

THE MOTIVATIONAL LEVEL AND GENDER EFFECT ON ENGLISH READING ACHIEVEMENT OF THE FIRST SEMESTER OF ENGLISH STUDENTS AT STKIP PGRI JOMBANG

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A. Background

Reading is one of the fourth English skills which is taught in every level in English classroom, besides, the reason for teaching reading to the students is because it belongs to the basic language skills in English, just as important as speaking, listening and writing. Besides, reading ability is a general power, the easiest ability to acquire in a language and it is essential to succeed in all academic subjects since it involves the active of grammar, idioms and vocabularies.

For the first semester of university level who come from different educational background, the classroom activity in learning reading often finds difficulties in understanding it. Even though it has been familiarized since the students were at Elementary School to Senior High School level sometimes still get problems. Recognizing those phenomena, the teacher should evaluate what problems do occur to the students, whether they arise from the students themselves or from the teacher themselves. We may not judge that those come only from students, but as the teachers should introspect how the way they teach in order to make them enjoy and interest in learning English.

Psychologist suggested that people vary in the way they attribute causes to events.² The basic contrasts are shown in Table 1.1.

Table 1. Locus of Control

	Locus of control	
	Internal	External
Stable	Ability	Task difficulty
Unstable	Effort	Luck

Based on an attribution analysis of causes above inferred that :

Four basic causes of achievement are postulated: ability, task difficulty, effort and luck. These are analyzed along two dimensions; stability and locus of control. The stability dimension contrasts ability and task difficulty, both of which are thought to be relatively modifiable, with effort and luck, each of which may possibly change on another attempt to perform a task. The locus of control dimension contrasts causes which reside within the individual (ability and effort) and causes which are outside (task difficulty and luck). In principle, people may attribute causes to any of these four factors. In practice people may be systematic in what they view to be important causally. On the other hand,

¹Dosen pada Jurusan Pendidikan Bahasa Inggris di STKIP PGRI Jombang.

²Brown, H. *Teaching by Principles : An Interactive Approach to Language Pedagogy* (USA : Pearson Education, 2007), 220.

unstable factors such as effort and luck are psychologically prominent, persistence and motivation will be higher since the learner will see himself as having a potential impact on learning progress.³

In such cases, the stimulus for motivation would be the inherent interest of learning, because classrooms or learning situations might be attractive places them. As the consequences, the students at least do not have any burden, even they will be very happy to study English in the classroom. In addition, when they enjoy and enthusiast in learning English, automatically it will impact their achievement as the students' result of their study.⁴ Layman provided interrelationship factors as the Dimensions of motivational sources. It is presented in Table 1.2 below.

Table 2 Dimensions of Motivational Sources

	Within the learning context	The result of learning
Outside the individual	Materials teaching	Constraints, rewards
Inside the individual	Success	Goals

From the table above we can see that to determine whether the students have successfully achieved the goal or not, it depends on an outside and inside the individuals which relate within the learning context and the result of learning. Outside individual means an external factor of individuals, it can be gained from the materials given, the classroom activities, the teacher style of performing materials, etc. The result of this factor imply to the students' compensation. Besides, inside the individual means the individuals' intension to the study which leads to their success and achieve their goals.

In accordance with male and female, several studies on sociolinguistics theory suggested that female generally do better than male. For instance; investigated on a study of 490 (257 male and 233 female) Chinese University students in Hongkong. The female students achieve higher over-all means on ten tests of general L2 English proficiency and in many cases the differences were significant.⁵

Furthermore, other studies produced that female have more positive attitudes to learning L2 French in Canada than males.⁶ Those investigations proved that female tended to have higher motivation than male, therefore, the researcher wanted to attest whether it will be the same result or vice versa.

³Skehan, Peter. *Individual Differences in Second-Language Learning* (London : Edward Arnold, 1989), 50.

⁴Sugimoto, T., dkk. *Exploring the Role of Attitude, Motivation and Gender in EFL Learning*.(Online), (<http://journal.cs/survey/html>, accessed on March 8, 2011).

⁵Ellis, R. *The Study of Second Language Acquisition* (New York : Oxford University Press, 1994), 202.

⁶Ibid, 203.

Based on some reasonabove, the researcher formulated the research problems as follows : Do motivational levels affect on the students' English reading achievement? Do genders affect on the students' English reading achievement? Do motivational level and gender provide interaction effect on the students' English reading achievement?

B. Research Method

This research belongs to quantitative research which employs causal comparative (ex post facto) as the methodology. Since this study is investigating the combined effect of two independent variables, thus it is considered as factorial design.

Factorial design is one in which the researcher manipulates two or more variables simultaneously in order to study the independent effect of each variable on the dependent variable, as well as the effects caused by interactions among the several variables. Furthermore, the effect investigated by the first and second independent variables which stated in the first and second research problems are called main effects, whereas the third is referred to as the interaction effect.⁷

However, the two independent variables are not experimentally manipulated both motivational level and gender which are considered as discrete variable since they cannot be manipulated by the researcher, hence the design is included into factorial design. The factorial design was shown in Table 3 below :

Table 3 Factorial Design of Students' Motivational Level and Gender

Motivational Level (X ₁)	Gender (X ₂)	
	Male (X _{2.1})	Female (X _{2.2})
High (X _{1.1})	(X _{2.1} , X _{1.1})	(X _{2.2} , X _{1.1})
Moderate (X _{1.2})	(X _{2.1} , X _{1.2})	(X _{2.2} , X _{1.2})
Low (X _{1.3})	(X _{2.1} , X _{1.3})	(X _{2.2} , X _{1.3})

The population of this study involved all of the students of the first semester of English department at STKIP PGRI Jombang 2012-2013. The students' numbers both males and females were 210. The females numbers were 147 while male were 63.

The researcher employed stratified sampling in this study as the population consisted of a number of subgroups or strata that may differ in the characteristics being studied moreover,⁸ the researcher took equal numbers from each stratum or selection or select in

⁷Ary, D. et.al. 2002. *Introduction to Research in Education* (Belmont : Wadsworth Group, 2002), 311.

⁸Ibid, 167.

proportion to the size of the stratum in the population, thus it was recognized as proportional stratified sampling.⁹

The females' numbers were more than males' and it was for about seventy percent (70%), then males' percentage were thirty percent (30%). Since sample was representing the number of population, then, it was divided into two parts equally. According to the percentage above, the samples of females' were 74 and males' were 31.

Moreover, the students' motivational level was classified into high, moderate and low level. The students with moderate level both males and females got the furthest numbers, then they got the furthest percentage than high and low. In addition, a hundred percent must be divided into three categories, then, the moderate level attained (50%), and for the left percentage went to the high (25%) and low (25%) levels.

The proportion of each stratum was equaled both male with high, moderate, low levels; and female with high, moderate, low levels. The samples taken were provided in the table below.

Table 4. Stratified Sampling of Students' Motivational Level and Gender Based on its Percentage

Motivational Level	Gender	
	Male (30%)	Female (70%)
High (25%)	8	18
Moderate (50%)	16	37
Low (25%)	7	19
Total	31	74
	105	

From those six groups; male with high, moderate and low motivational level; female with high, moderate and low motivational level were taken randomly and proportionally, thus the data were represented the population.

The nature of the data determined the kinds of instrument used. Since this study has two independent variables, and one dependent variable. The two independent variables were motivational level and gender, while dependent variable was English reading achievement. Hence, the instruments employed in this research were questionnaire for students' motivational level and test of English reading achievement. The researcher gathered the instrument through these ways:

1. Translating the questionnaire into Indonesian language.
2. Developing English reading test.

⁹Ibid.

3. Validating questionnaire and test.
4. Testing instruments
5. Analyzing the result of student' questionnaire and test

C. Discussion

The data was analyzed based on the research problems to investigate the effect of the students' motivational level and genders on their English reading achievement, besides, it also observed the interaction effect caused by either motivational level or genders on the students' English achievement.

1. Univariate Analysis of Variance

The first step that the researcher did in analyzing the data was classifying the students' group into male (1) and female (2) based on their motivational level whether high (1), moderate (2) and low level (3). 26 students were categorized as having high motivational level; 8 males and 18 females, then, 53 students were moderate; 16 males and 37 females, the last was 26 students who were low level; 7 males and 19 females.

In relation to each of either male (1) or female (2), motivational level was determined as first independent variable or X_1 . Moreover, the students' English reading achievement was dependent variable which symbolized by Y . The data was analyzed using two-way ANOVA. Furthermore, the explanation above was simplified in the table 4.1 below:

Classification of Motivational Level and Gender

Between-Subjects Factors

Motivational Level	1	N
	2	26
	3	53
Gender	1	26
	2	31
		74

Mean Score, Std. Deviation and N for Each Subgroup Descriptive Statistics

Dependent Variable: English Achievement

Motivational Level	Gender	Mean	Std. Deviation	N
1	1	89.00	2.828	8

	2	92.33	3.835	18
	Total	91.31	3.834	26
2	1	72.62	7.509	16
	2	77.41	5.030	37
	Total	75.96	6.220	53
3	1	51.14	5.521	7
	2	54.42	7.471	19
	Total	53.54	7.050	26
Total	1	72.00	14.661	31
	2	75.14	14.727	74
	Total	74.21	14.707	105

The result of students' English reading achievement showed that females got better score than males. Mean score of males from high, moderate and low motivations were 89.00, 72.62, and 51.14 while females' score were 89.00 92.33, 77.41, and 54.42. It demonstrated that males' score were lower than females'

Levene's Test of Equality of Error Variances^a

After recognizing the descriptive statistical report, then the data showed a test of one of the assumptions underlying analysis of variance. The result of analysis called Levene's test of equality of error variance which provided in Table below:

Levene's Test table of Equality of Error Variances^a

Dependent Variable: English Achievement

F	Df1	Df2	Sig.
3.718	5	99	.004

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design : Intercept + X1 + X2 + X1 * X2

The value of variance of the dependent variable showed it significance at .004 level or .04%, since significance value should be less than .05, and therefore the value was significant. Thus, dependent variable (English reading achievement) may affect to independent variables (motivational level and gender).

2. Main Output of Two-Way ANOVA

The main output from two-way ANOVA is a table labelled Tests of Between-Subjects Effects. This gives us a number of pieces of information, moreover, to recognize interaction effect and main effect of the variables, the table was shown in Table below:

Table Tests of Between-Subjects Effects

Dependent Variable: English Achievement						
Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	19245.233 ^a	5	3849.047	117.242	.000	.856
Intercept	410046.256	1	410046.256	1.249E4	.000	.992
X1	15407.405	2	7703.703	234.655	.000	.826
X2	278.746	1	278.746	8.491	.004	.079
X1 * X2	11.848	2	5.924	.180	.835	.004
Error	3250.158	99	32.830			
Total	600736.000	105				
Corrected Total	22495.390	104				

a. R Squared = .856 (Adjusted R Squared = .848)

From that table it indicated the possibility of interaction and main effect, in this table we need to look at labeled X1*X2 to find out whether the interaction is significant. If the value is less than or equal to $\leq .05$ (e.g. .03, .01, .001), then there is a significant interaction effect. In the result of this study confirmed that the interaction effect was not significant (X1*X2: sig = .835). This indicated that there is no significant difference in the effect of motivational level on English reading achievement for males and females.

However, we did not have a significant interaction effect; therefore, we can safely interpret the main effects. To determine whether there is a main effect for each independent variable, check in the column marked Sig. next to each variable. If the value is less than or equal to .05 (e.g. .03, .01, .001), then there is a significant main effect for that independent variable. In the result showed that there is a significant main effect for motivational level (X1: sig = .000) for its F value 234.655, and gender (X2: sig = .004) and its F value 8.491. This means that students' motivational level both males and females for high, moderate and low levels differ in term of their English reading scores.

Furthermore, the effect size for the motivational level variable is provided in the column labeled Partial Eta Squared, it represents the proportion of variance of the dependent variable that is explained by the independent variable. Values for eta squared can range from 0 to 1. To interpret the strength of eta squared values the following guidelines can be used :

- .01 = small effect;
- .06 = moderate effect; and

- .14 = large effect.

Since the eta squared showed (.826), this can be classified as moderate effect. So, while this effect reaches statistical significance, the actual difference in the mean values is moderate. From the Descriptive table we can see that the mean scores for the three motivational levels are 91.31, 75.96, 53.54. The difference between motivational level appears to be of moderate practical significance.

3. Multiple Comparisons

Output SPSS warned that Post Hock test were not performed for gender because there were fewer than three groups, thus, it was provided by the table labeled Multiple Comparisons. Sig. for any values less than .05. Significant results are also indicated by a little asterisk in the column labeled Mean Difference. In this study covered that motivational level sig at .000 level. This means that each of students' motivational level is different from each level. The result showed in Table below :

Multiple Comparisons of Motivational Level table

Multiple Comparisons						
English Achievement						
Tukey HSD						
(I)	(J)	95% Confidence Interval				
Motivat	Motivat	Mean Difference				
ional	ional	(I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
Level	Level					
1	2	15.35*	1.372	.000	12.08	18.61
	3	37.77*	1.589	.000	33.99	41.55
2	1	-15.35*	1.372	.000	-18.61	-12.08
	3	22.42*	1.372	.000	19.16	25.69
3	1	-37.77*	1.589	.000	-41.55	-33.99
	2	-22.42*	1.372	.000	-25.69	-19.16

Based on observed means. The error term is Mean Square (Error) = 32.830.

*. The mean difference is significant at the .05 level.

From that table indicated that students' motivational level were different, the high level (1) was differ from the moderate (2), while the moderate also differ from the low level (3) and vice versa. The result showed that all of the three motivational level significant at .000

level which means that each level of students' motivation for high (1), moderate (2) and low (3) is different.

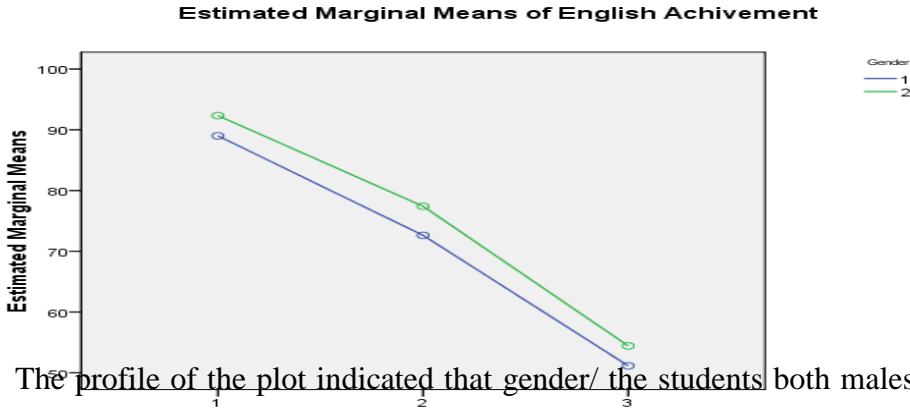
4. Plots

SPSS output of plot defined the English reading scores for males and females. This plot is very useful to inspect the relationship among variables. The plots are often useful to inspect first to help better understand the impact of two independent variables. The high score went to those who had high motivation, and the difference between high and low tended to far (91.3 as compared with 53.5). The result demonstrated in Table below :

Estimated Marginal Means of Total English Reading Achievement
English Reading Achievement

Tukey HSD				
Motivational Level	N	Subset		
		1	2	3
3	26	53.54		
2	53		75.96	
1	26			91.31
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed. Based on observed means. The error term is Mean Square (Error) = 32.830.



The profile of the plot indicated that gender/ the students both males (1) and females (2) who had high motivation got their score 91.31, this means the score is high since it is more than 85 (≥ 85), while the moderate motivation (2) also achieved moderate score 75.96 since it is more than 60 (≥ 60), and the low motivation (3) attained the low score 53.54. All of the three levels are significant at 1.000, hence, due to the students' motivational level is different, the students' English reading achievement also different too. The high students' motivation the high students' score, however, the low students' motivation the low the students' score.

The results of the analysis above could be concluded as follows :

A two-way between-groups analysis of variance was conducted to explore the impact of motivational level and gender on English reading achievement. Subjects were divided into three groups according to their level of motivation (Group 1: high motivation; Group 2: moderate motivation; Group 3: low motivation). There was a statistically significant main effect for motivational level [$F(2, 99) = 234.6$, $p = .000$]; however, the effect size was moderate (partial eta squared = .826). Post-hoc comparisons using the Tukey HSD test indicated that the mean score for the high motivational level ($M = 91.31$, $SD = 3.83$) was significantly different from the moderate level ($M = 75.96$, $SD = 6.22$) and the low level ($M = 53.54$, $SD = 7.05$). The main effect for gender [$F(1, 999) = 8.49$, $p = .04$] and the interaction effect [$F(2, 999) = .180$, $p = .835$] did not reach statistical significance.

5. The Difference between Students' Motivational Level and Gender in English Reading Achievement

The finding of this study revealed that the students' motivational level affected their English reading achievement. The students with high motivational level attained the high score on their English reading achievement, for those who had moderate and low level got the moderate and low score as well, furthermore, it occurred for both males and females which meant that there were no significant differences when males or females got high motivation, they will achieve high score.

The result of this finding conveyed that females' scores were higher than males' even for those who got high, moderate and low motivation. It was supported by the previous theory that many of them claimed females tended to have higher motivational level and score than males.

Consistently more integrative motivation in girls. One reason perhaps is that girls appear more confident of parental support for language learning.¹⁰ Whatever the rights or wrongs of the matter, some parents seem to regard learning languages as suitable for girls, while the boys are encouraged in the direction of subjects (like electronics and mechanics perhaps).

Thus, the fact exposed from this study that females still keep consistency with their abilities and willingness to study, thus, they can achieve better scores than males, while males

¹⁰Johnson, Keith. *An Introduction to Foreign Language Learning and Teaching* (England: Pearson Education Longman, 2001), 132.

still need to be more conscious and aware for their selves improvement when they felt they do not want to leave behind from females.

6. Interaction Effect among Motivational Level, Genders and English Reading Achievement

Interaction among variables occurred when those independence variables (X) interrelated significantly to dependence variable (Y). However, this study reflected that both motivational level (X1) and gender (X2) were not interrelated significantly, thus, the possibility of interaction effect was not occur. This indicated that there is no significant difference in the effect of motivational level on English reading achievement for males and females.

It seemed that motivation played important role for individual's success both males and females. The high motivation is, the high score will be, on the other hand, the moderate or low motivations are, the moderate and low score will be. In addition, gender also influence in achieving a result, females whom we addressed as having high motivation and enthusiasm proved that they could get better achievement, while males did not. It could be some of them did not like English, duo to their low motivation they got low score.

D. Conclusion

The conclusion was formulated which based on the findings related to the research problems. Firstly, this study revealed that the students' motivational level significant at .000 level which means that students with different motivational level have significantly different English reading achievement, thus, hypothesis is accepted while null hypothesis is rejected.

Secondly, gender also significant at .004 level or .04% which indicates that male and female students have different English reading achievement, hence, hypothesis is accepted since null hypothesis is rejected.

Thirdly, there is no significance interaction effect of motivational level and gender (X1*X2 significant = .835). This indicates that there is no significant difference in the effect of motivational level on English reading achievement for males and females. As a result, hypothesis is rejected since null hypothesis is accepted.

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