

## **CHAPTER III**

### **RESEARCH METHOD**

This chapter explains the research methodology. In the cover of the research design, population and sample, data collection techniques and data analysis technique.

#### **3.1. Research Design**

This study was designed to find the online reading strategies used by senior high school students. This study is a survey study. Survey study to find the most of online reading strategies.

This present study is using quantitative research. Quantitative is a methodology of collecting, analyzing, interpreting and composing the outcomes of a study (Creswell, 2002). According to Mokhtari & Sheorey (2002) as Online Survey of Reading Strategies to references of questionnaire to collect the data in this research.

#### **3.2. Population and Sample**

##### **3.2.1. Online reading strategies in senior high school**

Online reading is one way to get some knowledge used by senior high school students. They use this way to complete their tasks such as reading an online article, find some online sources and others.

Online reading always used in the learning process at school and at university. Many tasks that students get in the learning process make them need more references. Online reading helps students without limit, giving more practical time and less energy to search for references in other places such as the library.

### 3.2.2. Population

The subject for research is population. According to Creswell (2012), A place that has similar characteristics is a good population. Based on data from academic in senior high school, the total of population is 220 students. The characteristics of quantitative according to Creswell (2012) are techniques of structural equation modeling, hierarchical linear modeling, and logistic regression such as independent, intervening, and dependent. The researcher chooses the students in grade XI because the students may use to read online reading such as the article. In grade XI, the teacher more often give the students task and reading online. Then, in grade X the students more often directed to read in the library and in grade XI1 the students mostly focus working on written questions to their final exam. Furthermore, the students have reading habits in many versions, especially on online reading.

### 3.2.3. Sampling

This sample of this research consists of all of the active student's grade XI in senior high school. Arikunto (2006) said if the population exceeds 100 respondents then the researcher can take 10-25% of all population as the sample. The total respondents obtained were 174 out of 220 students.

No.	Class	Population	Sample
1	XI IPA 1	32	25
2	XI IPA 2	30	24
3	XI IPA 3	32	24
4	XI IPA 4	32	28
5	XI IPS 1	32	26
6	XI IPS 2	31	23
7	XI IPS 3	31	24
<b>Total</b>		220	174

Table 3.1. Population and Sampling

The results can be obtained from the calculation based on the total population and existing samples (Cohen, Manion & Morrison, 2007). The confidence of margin error can be predicted in 90%, 95% and 99% as in the following table below :

Population	Confidence level 90 per cent			Confidence level 95 per cent			Confidence level 99 per cent		
	Confidence	Confidence	Confidence	Confidence	Confidence	Confidence	Confidence	Confidence	Confidence
30	27	28	29	28	29	29	29	29	30
50	42	45	47	44	46	48	46	48	49
75	59	64	68	63	67	70	67	70	72
100	73	81	88	79	86	91	87	91	95
120	83	94	104	91	100	108	102	108	113
150	97	111	125	108	120	132	122	131	139
200	115	136	158	132	150	168	154	168	180
250	130	157	188	151	176	203	182	201	220
300	143	176	215	168	200	234	207	233	258
350	153	192	239	183	221	264	229	262	294
400	162	206	262	196	240	291	250	289	329
450	170	219	282	207	257	317	268	314	362
500	176	230	301	217	273	340	285	337	393
600	187	249	335	234	300	384	315	380	453
650	192	257	350	241	312	404	328	400	481
700	196	265	364	248	323	423	341	418	507
800	203	278	389	260	343	457	363	452	558
900	209	289	411	269	360	468	382	482	605
1,000	214	298	431	278	375	516	399	509	648
1,100	218	307	448	285	388	542	414	534	689
1,200	222	314	464	291	400	565	427	556	727
1,300	225	321	478	297	411	586	439	577	762
1,400	228	326	491	301	420	606	450	596	796
1,500	230	331	503	306	429	624	460	613	827
2,000	240	351	549	322	462	696	498	683	959
2,500	246	364	581	333	484	749	524	733	1,061
5,000	258	392	657	357	536	879	586	859	1,347
7,500	263	403	687	365	556	934	610	911	1,480
10,000	265	408	703	370	566	964	622	939	1,556
20,000	269	417	729	377	583	1,013	642	986	1,688
30,000	270	419	738	379	588	1,030	649	1,002	1,737
40,000	270	421	742	381	591	1,039	653	1,011	1,762
50,000	271	422	745	381	593	1,045	655	1,016	1,778
100,000	272	424	751	383	597	1,056	659	1,026	1,810
150,000	272	424	752	383	598	1,060	661	1,030	1,821
200,000	272	424	753	383	598	1,061	661	1,031	1,826
250,000	272	425	754	384	599	1,063	662	1,033	1,830
500,000	272	425	755	384	600	1,065	663	1,035	1,837
1,000,000	272	425	756	384	600	1,066	663	1,036	1,840

Table 3.2. Confidence of Margin Errors

Based on the table, there are sampling that can be results based on the total population. The small and big of the results are determined by existing samples (Fink, 2017). The researcher used 174 students as the respondents from 220 total the population. The respondents are students in senior high school grade XI and the students often reading English text using the internet. Then the level confidence that researcher use is 95% and the margin of error is 4%. Then, the result will be trusted based on the total sample that was collected.

### **3.3. Data Collecting Technique**

The data collection process for three days in senior high school. This study describes data collection techniques which are instrument, validity, and reliability.

#### **3.3.1 Research Instrument**

In this part, the researchers explain the instrument to collect the data which is used to find the results of the study. The researcher used some questionnaires to the instrument. The researcher will get the good results from collecting the data using questionnaires then apply it in the appropriate procedure (Arikunto, 2006).

Researchers used a questionnaire in research instruments. Researchers used printed form that focuses on surveys and questionnaires. Printed form aims to support the creation of a form from OSORS specifically for surveys and questionnaires. Then, the researcher shares the printed form to collect the data.

#### **3.3.2 Questionnaire**

In this study, the researchers use the questionnaire as an instrument to collect the data.

The researcher used OSORS by Mokhtari and Sheorey (2002) for the respondents to take the data. The survey consists of 38 items. The respondents answered based on a five-point Likert-type scale:

1= Never (N)

2= Only Occasionally (OO)

3= Sometimes (S)

4= Usually (U)

5= Always (A)

The questionnaire, consequently, is divided into three categories:

- Global Reading Strategies (18 items) measured about the various method of finding the information
- Problem solving (11 items) measured about the process of finding solutions.
- Support (9 items) measured about the tools to help the reader to understand about the meaning.

Domain	Question No	Statement
Global Reading Strategies	1, 2, 3, 5, 6, 8, 10, 14, 17, 18, 20, 23, 24, 26, 27, 30, 32, 33	1.I have a purpose in mind when I read online. 2.I participate in live chat with other learners of English. 3.I participate in live chat with native speakers of English. 5.I think about what I know to help me understand what I read on-line. 6.I take an overall view of the on-line text to see what it is about before reading it. 8.I think about whether the content of the on-line text fits my reading purpose. 10.I review the on-line text first by noting its characteristics like length and organization. 14.When reading on-line, I decide what to read closely and what to ignore. 17.I read pages on the Internet for academic purposes. 18.I use tables, figures, and pictures in the on-line text to increase my understanding. 20.I use context clues to help me better understand what I am reading on-line. 23. I use typographical features like bold face and italics to identify key information.

		24.I critically analyze and evaluate the information presented in the on-line text.
		26.I check my understanding when I come across new information.
		27.I try to guess what the content of the on-line text is about when I read.
		30.I check to see if my guesses about the on-line text are right or wrong.
		32.I scan the on-line text to get a basic idea of whether it will serve my purposes before choosing to read it.
		33.I read pages on the Internet for fun.
Problem Solving Strategies	9, 11, 13, 16, 19, 22, 28, 31, 34, 35, 36	<p>9.I read slowly and carefully to make sure I understand what I am reading on-line.</p> <p>11.I try to get back on track when I lose concentration.</p> <p>13.I adjust my reading speed according to what I am reading on-line.</p> <p>16.When on-line text becomes difficult, I pay closer attention to what I am reading.</p> <p>19.I stop from time to time and think about what I am reading on-line.</p> <p>22.I use context clues to help me better understand what I am reading on-line.</p> <p>28.When on-line text becomes difficult, I re-read it to increase my understanding.</p> <p>31.When I read on-line, I guess the meaning of unknown words or phrases.</p> <p>34.I critically evaluate the on-line text before choosing to use information I read on-line.</p> <p>35.I can distinguish between fact and opinion in on-line texts.</p> <p>36.When reading on-line, I look for sites that cover both sides of an issue.</p>
Support Reading Strategies	4, 7, 12, 15, 21,25, 29,37, 38	<p>4.I take notes while reading on-line to help me understand what I read.</p> <p>7.When on-line text becomes difficult, I read aloud to help me understand what I read.</p> <p>12.I print out a hard copy of the on-line text then underline or circle information to help me remember it.</p> <p>15.I use reference materials (e.g. an on-line dictionary) to help me understand what I read on-line.</p> <p>21.I paraphrase (restate ideas in my own words) to better understand what I read on-line.</p>

- 25.I go back and forth in the on-line text to find relationships among ideas in it.
- 29.I ask myself questions I like to have answered in the on-line text.
- 37.When reading on-line, I translate from English into my native language.
- 38.When reading on-line, I think about information in both English and my mother tongue.
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**Table 3.3 : Questionnaire**

The questionnaire above is use to get the data that appropriate with the study. The researcher only use 38 items of Online Survey of Reading Strategies (OSORS) to take the data. We change it to the Indonesian language, so that participants more easily understand when filling out the questionnaire.

### **3.3.3. Validity of the Instrument**

Validity is a concept is accurately measured in a quantitative study. The OSORS questionnaire is legitimate and can be used in this research.

According to Mokhtari & Sheorey (2002), Cronbach's alpha of the OSORS questionnaire has equal to 0.92. This is the table of the Cronbach' alpha coefficient that can be used according to Cohen et al (2007).



Cronbach's alpha	Criteria
>0.90	Very highly reliable
0.80 – 0.90	Highly reliable
0.70 – 0.79	Reliable
0.60 – 0.69	Minimally reliable
< 0.60	Unacceptably low reliability

Table 3.4. The Criteria of Cronbach's alpha

There are 38 items of the questionnaire that were distributed to senior high school grade XI students. Then, the interval of Cronbach's Alpha of OSORS questionnaire is 0.92 which means that the questionnaire's items were very high reliability.

### 3.3.4. Reliability of the Instrument

Reliability was related to the result of the motivation from the research equal with the respond of the test Heala and Twycross (2015). Reliability of the OSORS the reliabilities for each category are Global Reading Strategies; 0.77, Problem Solving Strategies; 0.64, and Support Reading Strategies; 0.69. The data make the OSORS is a reliable instrument to take the data.

## 3.4. Data Analysis Technique

### 3.4.1 Data Indicator

This subchapter show specific measurement to answer research questions. This research using Online Survey of Reading Strategies (OSORS) as the instrument. OSORS was adapted from The Survey of Reading Strategies (SORS) (Sheorey and Mokhtari, 2001). SORS focused on metacognitive strategy in academic reading.

The adaptation named OSORS to distinguish it from SORS. OSORS consist of 38 items there are Global Reading Strategies (18 items; an additional 5 items were added), Problem Solving Strategies (11 items; an additional 3 items were added) and Support Reading Strategies (the original 9 items were maintained).

#### **3.4.3.1. Online Survey of Reading Strategies (OSORS)**

In the Online Survey of Reading Strategies (OSORS), using the paper form to the administration so that the students more easily to complete the questionnaires. The data was analyzed using Microsoft Excel. there are the steps to collect the data in this research such as:

1. Finding the literature review for questionnaire instrument.
2. Researcher used OSORS by Mokhtari and Sheorey (2002) for the respondents to take the data and translated into bahasa indonesia.
3. Using printed questionnaire to make the students easy complete the questionnaire that shared by the researcher.
4. Distributing the questionnaire to students in senior high school grade XI.
5. Moving the data that was collected to Microsoft Excel.
6. Analyze the data using Microsoft Excel With the =STDEVA and =AVERAGE formula, in order to find the mean of each column in excel.