5 |
| 15 | AFI | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 4 | 3 | 3 | 4 | 3 | 3 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 | 5 | 3 | 4 | 3 |
| 16 | MFH | 5 | 5 | 4 | 5 | 5 | 5 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 2 | 1 | 1 | 4 | 5 | 5 | 5 | 2 | 5 | 5 |
| 17 | ZHF | 4 | 4 | 2 | 3 | 3 | 3 | 4 | 4 | 5 | 4 | 5 | 3 | 4 | 4 | 2 | 5 | 4 | 5 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 5 | 4 | 4 | 5 | 5 | 4 | 5 | 5 | 5 | 4 |
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| No. | Initial | Global Reading Strategies | | | | | | | | | | | | | | | | | | Problem Solving Reading Strategies | | | | | | | | | | | Support Reading Strategies | | | | | | | | |
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**APPENDIX 4. INTERVIEW TRANSCRIBE**

The interviews were conducted via WhatsApp chat with representatives of 10 students. In presenting the data, the researcher uses the following codes:

- Q stands for interview questions
- A stands for interview answers

| Questions | Answers |
|---|---|
| 1. What do you think about online reading for academic purposes? | A1 : Talking about the benefits, I think it is useful for me. We can search any materials from any sources for our academic purpose such as online journals, online lectures, articles, etc. This so-called search engines likeGoogle and Microsoft Edge we are able to find any materials to support our academic tasks every time and anywhere. |
|  | A2 : I think it's very helpful, and get more knowledge from reading on the internet. Especially with the current situation, where we minimize activities related to many people. To read online, there are many benefits that can be obtained besides knowledge, namely saving time. If we usually have to go to the library, by reading online we are more flexible and efficient. |
|  | A3 : Actually that's the question that I am interested in. As an English student I need to always increase my skills in English. One of them is reading skill, and I find an easy way to read anything in English through online. Because I don't have enough English book to read, so reading online helps me a lot. I |

can find many articles online, journals, news or short stories to read. That's important to keep me nurturing the habit of my reading and increase my my words. Also, I can find a lot of materials that are useful for me to study beside materials I've gotten in class.

A4 : I think it's ok, because academic sources are not only from text books but also online text. Internet makes us easy to find many information for learning      but sometimes reading online makes my eyes tired. I should look for reliable sources and free websites to help my study.

A5 : In my opinion, reading online is like reading culture in general and has become an open secret about many benefits of reading, only that it is done online, not through print books. It is very practical for me. However, I don't think you can really say you like reading if you only like reading online without reading offline.

A6 : Of course that's a good thing. We can look for more and more varied reading references. Even though we don't know the quality of the text we read.

A7 : Yes, that's fine, because nowadays there are a lot of online books, online journals, etc. So, online reading for academic purposes is a fairly effective way.

A8 : I think it is ok, because we don't need to go looking for the materials for our learning. It's the alternative way because we can find many online sources for learning. Reading online is

| | | |
|---|---|---|
| | | also more comfortable for me. But, sometimes there are any unaccessed websites and any unreliable sources. Reading online also detrimental to eyes health.<br><br>A9 : In my opinion reading online for academic purposes is good. As we know it is increases our knowledge of everything. I really support reading online for academic purposes. But we should choose appropriate and reliable sources or websites.<br><br>A10 : I think reading online is an important aspect of this era. Because internet has big impact in the education field, includes reading. I download many references book to help me in learning. Reading online also gives more knowledge. For example, when we are in class, teacher only gives one book for us, but by using internet, especially for reading online it gives us more knowledge. |
| 2. | What types of difficulties do you encounter when reading academic texts online? Please explain! | A1 : Every time I read online for my tasks to search such materials. I often get frustrated in choosing many websites which suit my topic before get toread. And when I got to the site I have to look up the ideas of reading , but since we are in English major students, we have to understand those English texts so that we can decide to choose it or not. I often read for so many times with support from a translator engine. I feel every time besides my translation is not good. I found myself difficult to absorb the ideas of my reading, even read an Indonesian book. I tend to read many times to get the meaning. So, I |

| | like to read in such the quiet environment due to these difficulties. |
|---|---|
| | A2 : I usually prefer to interpret text several times, and online academic texts are usually boring for someone like me who can't see much writing, and also if the text is in English I still need to use a dictionary to help me interpret some words |
| | A3: There may actually be more advantages than difficulties. That is very practical maybe the problem is that I have hard time focusing when there is a notification on the phone while reading online. Because lack of vocabularies also make me difficult to understand the text |
| | A4 : Sometimes, I find it difficult to find words meaning. I usually look for other sources or websites to make me more understanding. |
| | A5 : If I find it difficult to understand the text I will re-read the text |
| | A6 : Sometimes I lose concentration and meet difficult unfamiliar vocabulary |
| | A7 : The most difficult point is to know the messages brought through words. Put simply I don't understand several words and forget the point. Sometimes I also lose my concentration. |
| | A8 : Sometimes I lost concentration and find difficult words. |
| | A9 : I often find new words, terms, or sentences that the language is so complex and it is difficult to grasp the meaning |
| | A10 : It's hard to understand. While there may be some difficult meanings to understand. It also contains some |

| | | languages that difficult to understand because it may have academic terms. Sometimes I also lost my focus, because there are many distractions |
|---|---|---|
| 3. | What kind of strategies did you use during online reading? | A1 : Well, for me it is really easy and help me understand English texts when I use translator software. Then, I take a note of unfamiliar words to be learned next time. I also re-read and translate information into my mother tongue language. |
| | | A2 : Usually I read it step by step, like one paragraph I used to read and I interpreted the meaning. If I am still confused I can ask my friend. When I lose concentration I take a time to rest such as drinking coffee or juice after that continue to reading. I use many strategies to help me faced the problems in reading online. |
| | | A3 : When I lose my concentration I try back to focus or re read so I can get the point of the text. I often read aloud the text, because it really helps me to understand the text. For words meaning problems, I take a note unfamiliar words and then find the meaning in the dictionary. |
| | | A4 : First, I read to find keywords after that I read the whole text. If in the middle I don't understand I re-read, guessing the meaning. If I still don't understand I search other sources with some topics and combine the information. The strategy I use really help me to understand the text well. |
| | | A5 : I do scanning the text, add my space in reading and look the meaning from the whole text. If I find difficult words, |

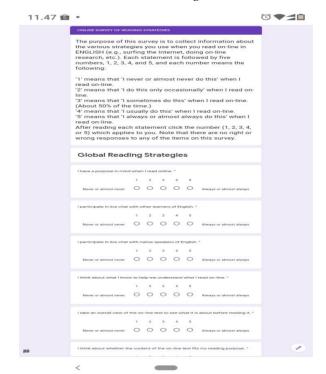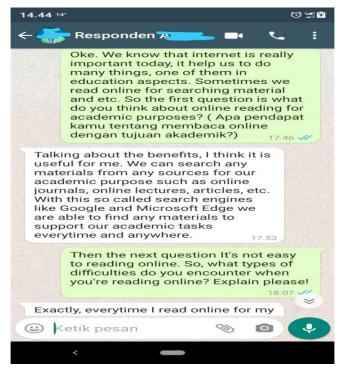|  | I solved this problem by reading the next sentence. Sometimes I also read carefully and slowly if I don't understand. All of the strategies really help me understand the text. |
|  | A6 : If I lose concentration I have to re-read it from the beginning, I also use look the meaning of unfamiliar words in the dictionary, sometimes I am scanning or skimming the text. I realize the mistake I made when reading, then I try to find strategies to fix it. |
|  | A7 : I often practice my reading skill every day at least one article or one book page, if there is a difficult sentence I will read it over and over again. |
|  | A8 : I take a time to rest when losing my concentration, I'm skimming the text to find the keyword, after that read carefully. I also compared the points of the text with other text. Sometimes I also take a note and paraphrase into Indonesian language. |
|  | A9 : Strategies that I use are scanning, skimming, take a note the main ideas, and discuss with friends. I realize my difficulties and that's why I choose appropriate strategies to help me understand the text. |
|  | A10 : When I don't understand I read the main paragraph, I don't read the whole the whole text, this is also called skimming. I remember the important points and if I don't understand the meaning of the words. I will continue to the next sentences, so I can guess the meaning or the content. I combine the strategies to help me understand the online text. |

# APPENDIX 5.  DOCUMENTATION

*Picture 1.1*

*OSORS in the Google Form*

*Picture 1.2*

*Interview Session on WhatsApp*

# CURRICULUM VITAE

A.  PERSONAL IDENTITY

    Name                     : Ela Maryam Saraswati

    Place, Date and Birth  : Banyumas, 29$^{th}$ January
1999

    Sex                      : Female

    Nationality            : Indonesian

    Marital Status       : Single

    Home Adress        : Randegan RT 02/09,
Wangon, Banyumas.

    Phone                 : 088221500975

    Email                 : watigood908@gmail.com

B.  EDUCATIONAL BACKGROUND

    Elementary School   : SD N 1 Randegan,
Banyumas

    Junior High School   : SMP N 1 Wangon,
Banyumas

    Senior High School   : SMA N 1 Jatilawang,
Banyumas