

CHAPTER IV

DATA ANALYSIS AND INTERPRETATION

In this chapter, the writer would like to discuss the findings and interpretation of the data related to the students' perceptions on group-based game-making to learn descriptive writing and the correlations between the students' gender and gaming skill with their interest in creating a game for different writing genres and their difficulty in creating the game itself.

The writer analyzed the data based on the related theories and previous researches that have been done. He used SPSS to count the means and the standard deviations. The writer also obtained the data from the freshman. The students had taken paragraph and expository writing class, had knowledge about descriptive writing in general.

The students who participated in the workshop were only 24 out of 65 of the total population.

In this chapter, the writer described the findings in three sections; the first half consisted of each of the background questions, the second half was the 18 statements that were found in the related questionnaire, and the last one was the correlation test between the background questions data and research statements data. They are as the following:

4.1 BACKGROUND QUESTIONS

Table 1.

Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Female	20	83.3	83.3	83.3
Male	4	16.7	16.7	100.0
Total	24	100.0	100.0	

As the writer have stated above, a total of 24 students were the participants of the workshop/research conducted. The participating male students were four persons only, where the female students were the majority of the participants, taking as much as 83.3% of the total amount (20 students).

Table 2

Playing frequency

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Often	4	16.7	16.7	16.7
Often	7	29.2	29.2	45.8
Sometimes	7	29.2	29.2	75.0
Seldom	6	25.0	25.0	100.0
Total	24	100.0	100.0	

The second item of the background question was the frequency of the students' playtime. Four of the students said they played games very often. Seven of them played games often too, but not as frequently as the first four

students. The rest were casual gamers as there were 29.2% (seven) students that played games sometimes, and the last six students, which took 25% of the total, rarely or seldom played games. The result indicates that the gaming frequency of the students vary from one another depending on their preference of using their leisure time.

Table 3

Platform used for gaming

	Frequency	Percent	Valid Percent	Cumulative Percent
On my laptop	8	33.3	33.3	33.3
On my smartphone	15	62.5	62.5	95.8
On my console	1	4.2	4.2	100.0
Total	24	100.0	100.0	

The next item was about the gaming platform that the students tended to use. The majority of the population (62.5%) played their game on their smartphone, while the rest of the students played it on their laptops and gaming consoles, summing as much as 33.3% (eight persons) for the former and 4.2% (one person) for the latter. Rather than the usual gaming platforms such as computers/laptops and consoles (PlayStation, Xbox, etc.), this result shows that most students preferred a platform that is compact, easy to carry, and able to access at any time, which is smartphone.

Table 4

Gaming skill

	Frequency	Percent	Valid Percent	Cumulative Percent
Very Good	2	8.3	8.3	8.3
Good	19	79.2	79.2	87.5
Fair	2	8.3	8.3	95.8
Poor	1	4.2	4.2	100.0
Total	24	100.0	100.0	

The fourth background question asked about the students' confidence in rating their game-playing ability. 19 students were confident that their game-playing ability was good, whereas two students proudly stated that they had a very good game-playing ability than the rest. 8.3% of them felt that their game-playing ability was fair. Interestingly, one student, or 4.2% of the total population, acknowledged that his/her game-playing ability was poor. Based on the result, the majority of the student felt that they had a good skill in gaming, indicating that the students were familiar enough with the games that they played.

Table 5

Game type

No	Game Type	Total
1	Real-time strategy	8
2	Simulation	12
3	Role-playing game	8
4	Puzzle	8
5	Massive multiplayer online	2

The fifth from the background questions was about some type of games that students liked to play. The writer provided some options and the students were free to choose for more than one option, should they want to. From the table above, the most favorable game type that the students liked the most was simulation games whereas the second most popular ones belonged to real-time strategy, role-playing game (RPG), and puzzle, favored by eight students each. The least favored type was massive multiplayer online (MMO) which was chosen by two students only.

Table 6

Numbers of players

	Frequency	Percent	Valid Percent	Cumulative Percent
Multiplayer	6	25.0	25.0	25.0
Single player	18	75.0	75.0	100.0
Total	24	100.0	100.0	

Background question number six was about the students' preference of players in playing games. From 24 students, 25% (six) of them liked to play

the game with their friends/family members/colleagues (multi-player) whereas the majority 75% (18) for this category preferred to play it individually (single-player). The result of this question shows that students liked to play their games by themselves due to accessibility and availability. Playing a single player game is quicker rather than multi player because students did not have to wait or even need another players.

Table 7
Creating game

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	3	12.5	12.5	12.5
No	21	87.5	87.5	100.0
Total	24	100.0	100.0	

The last background question was about the students' experience in creating a game. In this simple question, students were asked whether or not they have created a game before. Three of them answered with 'yes' whereas the remaining 21 answered with 'no'. While students' inexperience in creating a game are high, this is understandable because the students are from the Faculty of Language and Arts whose focus is studying English instead of game making.

Table 8

The students' perception on game making for descriptive writing

Question Number	Statement	N	Mean	Std. Deviation	Min.	Max.
1	I feel satisfied with the game I created	24	3.13	0.537	2	4
2	Creating the game is easy for me	24	2.42	0.717	1	4
3	The template is helpful for me to create the activities	24	3.29	0.464	3	4
4	This game is helpful for me to practice descriptive writing	24	3.42	0.504	3	4
5	I am interested in creating a game for different writing genres	24	3.04	0.624	2	4
6	Creating a game to practice descriptive writing is exciting	24	3.29	0.464	3	4
7	I feel this game meets my needs to learn descriptive writing skill	24	3.29	0.550	2	4
8	I am interested in creating group-based games to practice my descriptive writing skill	24	3.00	0.511	2	4
9	I am interested in sharing the game I created	24	3.00	0.659	2	4
10	The game I created is useful for other learners who want to practice their English skills	24	3.21	0.509	2	4
11	I feel that group-based games are more appealing if they can be played on various gadgets	24	3.25	0.532	2	4
12	I feel that the game I created is interesting	24	3.17	0.637	2	4
13	It is possible to use the game to practice other English skills and	24	3.38	0.576	2	4

	contents (e.g. reading, sociolinguistics, culture)					
14	Games should be included as a learning medium in schools/colleges	24	3.42	0.504	3	4
15	We distribute the writing tasks equally	24	3.08	0.504	2	4
16	The team members shared their ideas in creating the writing activities	24	3.29	0.464	3	4
17	Creating the writing activities is more difficult than creating the game itself	24	2.92	0.881	1	4
18	It is better to create this kind of game on my own	24	2.96	0.751	1	4
	Overall		3.142	0.5771		

Table 9

The students' perception on game making for descriptive writing (highest to lowest mean)

Question Number	Statement	N	Mean	Std. Deviation	Min.	Max.
4	This game is helpful for me to practice descriptive writing	24	3.42	0.504	3	4
14	Games should be included as a learning medium in schools/colleges	24	3.42	0.504	3	4
13	It is possible to use the game to practice other English skills and contents (e.g. reading, sociolinguistics, culture)	24	3.38	0.576	2	4
3	The template is helpful for me to create the activities	24	3.29	0.464	3	4
6	Creating a game to	24	3.29	0.464	3	4

	practice descriptive writing is exciting					
7	I feel this game meets my needs to learn descriptive writing skill	24	3.29	0.550	2	4
16	The team members shared their ideas in creating the writing activities	24	3.29	0.464	3	4
11	I feel that group-based games are more appealing if they can be played on various gadgets	24	3.25	0.532	2	4
10	The game I created is useful for other learners who want to practice their English skills	24	3.21	0.509	2	4
12	I feel that the game I created is interesting	24	3.17	0.637	2	4
1	I feel satisfied with the game I created	24	3.13	0.537	2	4
15	We distribute the writing tasks equally	24	3.08	0.504	2	4
5	I am interested in creating a game for different writing genres	24	3.04	0.624	2	4
8	I am interested in creating group-based games to practice my descriptive writing skill	24	3.00	0.511	2	4
9	I am interested in sharing the game I created	24	3.00	0.659	2	4
18	It is better to create this kind of game on my own	24	2.96	0.751	1	4
17	Creating the writing activities is more difficult than creating the game itself	24	2.92	0.881	1	4
2	Creating the game is easy for me	24	2.42	0.717	1	4
	Overall		3.142	0.5771		

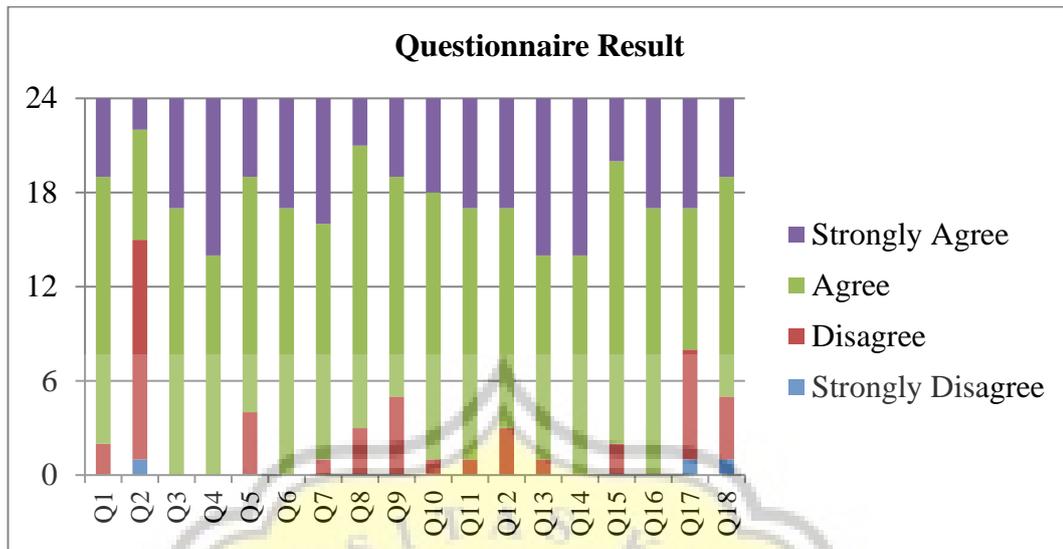


Figure 1 Questionnaire Result

Based on the figure above, we could see the various options that the students chose for the 18 statements. The most favorable result that they chose based on the answers were found on Q3, Q4, Q6, Q14, and Q16 because the options that the students chose were mainly *agree* and *strongly agree*. In general, the students' choice of options showed a positive attitude towards the statements provided. Even though there were some options like *disagree* and *strongly disagree* that students chose in several statements, it did not really affect much on the total result.

4.2 STATEMENTS

From the tables and the figure above, we can see that the overall mean score of the students' perceptions on group-based game making to learn descriptive writing could be concluded as favorable. Also, there are two statements that have the highest mean scores of all (3.42), respectively Statement 4 (*This game is helpful for me to practice descriptive writing*) and Statement 14 (*Games should be included as a learning medium in schools/colleges*). The mean for Statement 4 indicates that the usage of the game helps the students describe their writing practice. The majority of the students felt this game, or the usage of this particular game during the workshop, are more helpful than the standard writing activity (without any multimedia aids). The other one of the highest-scored statements, which is Statement 14 (*Games should be included as a learning medium in schools/colleges*), shows that the inclusion of a modern learning medium, which in this case, game, is very preferred by the students in a school/college setting.

The second high-scored statement (3.38) goes to Statement 13 (*It is possible to use the game to practice other English skills and contents [e.g. reading, sociolinguistics, culture]*). Based on the favorable response, the students felt that the game holds many possibilities to be applied in other English skill courses and contents. Meaning, the game's academic application is not limited to writing practice purposes only, but also to other English-

related courses such as structure, reading, and literature if it is programmed in such way.

The statements that highlight the relevance of group-based game making for this study are Statement 8 (*I am interested in creating group-based games to practice my descriptive writing skill*), Statement 11 (*I feel that group-based games are more appealing if they can be played on various gadgets*), Statement 15 (*We distribute the writing tasks equally*), and Statement 16 (*The team members shared their ideas in creating the writing activities*). The aforementioned statement each have the following means of 3.00, 3.25, 3.08, and 3.29, resulting to an average mean of **3.155**. This data show that the students have perceived a good attitude towards group-based game-making activity. Students feel that creating group-based games is a good activity to practice their writing skill (in this case, descriptive), and contribute something to the group such as ideas which are very relevant to what Robertson & Nicholson (2007) had stated (sharing ideas & tips). They also take turns in writing the descriptive questions/statements so that everyone is involved in the process. The students also thought that the group-based games that they created would be more interesting if it could be executed on various gadgets/platforms so that everyone could enjoy it without any technological hindrance or limitations.

The next list of statements highlights the students' thought of the game's usage for practicing descriptive writing. Statement 4 (*This game is helpful for me to practice descriptive writing*), 6 (*Creating a game to practice descriptive*

writing is exciting), and 7 (*I feel this game meets my needs to learn descriptive writing skill*) are covering this section. The average mean of the aforementioned statements for this section is **3.333**. The average mean scores for this category has proven that game's usage plays a quite major part in boosting the students' descriptive writing practice through the game aids as it is deemed helpful, exciting, and fulfilling by the students. As for the game application for another writing genre stated by Statement 5 (*I am interested in creating a game for different writing genres*), the students also showed a positive attitude towards the activity.

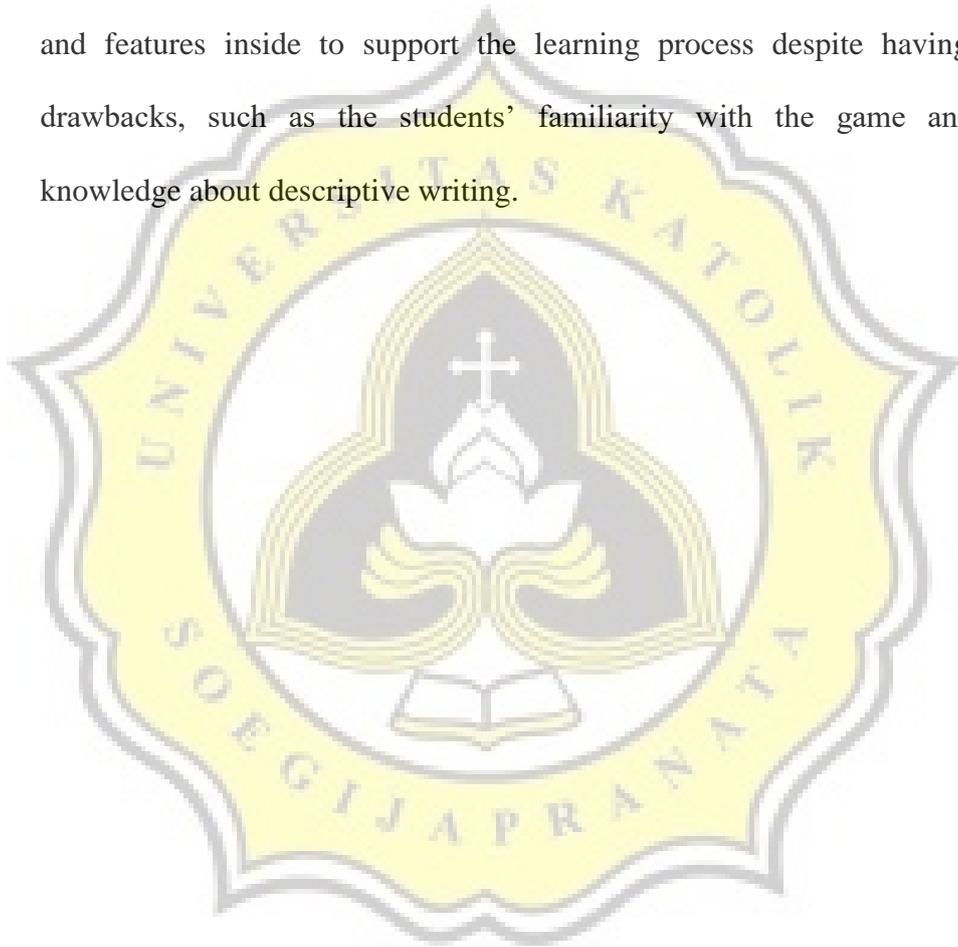
The statements that show the students' personal thought of the game-making activity and the game itself are Statement 1 (*I feel satisfied with the game I created*), 3(*The template is helpful for me to create the activities*), 9(*I am interested in sharing the game I created*), 10(*The game I created is useful for other learners who want to practice their English skills*), 12(*I feel that the game I created is interesting*), and 18(*It is better to create this kind of game on my own*). Favorable responses are given from the students to Statement 1 (3.13), 3 (3.29), 9 (3.00), 10 (3.21), 12 (3.17). We can see that after the activity was done, the students were satisfied with their created game. They also felt that the game was helpful for them in creating the activities. Interesting aspects that we could deduct from their answers are their opinions on the game. They believe that it is interesting and helpful for other learners to improve their English skills, and they don't even mind sharing it with others also, should they need one. As for Statement 18 (*It is better to create this kind*

of game on my own), the students felt that the provided game template will be easier to manage individually. This could be caused by the availability of the laptops per group, which is only one. Although they took part and took turns in sharing their ideas (Statement 16) and typing the contents (Statement 15), the wait between turns could cause a boredom, which is believed why they would like to do it fully on their own.

The remaining statements, Statement 2 (*Creating the game is easy for me*) and Statement 17 (*Creating the writing activities is more difficult than creating the game itself*), received mean scores of 2.42 and 2.92 respectively. The students found that making the game is not easy as they thought it would be as there are many things that should be managed and programmed. The writer also found it a bit overwhelming at first, but with a bit of practice and familiarity with the game itself, everything will be easier and fun after a while. The writer believed that the cause was from the students' unfamiliarity for they tended to ask the writer for a help in optimizing their game's content. As for Statement 17, students found it quite challenging in making the descriptive writing activity. Before the workshop began, students were asked by the writer whether they had reached descriptive writing in their writing class or not, and the students answered that they had just started on the particular topic but had not practiced much. From their answers, the writer believed that the cause was the students' unfamiliarity with the descriptive writing itself.

In general, the findings of this study related to the students' perceptions on group-based game making to learn descriptive writing could be indicated as

favorable. The students felt that the game and the game-making activity are both interesting and helpful. The idea of working in groups received a positive response as well. Students were able to contribute to and share something with the group to maximize their work. The game is also perceived to be helpful for learning descriptive writing as well, as it contains many interesting functions and features inside to support the learning process despite having some drawbacks, such as the students' familiarity with the game and their knowledge about descriptive writing.



4.3 DATA CORRELATIONS

In this section, the writer would like to find out the correlation between background question 1 and statement 5, which were gender and the interest of creating a game for different writing genre, and also background question 4 and statement 2, which were gaming skill and ‘*creating the game is easy for me*’ using Kruskal-Wallis test in SPSS. The results are as follows:

Table 10

Gender

	Test Statistics ^{a,b}		
	Chi-Square	Df	Asymp. Sig.
Q1	0.191	1	0.662
Q2	0.233	1	0.629
Q3	0.039	1	0.844
Q4	0.131	1	0.717
Q5	0.018	1	0.893
Q6	0.039	1	0.844
Q7	0.052	1	0.819
Q8	0	1	1
Q9	0.69	1	0.406
Q10	0.021	1	0.884
Q11	1.068	1	0.301
Q12	0.278	1	0.598
Q13	0.195	1	0.659
Q14	0.526	1	0.468
Q15	0.167	1	0.683
Q16	0.039	1	0.844
Q17	0.667	1	0.414
Q18	0	1	1

^aKruskall Wallis Test

^bGrouping Variable : Gender

Table 11

Frequency

	Test Statistics ^{a,b}		
	Chi-Square	Df	Asymp. Sig.
Q1	5.116	3	0.163
Q2	2.378	3	0.498
Q3	1.574	3	0.665
Q4	0.751	3	0.861
Q5	3.595	3	0.309
Q6	4.611	3	0.203
Q7	1.574	3	0.665
Q8	1.187	3	0.756
Q9	3.751	3	0.29
Q10	0.575	3	0.902
Q11	2.322	3	0.508
Q12	3.36	3	0.339
Q13	2.165	3	0.539
Q14	6.478	3	0.091
Q15	3.727	3	0.292
Q16	1.574	3	0.665
Q17	5.358	3	0.147
Q18	2.199	3	0.532

^aKruskall Wallis Test

^bGrouping Variable : Frequency

Table 12

Platform

	Test Statistics ^{a,b}		
	Chi-Square	Df	Asymp. Sig.
Q1	0.088	2	0.957
Q2	2.381	2	0.304
Q3	0.58	2	0.748
Q4	2.366	2	0.306
Q5	0.971	2	0.615
Q6	2.242	2	0.326
Q7	2.026	2	0.363
Q8	0.735	2	0.693
Q9	2.588	2	0.274
Q10	4.387	2	0.112
Q11	0.3	2	0.861
Q12	0.199	2	0.905
Q13	0.903	2	0.637
Q14	0.887	2	0.642
Q15	0.083	2	0.959
Q16	0.58	2	0.748
Q17	1.492	2	0.474
Q18	0.311	2	0.856

^aKruskall Wallis Test

^bGrouping Variable : Platform

Table 13

Skill

	Test Statistics ^{a,b}		
	Chi-Square	Df	Asymp. Sig.
Q1	2.431	3	0.488
Q2	1.438	3	0.697
Q3	1.638	3	0.651
Q4	2.352	3	0.503
Q5	1.707	3	0.635
Q6	1.272	3	0.736
Q7	1.355	3	0.716
Q8	0	3	1
Q9	0	3	1
Q10	1.268	3	0.737
Q11	1.253	3	0.74
Q12	1.356	3	0.716
Q13	0.689	3	0.876
Q14	2.352	3	0.503
Q15	1.582	3	0.663
Q16	1.638	3	0.651
Q17	1.047	3	0.79
Q18	1.264	3	0.738

^aKruskall Wallis Test

^bGrouping Variable : Skill

Table 14

Type

	Test Statistics ^{a,b}		
	Chi-Square	Df	Asymp. Sig.
Q1	5.817	4	0.213
Q2	4.386	4	0.356
Q3	3.982	4	0.409
Q4	5.651	4	0.227
Q5	8.817	4	0.066
Q6	2.59	4	0.629
Q7	5.028	4	0.284
Q8	2.396	4	0.663
Q9	0.997	4	0.91
Q10	4.257	4	0.372
Q11	4.312	4	0.365
Q12	0.974	4	0.914
Q13	6.101	4	0.192
Q14	4.206	4	0.379
Q15	3.412	4	0.491
Q16	3.982	4	0.409
Q17	2.868	4	0.58
Q18	4.951	4	0.292

^aKruskall Wallis Test

^bGrouping Variable : Type

Table 15

Playing

	Test Statistics ^{a,b}		
	Chi-Square	Df	Asymp. Sig.
Q1	1.181	1	0.277
Q2	0.823	1	0.364
Q3	1.611	1	0.204
Q4	0.219	1	0.64
Q5	0.037	1	0.847
Q6	0.064	1	0.8
Q7	0.557	1	0.455
Q8	0	1	1
Q9	0.511	1	0.475
Q10	0.451	1	0.502
Q11	0.418	1	0.518
Q12	0.001	1	0.97
Q13	0.325	1	0.569
Q14	0.219	1	0.64
Q15	0.194	1	0.66
Q16	1.611	1	0.204
Q17	6.055	1	0.014
Q18	0.508	1	0.476

^aKruskall Wallis Test

^bGrouping Variable : Playing

Table 16

Create

	Test Statistics ^{a,b}		
	Chi-Square	Df	Asymp. Sig.
Q1	0.108	1	0.743
Q2	1.786	1	0.181
Q3	0.028	1	0.868
Q4	0.845	1	0.358
Q5	0.74	1	0.39
Q6	0.028	1	0.868
Q7	1.653	1	0.198
Q8	1.46	1	0.227
Q9	0	1	1
Q10	0.193	1	0.66
Q11	0.07	1	0.791
Q12	2.064	1	0.151
Q13	0.04	1	0.842
Q14	0.094	1	0.759
Q15	0.119	1	0.73
Q16	0.028	1	0.868
Q17	1.782	1	0.182
Q18	0.782	1	0.377

^aKruskall Wallis Test

^bGrouping Variable : Create

From the tables above, we could see that there were several results for the correlations from the Kruskal-Wallis test. The first correlation, which was gender with Q5 (I am interested in creating a game for different writing genre) in table 10, was resulted in a p of 0.893. The result from this correlation test showed that gender did not have any significant difference with students' interest in creating a game for different genres of writing.

As for the second correlation, which was gaming skill with Q2 (*Creating the game is easy for me*), it had a p result of 0.697. From the result of this correlation test, we could see that gaming skill did not affect the students' difficulty in creating the game.

Based on the correlation results above, the writer did not find any statistically significant difference between the variables because none of its p result was equal to or lower than 0.05 to be statistically significant. In conclusion, the students' gender and gaming skill did not affect their interest in creating a game for different writing genres and their difficulty in creating the game.