

## **CHAPTER III**

### **METHOD OF DATA COLLECTION AND ANALYSIS**

#### **3.1 DATA COLLECTION**

This study focuses on finding out respondents' perception on the created game "*Your Stories*". According to Creswell theory (Creswell, 2014), three methods of research are quantitative, qualitative, and mix both methods. The writer used questionnaire as quantitative method for this research.

##### **3.1.1 Population and Sample**

The writer took the respondents of this research were active students in the Faculty of Language and Arts (FLA) of Soegijapranata Catholic University from batch 2016 to 2019. There were 242 active students; 57 students from batch 2016, 47 students from batch 2017, 67 students from batch 2018, and 71 students from batch 2019. The main reason why the writer chooses FLA students as respondents because students in FLA are already quiet familiar with English language and they have an intention to learn English language better, so they are the perfect respondents to ease the process of this research and it can even more produce better perception as result.

##### **3.1.2 Instruments**

The writer used online questionnaires to find out respondents' perception. The online questionnaire with Google Form was more effective and shortened the time of

this research. The writer used Likert scale as the scoring method of the questionnaires with close-ended questions. By using Likert scale, respondents are asked to rate questions on a level of agreement (Jamieson, 2004). The options are separated into five sections: strongly disagree, disagree, neutral, agree, strongly agree with the scoring system shown as below (Kustriwardani, 2018):

1. Strongly Disagree = 1
2. Disagree = 2
3. Neutral = 3
4. Agree = 4
5. Strongly Agree = 5

For this study, the questionnaire was divided into two sections with seven statements each. The first section was about the respondents' perception on trial game "Your Stories", and the second section was about the respondents' perception on English language content in the trial game "Your Stories".

### 3.1.3 Procedures

The procedures to collect the data in this research were:

1. In the first step, the writer made the game concept and a story scenario. The writer decided to create a story about a freshman attending his/her first welcoming ceremony in Soegijapranata Catholic University or usually called PTMB "Pembekalan Terpadu Mahasiswa Baru" and meeting with new friends, his/her

lecturer. Because welcoming ceremony (PTMB) in Soegijapranata Catholic University is a familiar thing to almost all SCU students, the writer found this as a good introduction in the story. The writer wrapped the whole story in one short chapter.

2. The writer used *Construct 2 game-maker* as a tool to realize the game. After finishing the game and formatting to website link, the game was ready to be played. The game link is <https://yelinyourstories.000webhostapp.com/>.
3. Next, the writer created the questionnaire to know the players' perception. The statements are modification of Andreas Setiawan Akim' research statements (Akim, 2017). The writer edited some sentences to fit in the writer's needs. The writer forms the questionnaire in Google Form with a shorten link: <https://forms.gle/g8D3Uy6Hh6RWKEV96>.
4. Before distributing each questionnaire to the actual respondents, the writer did a pre-test or pilot study to check the reliability and validity of the questionnaire. A research statement can be said valid if it is capable of measuring what should be measured, while it is reliable if the statement has the consistency to measure the same thing in a period of time (Raharjo, 2019). There were sixteen statements tested for validity and realibility in the pilot study. The writer shared the questionnaire to seventeen students at Soegijapranata Catholic University. The result is showed in the table below (Table 1):

Table 1  
*The Reliability of the Students' perception*

Reliability Statistics	
Cronbach's Alpha	N of Items
,890	16

All the statements were considered reliable if the Cronbach's Alpha value is more than 0.60. The pilot study showed the Cronbach's Alpha = 0,890, so all sixteen statements were reliable. Meanwhile, the statements were valid if the r value for 17 respondents was more than 0.514. The Rvalue result for the first pilot study is listed below (Table 2):

Table 2  
*The Validity Table of the Students' perception*

No.	Statements	Rvalue	Rtable (5%)	Interpretation
1.	I am interested to play "Your Stories" interactive game more	0,732	0.532	VALID
2.	I like how "Your Stories" game works	0,690	0.532	VALID
3.	I want to interact more in the interactive game "Your Stories"	0,322	0.532	INVALID
4.	I learn mistakes from the interactive part of the game	0,654	0.532	VALID
5.	I am excited to play and to learn in the same time	0,205	0.532	INVALID
6.	I find it helpful to learn English by playing the game "Your Stories"	0,330	0.532	INVALID

7.	I can see Indonesian culture showed in “ <i>Your Stories</i> ” game	0,378	0.532	INVALID
8.	I find it helpful to use English Expression in Indonesia by the cultural setting in the game.	0,488	0.532	INVALID
9.	I can learn more basic English expressions from the game	0,552	0.532	VALID
10.	I learn many new English words in the game	0,626	0.532	VALID
11.	I can get to learn new English Expression	0,671	0.532	VALID
12.	I can learn how and when to use formal and informal English	0,482	0.532	INVALID
13.	I can apply some English sentences showed in the game to my daily speaking	0,647	0.532	VALID
14.	I learn from the mistakes I made in “ <i>Your Stories</i> ” interactive game	0,766	0.532	VALID
15.	I can apply the English expression to my daily colloquial language	0,623	0.532	VALID
16.	I can practice my English by reading the story lines in “ <i>Your Stories</i> ” game	0,727	0.532	VALID

According to the result, there were six invalid statements. The writer decided to re-test only the invalid question with revised words. For instance, on statement 3, the writer changed the sentence “*I want to interact more in the interactive game Your Stories*” to “*I want to play "Your Stories" interactive game more*”. The writer realised that word choice could affect respondents understanding, so the writer changed some words for better comprehension. Also, the writer added Indonesian language on each statement, so it is a bilingual

questionnaire. On the second test with 8 participants, the revised statements showed better validation and reliability. It showed Cronbach's Alpha value of 0,970 and all Rvalues (n=6) are more than 0,811. From this evaluation, the writer deleted two statements from sixteen to fourteen for better performance.

5. The writer finally shared the created game "*Your Stories*" website link to as many as possible Faculty of Language and Arts students. 100 out of the total 242 active students were asked as participants to play the game first. After playing the game, the respondents were asked to filled in the questionnaires.
6. The writer only retrieved 52 responses from 100 distributed questionnaires. When all the results were collected, the writer analysed the respondents' answer whether the game and the English language content was helpful or not.

### **3.2 DATA ANALYSIS**

The data analysis was done with the help of the IBM SPSS Statistics 2.0 application. The writer used descriptive statistics to find out the mean scores and to show the result whether it was positive or negative perception. In short, the positivity and the negativity showed how useful and understandable the English language content in the created game "*Your Stories*" for every respondent that participated in this research.