

## Investigating the motivation, participation, and achievement of students: a comparative study of gender-based EFL classroom

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### Abstract

This research focused on students' motivation, class participation and achievement in male and female class as well as mixed class. The research used the quantitative method to investigate the students' motivation, participation, and achievement in different classroom composition. The findings of this research indicated that there is no difference in students' motivation in gender-based EFL classroom. Male class gained the highest scores in performance goal and achievement goal in factors of motivation. Meanwhile, female class gained the highest scores in science learning value, and learning environment stimulation and mixed class gained the highest scores in self-efficacy and active learning strategy. Students' participation in gender-based EFL classroom for male class gained the highest scores in all factors of participation. It means that students of male class more participate in EFL class than students of female class and mixed class.

### Keywords:

Motivation; achievement, gender

### 1 INTRODUCTION

This study focused on students' motivation because many of these other variables are dependent on the motivation for their effects to be realized. For example, language learning strategies probably will not be used if the individual is not motivated to learn the language, and there is no reason to take risks using the language if there is no intention to learn it. Motivation is reflected to be one of the primary determining factors in L2 development (Oxford & Shearin, 1994). It mainly determines the level of active, personal involvement in L2 that enables learners to develop their potential L2 skills.

This research refers to using six factors of motivation (Tuan, Chin, & Shieh, 2005). Firstly, *self-efficacy*, students believe in their ability to perform well in science learning tasks. Secondly, *active learning strategies*, students take an active role in using some strategies to hypothesize different knowledge based on their previous understanding. Thirdly, *science learning value*, the value of science learning is to let students acquire problem-solving competency, experience the inquiry activity, stimulate their thinking, and find the relevance of science in daily life. Fourthly, a *performance goal*, the student's goals in science learning are to compete with other students and get

attention from the teacher. Fifthly, an *achievement goal*, students feel satisfaction as they increase their competence and achievement during science learning. Sixthly, *learning environment stimulation*, in the class, learning environment surrounding students, such as curriculum, teachers' teaching, and pupil interaction influenced students' motivation in science

For examining the participation, the researcher observed the classroom activities. This study used a checklist form to get information about students' participation. The checklist of participation is designed based on categories of participation by Dancer and Kamvounias (2005) consist of preparation, contribution to the discussion, group skills, communication skills, and attendance.

## **2 METHOD**

### **2.1 Design**

The research used the quantitative methodology to investigate the students' motivation, participation, and achievement in different classroom composition. Comparative study is a wide-ranging term including both quantitative and qualitative comparison of social entities. The underlying goal of the comparative analysis is to search for similarity and variance. Those searching for similarity (i.e., the regression equation) often apply a more general theory and search for universals or underlying general processes across different contexts (Mills, Van de Bunt, & De Bruijn, 2006).

### **2.2 Procedure**

This study conducted three junior high schools at South Sulawesi, Indonesia. The population of this study is students in grade 8. Junior High School 1, 2, and three consists of forty-six, fifty-seven, and one-hundred and sixty-eight students respectively. In this research, the extraction of research data used the technique of purposive sampling.

## **3 RESULTS**

The questionnaire was used to know the students' motivation; observation was used to know the students' participation by using checklist form and instrument test used to know the students' achievement.

### **3.1 The Data of Questionnaire**

The first factor in students' motivation is self-efficacy. Self-efficacy is about students believed in their ability to perform well in science learning tasks. What the students feel confident about understanding difficult science concepts. Alternatively, when they find the science content difficult, they try to learn it or do not. The Table 1 below shows in details the questionnaire data in this study.

Table 1. Students' motivation

Factors of Motivation	Male Class		Female Class		(Mixed Class	
	Sum	Mean	Sum	Mean	Sum	Mean
Self-Efficacy	293	2.93	286	2.86	297	2.97
Active Learning Strategy	262	3.28	260	3.25	265	3,31
Science Learning Value	256	3.20	260	3.25	237	2.96
Performance Goal	128	2.13	121	2.02	117	1.95
Achievement Goal	296	3.70	254	3.18	230	2.88
Learning Environment Stimulation	180	3.00	185	3.08	169	2.82
Total	1,415	3.04	1,366	2.94	1,315	2.815

Based on the data in Table 1 above, self-efficacy shows that male class gained total score from questionnaire 293 with a mean score of 2.93 while female class had a total score of 286 and its mean was 2.86. The mixed class had 297 with the mean score was 2.97. The data means that the students of the mixed class have the highest score in self-efficacy aspect than male class and female class. The second factor of students' motivation is an active learning strategy. In this factor, students take an active role in using a variety of strategies to construct new knowledge based on their previous understanding. They asked when learning new science concepts; they attempt to understand them. Then when they meet science concepts that they do not understand, they still try to learn them. The table explained about active learning strategy of students. Based on the data from the questionnaire, the male class gained a total score of 262 with a mean score of 3.28 while female class had total score 260 and its mean was 3.25. The mixed class had 265 with the mean score was 3.31. The data means that the students of the mixed class have the highest score in active learning strategy aspect than male class and female class.

The third factor of students' motivation is Science Learning Value. The value of science learning is to let students acquire problem-solving competency, experience the inquiry activity, stimulate their thinking, and find the relevance of science to daily life. If they can perceive these critical values, they will be motivated to learn science. Based on the data from the questionnaire, the male class had a total score of 256 with a mean score of 3.20 while female class had total score 260 and its mean was 3.25. The mixed class had 237 with the mean score was 2.96. The data shows that the students of the female class have the highest score in science learning value aspect than male class and mixed class.

The fourth factor of students' motivation is a performance goal. The student's goals in science learning are to compete with other students and get attention from the teacher. They asked what they I participate in science courses to get a good grade, and they participate in English subject so that the teacher pays attention to them. Based on the data from the questionnaire, the male class had a total score of 128 with a mean score of 2.13 while female class had a total score of 121 and its mean was 2/02. The mixed class had 117

with the mean score was 1.95. The data shows that the students of the male class have the highest score in the performance goal aspect than female class and mixed class.

The fifth factor in students' motivation is an achievable goal. Students feel satisfaction as they increase their competence and achievement during the English subject. At this part, students asked during a learning process; they feel most fulfilled when they attain a good score in a test, and during a learning process, they feel most fulfilled when the teacher accepts their ideas. Based on the data, the male class had a total score of 295 with a mean score of 3.70 while female class had total score 254 and its mean was 3.18. The mixed class had 230 with the mean score was 2.88. The data shows that the students of the male class have the highest score in the performance goal aspect than female class and mixed class.

The sixth factor of students' motivation is learning environment stimulation. In the class, learning environment surrounding students, such as curriculum, teachers' teaching, and pupil interaction influenced students' motivation in science. Based on the data, the male class had total score 180 with a mean score of 3.00 while female class had a total score of 185 and its mean was 3.08. The mixed class had 169 with the mean score was 2.82. The data shows that the students of the female class have the highest score in the performance goal aspect than the male class and mixed class. Based on the data, the male class gained the highest scores in performance goal and achievement goal in factors of motivation. While female class gained the highest scores in science learning value and learning environment stimulation and mixed class gained the highest scores in self-efficacy and active learning strategy.

### 3.2 The Data of Observation

For examining the participation, the researcher observed the classroom activities. The researcher used a checklist form to get information about students' participation. The result of all dimension of students' participation can be seen in the summary Table 2 below.

Table 2. Students' Participation

Factors of Participation	(Male)		(Female)		(Mixed Class)	
	Sum	%	Sum	%	Sum	%
Preparation	47	78	44	73	47	78
Contribution to Discussion	69	86	62	77	50	62
Group Skill	66	82	61	76	62	77
Communication Skill	29	48	25	41	14	23
Attendance	20	100	20	100	20	100
Total	231	79	212	73	193	68

Category	participates actively	enough to participate actively	enough to participate actively
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The first factor of students' participation is about preparation. In this part, the researcher wants to know what the students are coming prepared with the necessary materials (e.g., textbooks, homework (if given), preparatory materials required to complete in-class activities) and asking the teacher questions about course content. Based on the data, the male class had total score 47 with percentage score 78% while female class had total score 44 and its percentage was 73%. The mixed class had total score was 46 with a percentage score was 78%. The data shows that the students of male class and mixed class have a higher score in preparation aspect than female class.

The second dimension of students' participation is a contribution to the discussion. The indicator is volunteering answers to teacher questions about course content and active listening (when required) during lectures (can have points deducted for mobile phone use, sleep, non-pertinent chatter during teacher talk). Based on the data from the checklist, the male class had total score 69 with percentage score 86% while female class had a total score of 62 and its percentage was 77%. The mixed class had total score was 50 with a percentage score was 62%. The data shows that the students of the male class have the highest score in contribution to discussion aspect than female class and mixed class.

The third dimension of students' participation is group skill. The indicators in this part are participating in course content activities appropriately and pro-actively, according to type (e.g., pair/group/class discussions, role plays, presentations) and helping others who are having trouble with course content. Based on the data from observation, the male class had total score 66 with percentage score 82% while female class had a total score of 61 and its percentage was 76%. The mixed class had a total score of 62 with a percentage score was 77%. The data shows that the students of the male class have the highest score in the group skill aspect than female class and mixed class.

The fourth dimension is communication skill. The indicators of this part are following teacher's instructions or giving instructions to others and using English at all times, including downtime in the classroom. Based on the data from checklist form, the male class had total score 48 with percentage score 48% while female class had total score 25 and its percentage was 41%. The mixed class had total score 14 with percentage score was 23%. The data showed that the students of the male class have the highest score in communication skill aspect than female class and mixed class.

The last dimension of students' participation is attendance. The indicator is active attendance in the classroom. Based on the data from checklist form, male class, female class, and the mixed class had total score 20 with percentage score was 100%. The data showed that all classes had the same score. Based on the data, the male class gained the highest scores in all factors of participation. The male class had percentage 79 %, this fall in high participation category, the female class had percentage 73 %, and it falls in

moderate participation category, and the mixed class had percentage 68%, and it falls in moderate participation category.

### 3.3 The Data of Test

A test used to know students achievement. The test included about writing, reading, listening and speaking. The result of all tests of students' achievement in English skills can be seen in Table 3 below.

Table 3. Students' Achievement

Language Skill	(Male Class)		(Female Class)		(Mixed Class)	
	Sum	Mean	Sum	Mean	Sum	mean
Writing	1,475	73.75	1,460	73	850	42.5
Reading	2,000	100	2,000	100	1,950	97.5
Listening	748	37.4	1,512	75.6	352	17.6
Speaking	1,692	84.6	1,691	84.55	1,665	83.25
Total	1,475	73.94	1,460	83.29	850	60.21

The first test is about students' skill in writing. The indicator of this competency is students can write using simple past tense. The table above explained about students' achievement in writing skill. Based on the result of the test, male class gained total score 1,475 with mean 73.75 while female class had total score 1,460 with mean 73 and the mixed class had total score 850 with the mean score was 42.5. The data showed that male class gained the highest score in writing skill.

The second test was about students' skill in reading. The indicator of this competency was students can understand simple past tense sentences (actions or situations that occurred in the past). Based on the data from the test, the male class had total score 2,000 with a mean score of 100 while female class had total score 2,000 and its mean was 100. The mixed class had a total score of 1,950 with the mean score was 97.5. The data showed that the students of male class and female class have the highest score in reading skill than mixed class.

The third test was about students' skill in listening. The indicator of this competency was students can understand simple past tense sentences (actions or situations that occurred in the past). Based on the data from the test, the male class had total score of 748 with a mean score of 37.4 while female class had total score 1,512 and its mean was 75.6. The mixed class had total score 352 with the mean score was 17.6. The data showed that the students of the female class have the highest score in reading skill than male class and mixed class.

The last test was about students' skill in speaking. The indicator of the competency was the students are to tell stories using simple past tense sentences. Based on the result of the test, male class gained total score 1,692 with mean 84.6 while female class had total score 1,691 with mean 84.55 and the mixed class had total score 1,665 with the mean score was 83.25. The data

showed that female class gained the highest score in speaking skill than male class and mixed class. Based on the data, female class gained the highest scores in language skills. The male class had a mean score 73.94, this classified as good, the female class had a mean score of 83.29, and is classified as very good, and the mixed class had mean score 60.21, and is classified as fair.

## 4 DISCUSSIONS

### 4.1 Students' Motivation

Male class gained the highest scores in performance goal and achievement goal. Meanwhile, female class gained the highest scores in science learning value and learning environment stimulation. Mixed class gained the highest scores in self-efficacy and active learning strategy. This finding is consistent with the result of Akram and Ghani (2013) research showing that there are no overall statistically significant differences between male and female participants in their motivation to learn English

From six factor of motivation that design by Tuan et al. (2005) that every class had the highest score for two factors from six factors of motivation. The male class had the highest score in the performance goal aspect. In this aspect, the student's goals in science learning are to compete with other students and get attention from the teacher. This aspect consistent with Williams and Burden (2004) have attempted to achieve a synthesis of the conception of motivation by defining it as:

*"a state of cognitive and emotional arousal, which leads to a conscious decision to act, and which gives rise to a period of sustained intellectual and physical effort in order to attain a previously set goal (goals)."*

Beside performance goal aspect, the male class had the highest score in achievement goal aspect. In this aspect, students feel satisfaction as they increase their competence and achievement during science learning. This is consistent with Dornyei and Ottó (1998) that provided a summary of the previous theoretical, and empirical studies of factors of effect on L2 learners' motivation and one of them is goal theories propose that human action is urged by purpose and critical concern with various objectives.

The female class had the highest score in science learning value aspect. This aspect explained that the value of science learning is to let students obtain problem-solving competency, experience the inquiry activity, stimulate their thinking and find the relevance of science to daily life. If they can perceive these essential values, they will be motivated to learn science. Motivation encompasses the primary determining factors in second language development (Oxford & Shearin, 1994). It mainly determines the level of active, personal involvement in the second language that enables learners to develop their potential second language skills. Besides that, the female class had the highest score in the learning environment stimulation aspect. This aspect is about in the class, learning environment surrounding students, such as curriculum, teachers' teaching, and pupil interaction influenced students' motivation in science. This is consistent with Brown, and Lee (2015) states that there are six

general guidelines which can help the teachers to infuse their English Second Language classroom with some intrinsically motivating dynamics. One of them is content-based activities and courses are intrinsically motivating. The teachers might strive to focus their students on interesting, relevant subject-matter content that gets them more linguistically involved with meanings and purposes.

Students from mixed class had the highest score in self-efficacy aspect. In this aspect, students believe in their ability to perform well in science learning tasks. This is consistent with Dornyei and Ottó (1998) stated that self-efficacy theory refers to the individual's judgment of their capabilities to perform particular tasks. The other aspect is active learning strategies. In this aspect, students take an active role in using a variety of strategies to construct new knowledge based on their previous understanding. This is consistent with Brown and Lee (2015) states that one of six general guidelines which can help the teachers to infuse their English Second Language classroom with some intrinsically motivating dynamics is learner-centered, cooperative teaching is intrinsically motivating. The teachers give students opportunities to make choices in activities or topics.

#### **4.2 Students' Participation**

Based on the data that found under observation, the researcher gained the summary that male class gained the highest scores in all factors of participation. It means that students of male class more participate in EFL class than students of female class and mixed class. These findings are consistent with Guarisco (2010) reported that in public school single-sex environments, student achievement improves, particularly for minority students or students in poverty, because of improved behaviors and teacher focus on learning-style differences.

Male class gained the highest score at motivation factor. This factor gave influence to the participation. This reality is consistent with Cohen (1991), students are more motivated, learn better, become better critical thinkers, and have self-reported gains in character when they are prepared for class and participate in discussions. In this research, the finding showed that the female class gained an excellent score about participation. Just a little difference score than male class. This is consistent with Guarisco (2010) also reported that females also get benefit from single-sex environments. Sexual harassment is an unfortunate problem in coeducational environments.

#### **4.3 Students' Achievement**

A test used to know students achievement. The test included about writing, reading, listening and speaking. The steps in designing the test are: consider the goal of the test. In this test, the goals of the test based on the basic competency from the English syllabus for Eight Grade. Based on the basic competency, the researcher determines the indicators. Then maintain consistency between goals for the subject, methods of teaching, and the tests used to measure the achievement of goals. Next, use testing methods that are appropriate to learning goals.

The male class gained the highest score in writing skill. The students of male class and female class have the highest score in reading skill than mixed class. The students of the female class have the highest score in reading skill than male class and mixed class. Female class gained the highest score in speaking skill than male class and mixed class. This result is inconsistent with Tuan et al. (2005)) showed the fact that students' motivation was significantly correlated to both their previous and current science achievement scores indicate s the stability of motivation about students' achievement. Thus, science achievement is often used as indirect evidence of students' motivation.

## 5 CONCLUSION

This study deals with students' motivation in gender-based EFL classroom (Samad, Fitriani, Patak, & Weda, 2018). This study shows that there is no difference in students' motivation in gender-based EFL classroom. Male class gained the highest scores in performance goal and achievement goal in factors of motivation. Meanwhile, female class gained the highest scores in science learning value, and learning environment stimulation and mixed class gained the highest scores in self-efficacy and active learning strategy. It means that single-sex and mixed classes have high motivation in English learning. About students' participation in gender-based EFL classroom, male class gained the highest scores in all factors of participation. It means that students of male class more participate in EFL class than students of female class and mixed class.

The researcher made the classification of participation categories based on the percentage of their score. The male class had percentage 79 %, this fall in high participation category, the female class had percentage 73 %, and it falls in moderate participation category, and the mixed class had percentage 68%, and it falls in moderate participation category. The researcher can conclude that students in single-sex classes are more conducive than students in mixed class regarding students' participation when they are learning English. About students' achievement in gender-based EFL classroom, after calculating a total score from all language skill, the result showed that female class gained the highest scores in language skills. Based on the classification, the male class had mean score 73.94, this classified as good, the female class had mean score 83.29, and is classified as very good, and the mixed class had mean score 60.21, and it classified as fairly. Based on the finding, the researcher can conclude that students in single-sex classes are more conducive than students in mixed class regarding students' achievement when they are learning English.

## 6 RECOMMENDATION

Some suggestions can be given related to the researcher's conclusion. To the English teachers for the male class should give attention to students' motivation in self-efficacy, active learning strategy, science learning value and learning environment stimulation factors. To the English teachers at the female class should give attention to students' motivation in self-efficacy, active

learning strategy and performance goal and achievement goal. Moreover, to the English teachers at mixed class should give attention to students' motivation in science learning value and performance goal, achievement goal and learning environment stimulation factors. To the government, the single-sex class becomes one suggestion to improve students' motivation, participation, and achievement. To the further research, it is suggested find out the teachers' attitude towards motivation, participation, and achievement of students. This is important to measure the implementation of the National Standards in School-based EFL Curriculum (Iskandar, 2015).

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