Students' Motivation in Using Quizizz for Assessment

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Abstract

This research aims to analyze the level of students' motivation and the differences in motivation components between male and female students in the academic year 2021. The researcher used the questionnaire as the instrumentation. The researcher used totally sampling to choose the sample. The sample of this research consists of 96 students which are from English education and non-English education study program at Universitas Negeri Padang. In this study, the researcher use quantitative descriptive research as the research design. There were six subcomponents of motivation in this research i.e. intrinsic goal orientation, extrinsic goal orientation, task value, control of learning beliefs, self-efficacy for learning and performance, and task anxiety. The findings of the data analysis showed that students have high motivation levels. Females have a higher motivation level than males. It is shown by the mean score and the standard deviation.

Keywords: motivation, quizizz, online assessment

Introduction

The ministry of education in Indonesia has to change its approach to learning because of the pandemic. According to circular letter number 15 of 2020, the government states that the learning method for students in this pandemic is learning from home or it is called online learning. This approach causes an impact on students. One of the impacts is the students' motivation of learning (Cahyani et al., 2020). The lack of motivation in online learning is caused by the process of learning (Padma & Sukanesh, 2011). With this approach, many teachers use mobile learning for the assessment. Mobile learning is an important technology for education and it might have impacts on students in learning, collaborating, and sharing ideas (Naciri et al., 2020). Online tools and resources, and mobile learning, using digital resources that are objectively accessed via mobile devices (Ramos et al., 2010).

The computer-based test is more profitable than paper-based test such as the distribution of the test is quite easy, having good management, testing the students' motivation, getting the score by the machine, and having quality tools like calculator and dictionary (Shaheen et al., 2019). Online applications supply new screenplay for interaction and design of knowledge that interested to senses: sound, visual, and narrative (Tororres-Madñero et al., 2020). Using online applications can increase motivation in-class activities and generate student interest in the material being taught (Amalia, 2020). Thus, the applications that support learning and assessments are very useful in this revolution.

There are many kinds of applications such as Kahoot!, Quizalize, Socrative, and Quizizz. According to Cárdenas-Moncada et al. (2020), Kahoot! has highly positive impacts on students' classroom environment and academic performance. Quizalize is an application that is useful for teachers and students to review the materials through quizzes (Mukaromah & Mutoharoh, 2019). Shaban (2017) stated that socrative is an application to enhance the students' level of engagement, critical thinking, and

collaboration. Quizizz platform is an online assessment tool that has fun activities for students using their gadgets (Yan mei et al., 2019). It is interesting for students because it is based on gamification. Educational gamification is often related to human motivational behavior (Razali et al., 2020). According to Bury (2017), three-quarters of students want to use Quizizz as an online assessment in class for the future. Quizizz as an online assessment can be challenging for students during doing the assessments. Thus, game-based assessments have positive impacts on students. However, do they have a good impact on students' motivation?

Students are more motivated in using portfolios as assessments than conventional assessments (Mareta et al., 2021). Students understand more about the materials while using an online assessment tool (Bury, 2017). Based on the results of his study, Quizizz is a good tool for adding motivation. Moreover, the Quizizz platform is more effective than the traditional test for motivating students (Amalia, 2020). Then, this is having an impact on college students in the English department. The external factor highly affects the motivation of English department students (Escobar Fandiño et al., 2019). It turns out that the application has an impact on students' motivation. Then, how about the motivation between male and female is, is there any differences?

It can be seen that there have been many studies related to motivation, especially in learning. However, the research about motivation based on gender is very little in the journal. Many of them just separate the participants based on gender but do not analyze it. It is shown in the research of Razali et al. (2020) and the research of Escobar Fandiño et al. (2019). Therefore, the research about motivation based on gender is still very limited.

This study aims to identify the level of English department students' motivation in using Quizizz for assessment based on gender. English department of UNP has implemented game-based assessments such as Quizizz (Siregar & Oktavia, 2022). It is worth reviewing the level of motivation based on gender. Within the aims, the following research questions are going to be investigated: What are the differences in motivation components between males and females of English department students?

Methods

This study used descriptive research because it was about the phenomena of motivation of college students. The populations of this research were the English department students at Universitas Negeri Padang in the academic year 2021, who have already used Quizizz as their assessments. There were 96 students in the English education and non-education study program. The females were 67 students and the males were 29 students. The sample of this research is purposive sampling. Purposive sampling is a technique that is based on the researcher's decision for selecting people (Berndt, 2020).

The instrumentation of this research is a questionnaire. The questionnaire had 40 items. It was adapted from Pintrich's theory. And it has already been validated by the lecturers at Universitas Negeri Padang. The questionnaire had a 5 scale from the Likert scale. The questionnaire was distributed by *Google* Form. This research used a positive score to measure the motivation of students.

There is a formula that was used to analyze the data. Before using it, the data were summed and averaged in *Microsoft Excel*. Then, it used Sudijono's formula for finding the percentage. And it used Wimolmas (2013) criteria for finding the level of motivation. It can be seen below:

Table 1. The Criteria of Motivation

Mean Range	Interpretation
3.68 - 5.00	High degree of motivation
2.34 - 3.67	Moderate degree of motivation
1.00 - 2.33	Low degree of motivation

The research method explains clearly how the research was conducted to enable readers to evaluate the work performed. State the research design used in the study. Describe precisely what you did, what and how experiments were run, what, how much, how often, where, when, and why equipment and materials were used. Define the population and the methods of sampling or participants were used in the study. Describe what, how and to whom the instruments were used in the study. Describe any approaches to ensure validity and reliability. Describe how the data were collected and analyzed. Describe statistical tests and the comparisons made.

Result and Discussion

This research used a questionnaire for the instrument. The questionnaire was used to see the answer from students about their motivation which was divided based on gender.

The Result

Motivation has 3 components, such as value components, expectancy components, and affective components.

1. Value components

   a. Intrinsic Goal Orientation

   Based on the intrinsic motivation, the students have the differentiation based on gender.

Table 2. Intrinsic Goal Orientation

Items	Mean Score	
	Male	Female
1. Quizizz makes me more challenged in learning new things	4.10	4.07
16. Practice using Quizizz piques my curiosity	3.86	4.09
22. The most satisfying thing for me in learning this intermediate is understanding the material in detail	4.24	4.49
24. I will do tasks that are understandable, although that doesn't guarantee that I will get good grades	4.31	4.36
37. I am proud when I get the highest ranking	4.45	4.67
Average	4.19	4.34

In the intrinsic motivation, males have 4.19 for the mean score. Meanwhile, females have 4.34 for the mean score. However, males have a high score in the question number 1. It means that males like a challenge. Moreover, related to intrinsic motivation, it is found that the difference distance in the mean score is far in question number 22. From the data, females have a higher mean score than males. It means that the females have a high intrinsic motivation.

   b. Extrinsic Goal Orientation

   Based on the extrinsic motivation, the students have the differentiation based on gender.

Table 3. Extrinsic Goal Orientation

Items	Mean Score	
	Male	Female
7. Getting good grades in practice using Quizizz is the most satisfying thing for me right now	4.31	4.37
11. It's important for me to improve my overall grade point average, in order to get a good grade	4.62	4.60
13. If I can, I want to get better grades in practice using Quizizz than other students	4.24	4.63
30. I want to excel in the intermediate grammar class to show my ability to family, friends, and others	4.07	4.45
32. Using avatars in Quizizz is fun for me	3.48	3.82
36. I'm interested in memes in Quizizz	3.41	3.85
38. Ranking makes me more challenged in doing exercises using Quizizz	4.14	4.33

	Male	Female
39. Getting power ups is fun for me	4.31	4.48
Average	4.07	4.32

In the extrinsic motivation, males have 4.07 for the mean score. Meanwhile, females have 4.32 for the mean score. In the question number 13, females have a higher motivation than males. It means that females fought for their scores to get higher than others. Moreover, related to extrinsic motivation, it is found that the difference distance in the mean score is far in question number 36. From the data, females have a higher mean score than males. It means that the females have a high extrinsic motivation.

c. Task Value

Based on the task value, the students have the differentiation based on gender.

Table 4. Task Value

Items	Mean Score	
	Male	Female
4. I think I can use what I learned on	3.83	3.88
10. It is important for me to understand intermediate material	4.66	4.79
17. I am very interested in using Quizizz in learning intermediate grammar	3.93	3.82
23. I think using Quizizz is useful for me	4.10	4.12
26. I like doing exercises on the Quizizz app	3.59	3.91
27. Understanding the exercises on the Quizizz app is very important to me	3.76	4.13
Average	3.98	4.11

In the task value, males have 3.98 for the mean score. Meanwhile, females have 4.11 for the mean score. In question number 17, the males have a higher score than females. It means that males are very interested in using Quizizz in intermediate grammar. Then, in question number 23, males and females have almost the same scores. It means that quizizz is very useful for them. Moreover, related to the task value, it is found that the difference distance in the mean score is far in question number 26. From the data, females have a higher mean score than males. It means that the females have a high task value.

2. Expectancy Components

a. Control of Learning Beliefs

Based on the control of learning beliefs, the students have the differentiation based on gender.

Table 5. Control of Learning Beliefs

Items	Mean Score	
	Male	Female
2. Quizizz is used according to my way of learning	3.83	3.73
9. I feel guilty that I didn't get the right answer while practicing using Quizizz	3.93	4.22
18. If I try hard, then I can understand the material of intermediate grammar well	4.28	4.57
25. If I don't get good grades in practice using Quizizz, it's because I didn't try hard enough	3.76	3.87
Average	3.95	4.10

In the control of learning beliefs, males have 3.95 for the mean score. Meanwhile, females have 4.10 for the mean score. In question number 25, females have a higher score than males. It means females have strong beliefs that they do not effort hard if the score is bad. Moreover, related to the control of

learning beliefs, it is found that the difference distance in the mean score is far in question number 9 and 18. From the data, females have a higher mean score than males. It means that the females have a high control of learning beliefs.

b. Self-Efficacy for Learning and Performance

Based on the self-efficacy for learning and performance, the students have the differentiation based on gender.

Table 6. Self-Efficacy for Learning and Performance

Items	Mean Score	
	Male	Female
5. I believe I will get good grades using Quizizz	3.66	3.60
6. I'm sure I can answer the most difficult test on Quizizz for intermediate grammar class	3.28	3.27
12. I believe I can understand the basic concepts of learning intermediate grammar	4.17	4.06
15. I believe I can understand the most difficult intermediate grammar material	3.38	3.48
20. I am sure that I can do the exercises in the Quizizz application in the intermediate grammar course very well	3.97	3.84
21. I hope to do my best in the intermediate grammar course	4.52	4.69
29. I believe I can use the Quizizz application when doing exercises in the intermediate grammar class	3.83	4.00
31. I feel I can give my best in this class	3.97	3.84
Average	3.85	3.85

In the self-efficacy for learning and performance, males have 3.85 for the mean score. Meanwhile, females have the same mean score. Even though they have the same score, there are many numbers of questions that are led by males. In question number 29, males have a higher score than females, which means that males are very confident in using Quizizz. Moreover, related to the self-efficacy for learning and performance, it is found that the difference distance in the mean score is far in question number 21 and 29. From the data, females and males have the same mean score. It means that they are equal in self-efficacy for learning and performance.

3. Affective Components

a. Test Anxiety

Based on the test anxiety, the students have the differentiation based on gender.

Table 7. Test Anxiety

Items	Mean Score	
	Male	Female
3. When I do exercises with Quizizz, I feel inadequate compared to my friends	2.90	2.57
8. When I do exercises using Quizizz, I think of questions that I can't answer	3.69	3.87
14. When I do exercises using Quizizz I am afraid of getting low rankings	3.79	4,19
19. I feel anxious when I go to practice using Quizizz	3.14	3.52

28. I feel my heart skip a beat when I do exercises using Quizizz	3.52	3.93
Average	3.41	3.62

In the test anxiety, males have 3.41 for the mean score. Meanwhile, females have 3.62 for the mean score. In question number 14, females have higher anxiety than males, it is because they are scared to get a low rank in Quizizz. Moreover, related to the test anxiety, it is found that the difference distance in the mean score is far in question number 28. From the data, females have a higher mean score than males. It means that the females have a high anxiety.
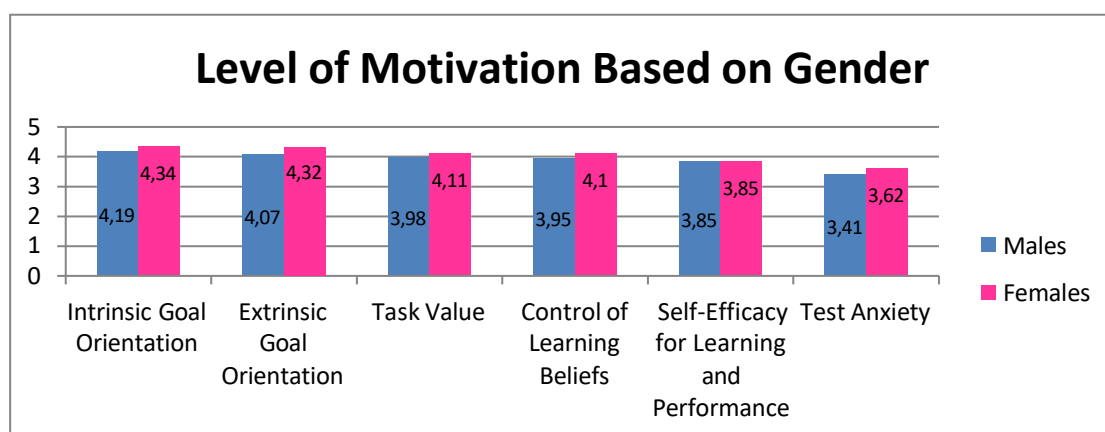
Figure 1. Level of Motivation Based on Gender

The above graphic is the mean score of students in motivation subcomponents. In that graphic, females' mean score is higher than males. In the intrinsic goal orientation, males had a 4.19 mean score, and females had a 4.34 mean score. In the extrinsic goal orientation, males had a 4.07 mean score, and females had a 4.32 mean score. In the task value, males had a 3.98 mean score, and females had a 4.11 mean score. In the control of learning beliefs, males had a 3.95 mean score, and females had a 4.10 mean score. In the self-efficacy for learning and performance, males and females had the same mean score which is 3,85. In the test anxiety, males had a 3,41 mean score, and females had a 3.62 mean score. Hence, the level of motivation among them is high, but females are higher.

Discussion

In the findings, the level of motivation between males and females is different. Females have a higher level of motivation than males. In the intrinsic goal orientation, males had a 4.19 mean score, and females had a 4.34 mean score. In the extrinsic goal orientation, males had a 4.07 mean score, and females had a 4.32 mean score. In the task value, males had a 3.98 mean score, and females had a 4.11 mean score. In the control of learning beliefs, males had a 3.95 mean score, and females had a 4.10 mean score. In the self-efficacy for learning and performance, males and females had the same mean score which is 3,85. In the test anxiety, males had a 3,41 mean score, and females had a 3.62 mean score.

The research about the motivation in Quizizz based on gender is very little in the journal. Many of them just separate the participants based on gender but do not analyze it. It is shown in the research of Razali et al. (2020) and the research of Escobar Fandiño et al. (2019). Therefore, the research about the motivation in Quizizz based on gender is still very limited.

However, there are many pieces of research about the motivation between males and females in general. The motivation level of female and male students in this research is high. However, the females' motivation is higher than males. Feng et al. (2013) support this result, they stated that the students' motivation can affect by their gender; females have higher achievements in learning than males. In addition, the research of Aldosari (2014) is also in line with this research. He stated that females are better than males because they have high motivation and positive attitudes toward learning.

However, the result of this research is the opposite of the research of Cortright et al. (2013). Their result is that male students have higher intrinsic motivation than females. It is shown on male students' motivation increased by 6.1%. Meanwhile, females' motivations only increase by 0.3%.

Conclusion

From the data that had been analyzed and discussed, there have to be conclusions in this research. There are differences in six subcomponents of motivation between male and female students. The motivation level of females is higher than males in the five motivation subcomponents. It had analyzed by the mean score and standard deviations.

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