

Are Women Still Better at Learning Languages? Examining Gender Differences on Learners' Academic Performance at University

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Abstract

Several past studies such as Guimond and Rousell (2001), Chatard, Guimond and Selimbegovic (2007) and Heinzmann (2009) investigated gender stereotypes on language learning at school. They found that girls were better at language learning than boys. Whatever Japanese university students are majoring in, English is one of compulsory subjects for them to complete their degrees. The author of this study is currently teaching English at one of the Japanese universities and he has noticed that female university students tend to get higher grades in many of his English classes. The aim of this study is to investigate whether female students perform better at learning English at university level. In addition, it examines reasons why female students are better at learning English than male students. Participants of this study are both 1st and 2nd year students of a private university in Japan (N=386: male students & N=232: female students). This study adopts the quantitative approach. Their final grades in the past two years were quantitatively examined. The results show that female students tend to get higher grades. In this study, 47% of female students received an A+ or A while 30% of male students received an A+ or A. However, only 4% of female students received a F compared to 16% of male students. The quantitative results tend to prove the myth that women are better language learners than men.

Keywords: gender stereotypes, education

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Introduction

Teaching English to students is important for Japanese university students. It is mostly English that is one of the requirements to obtain credits for graduation. In addition, those who hold higher scores on English exams such as TOEFL or TOEIC are believed to get better jobs. Japanese companies recruit those who can communicate with people around the world in English. Thus, most Japanese universities offer English programs for students. According to the survey conducted by the ministry of education, culture, sports, science and technology, Japan (2011), there are a total of 759 universities (86 national, 81 public, and 591 private universities) in 2011. 724 universities out of 759 offer students English subjects as part of undergraduate programs. 208 universities out of 759 require students to take English exams such as TOEIC, TOEFL and so forth. 222 universities out of 759 conduct lessons in English only for English classes.

Many past studies investigated a gender stereotype that women are better at learning languages while men are better at math or science subjects. According to the survey conducted by the ministry of education, culture, sports, science and technology, Japan (2014), the total number of enrolments in the Arts and humanity department at the universities throughout Japan were 371,212 students. Out of 371,212 students, 127,723 male students were enrolled in this area while 243,489 female students were enrolled in the same area. The numbers of female students of this area are almost the double of that of male students. As opposed to arts and humanities, the total number of enrolments in the engineering department at Japanese universities in 2014 were 388,817 students. 338,467 male students were enrolled in this area while 50,350 female students enrolled in the same area. As for the science department, 80,685 students in total were enrolled. 59,376 male students were enrolled while 21,309 students were enrolled in this area.

These figures suggest that the gender stereotype of women being better at learning languages while men are better at math or science subjects still remains. However, whatever major Japanese university students take, in order to graduate from their universities, they still need to learn English since English is taught as part of the requirement for their credits in most Japanese universities. The author of this study teaches English for those who are enrolled in the sport and health science department. Although some students are highly motivated in learning English, most of them are not particularly interested in learning English. They need to pass English classes in order to get credits to graduate.

The problem arises here. There are those who are not able to pass English subjects every year. Those who fail English subjects tend to repeat the same English subject every year although they are not majoring in English at university. The worst scenario is that they do not complete their degrees because they are failing English subjects. Based on observation by the author of this study, male students are likely to fail and repeat English subjects in his classes while female students tend to get higher marks in his classes. Therefore, the aim of this study is to investigate two research questions. Firstly, it examines whether the gender stereotype that women are better at learning languages while men are not. Secondly, if the first research question exists, then this study examines why it still exists.

Literature Review

Gender Stereotype Studies

Many studies of gender stereotypes in the past found gender stereotypes exist. For instance, one of the classic studies done by Lakoff (1975) found that women were often described as charming, lovely and divine. However, Archer and Lloyd (1985) found that men were often described as assertive, forceful, tough and so forth. Vogel et al. (2003) found that women were more emotional than men were. Prentice and Carranza (2002, p. 269) explain gender stereotypes are highly prescriptive. For instance, a stereotype that women are warm and caring is matched by a societal prescription that they should be being so. A stereotype of men that men are strong and agentic is matched by a societal prescription that they should be being so. Eagly and Johannesen-Schmidts (2002) support the gender stereotype that men are agentic. They explain that men are often described as assertive, controlling, aggressive, ambitious, dominant, forceful, independent. Heilman (2001) explains that men are often described as aggressive, decisive, forceful and independent while women are characterized as sympathetic, kind, helpful and concerned about others. Bihagen, E. and Kats-Gerro, T. (2000) studied gender differences on leisure activities. They found that women tended to watch TV shows such as documentary, social issues and news while men tend to watch lowbrow TV shows such as entertainment and sports. Holmes (2000:3) summarizes gender stereotypes that terms such as direct, aggressive, competitive, autonomous, dominates talking time, interrupts aggressively, task-oriented, referentially oriented are often used to describe as masculine. However, terms such as indirect, conciliatory, facilitative, collaborative, talks less than men, has difficulty getting a turn, person-oriented, affectively oriented are used to describe feminine.

Gender Stereotype Studies of Academic Performance

There are several past studies about one of the gender stereotypes that women are better at learning language while men are better at math or science. For example, Chatard, Guimond and Selimbegovic (2007) investigated one of the gender stereotypes that arts subjects are for women while mathematics is for men. They found that most boys believe in one of the traditional gender stereotypes that men are better at mathematics than women. They also found that most girls believe that women are better at arts than men. Guimond and Rousell (2001) studied a gender stereotype that women are better at languages while men are better at math and science. They found that the stereotype still exists in general but it does not exist for some groups. For instance, psychology students in their study are less likely to believe the stereotype of men's superiority in science subjects. Female high school students in science track career course are also less likely to believe women's inferiority in science subjects. Steffens and Jelenec (2011) found that women held stronger gender stereotype that math for men and languages for women than men did in their study. However, they found women's grades for both math and German language at the university were better than men's grades. Heinzmann (2009) studied school children who learn English and French. He found that girls were more motivated in learning English than boys were. Girls enjoyed learning English, put effort on learning English, and felt fewer burdens to learn English than boys did. According to Educational Testing Service (ETC) (2013), it reports gender differences

in TOEIC test scores worldwide. In general, women scored higher than men in TOEIC test in 2013. Women scored on average 593 of the total score. They scored 327 in listening and 266 in reading on average. Men scored on average 560 of the total score. They scored 304 in listening and 256 in reading on average.

Gender Differences in Different Cultures

Li and Kirkup (2007) researched gender differences in Internet use between Chinese students and British students. They found that men in both countries were more likely to use emails or chat rooms than women in both countries. However, gender differences when using the Internet were higher in Britain than China. They concluded that British women in their study had negative computer experiences at school or home when they started use computers. Fisher et al. (2004) explain that in Western industrial society, women are more likely to take domestic and nurturing roles than men do. However, men in this society are more likely to provide the material resources and to take a role in the paid economy than women do. Kobayashi (2002) found in his study that Japanese women had more positive images than men had. For example, Japanese women saw jobs that involve high use of English as intelligent jobs. They also thought in order to succeed in job hunting, English was important to get a better job. Therefore, Japanese women tend to study English as their major at universities. This point supports the data by the recent survey conducted by the ministry of education, culture, sports, science and technology, Japan (2014), out of 371, 212 students in total, 127, 723 male students are enrolled in this area while 243, 489 female students are enrolled in the same area. According to Educational Testing Service (ETC) (2013), it reports some culture differences on taking TOEIC test. Countries which have a large population of men take TOEIC tests are Bangladesh (91% of men), Saudi Arabia (79%), Pakistan (76%), Turkey (73%) and United Arab Emirates (73%). Countries which a large population of women take TOEIC tests are Hong Kong (72% of women), Albania (67%), China (63%).

Methodology

In order to collect data for this study, this study used both coding numbers of students' grades in 2012 and 2013. The author of this study has taught one of English subjects at one of the Japanese private universities for several years. However, he selected the most recent data for analysis.

Participants of This Study

Participants of this study are majoring in sport and health science in one of private universities in Japan. They are majoring in sport and health science but English is part of their requirements that they must take for their credits to graduate. Most university students in Japan are required to take English subjects as their compulsory subjects to graduate when they are in their first and second year. In this study, all participants are in their first and second year in their university. Their ages are over 18 years old and below 21 years old. The total of 627 students (male students:393 and female students:234) were involved in this study between 2012 and 2013.

Grading Guidelines

Since there is a grading policy by the department in the university where the author of this study works, the grade of A+ should normally be within 5% of each class. Each class that was examined for this study had between 20 and 25 students and therefore there is only one A+ student in each class. There was also a grading guideline by the department where the author of this study worked. The grade of A will be normally around 30% of each class but this is just a guideline which lecturers follow. As for the other grades (B, C, F), there was no particular guidelines.

Subjects which Were Used for This Study

The data of this study was collected from classes that the author of this study taught such as P1, P2, P3, and P4. Both P1 and P2 are for the first year students. In both subjects, students conduct their research individually and thus each student decides their research topic at the beginning of the semester. In P1, there are assessments such as a mid term presentation for three minutes, the final presentation for four minutes, homework every week, both attendance and participation in class, and the final essay which is around 600 words. In P2, assessments are similarly done as P1 but the length of presentations and final essay are longer than P1. In P2, students need to conduct both interview and questionnaires for their research. Although P2 focuses on teaching writing, P1 focuses on both speaking and listening.

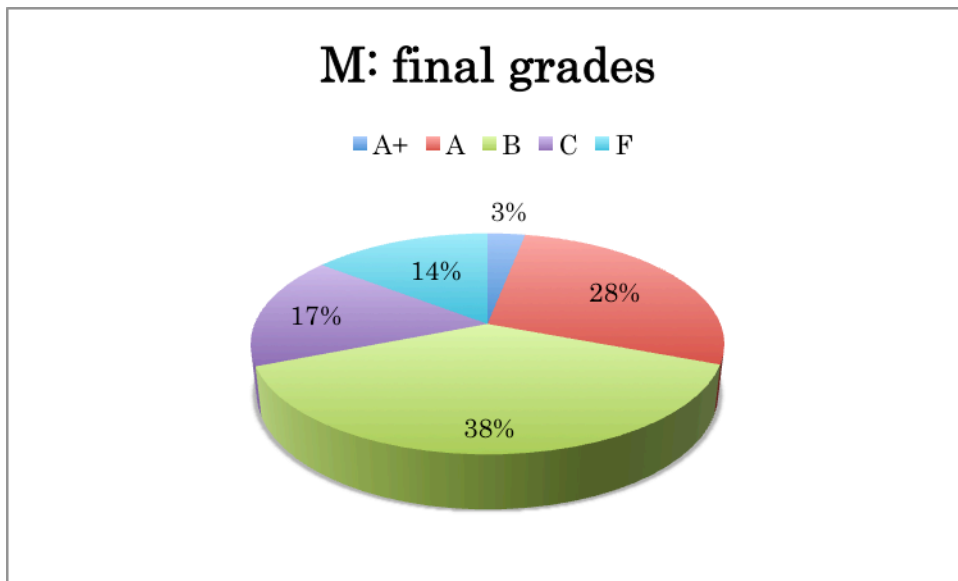
Both P3 and P4 are taught for the second year students but students conduct their research in small groups. Therefore research topics are decided by their groups instead of choosing individual topics. Since P3 focuses on teaching both speaking and listening skills, the assessments include a mini debate (each person 5 or 6 minutes), a mini panel discussion (same as the debate), a final presentation (each person 7 or 8 minutes), both attendance and participation, homework every week, and the final paper (each person should write 1000 words with at least four references including two English journals). In P4, since it focuses on teaching writing skill, assessments are a mid term group presentation (10 minutes as a group), the final group presentation (each person 7 or 8 minutes), the final paper (around 1500 words each student), both attendance and participation, and homework every week are assessed.

As for the data analysis for this study, in order to see whether there are gender differences on students' grades, assessments such as presentations, final essays, homework, and the final grades are analyzed in this study.

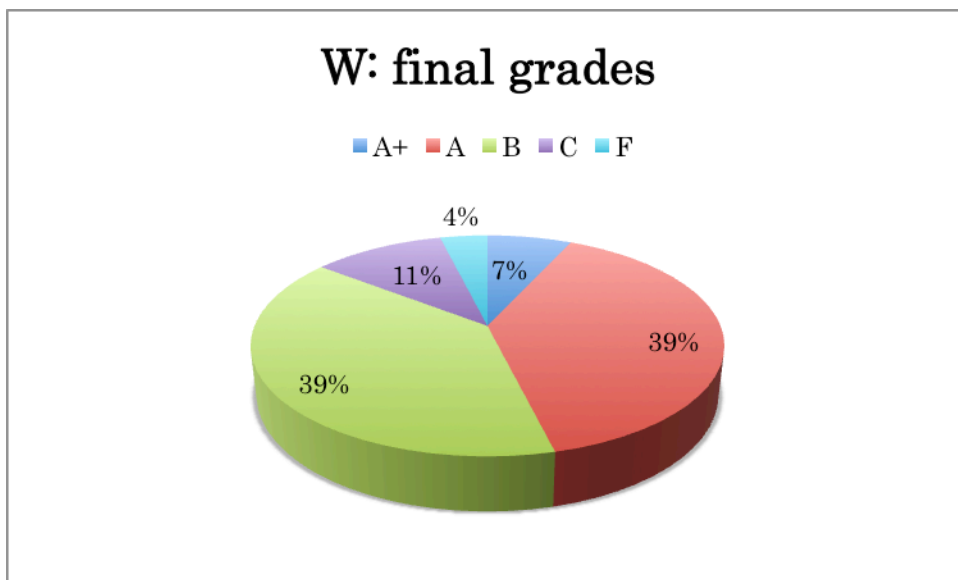
Results

Each category of students' grades such as final grades, mid term presentation, final presentation, final paper and homework are shown below. Firstly, results of final grades of both men and women are shown.

Graph 1

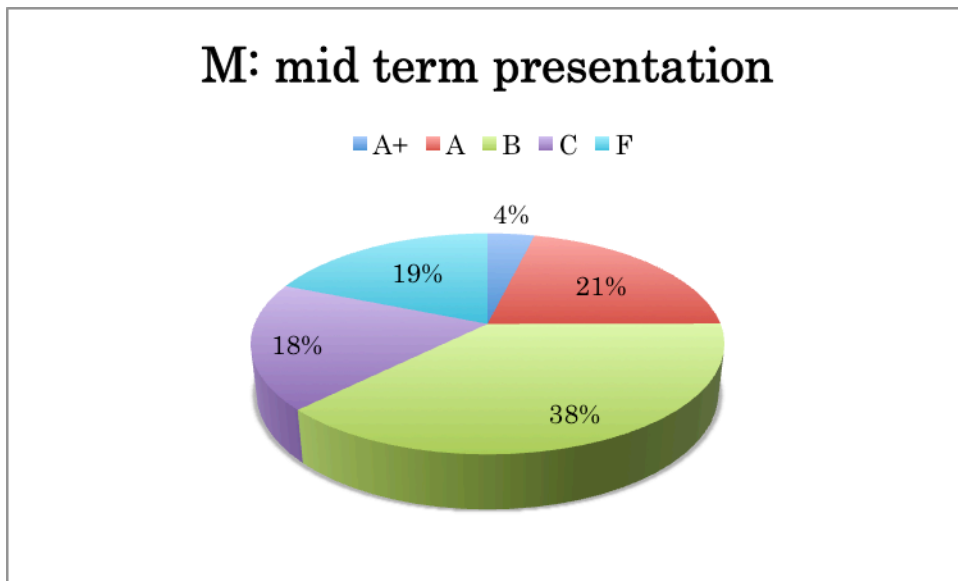


Graph 2

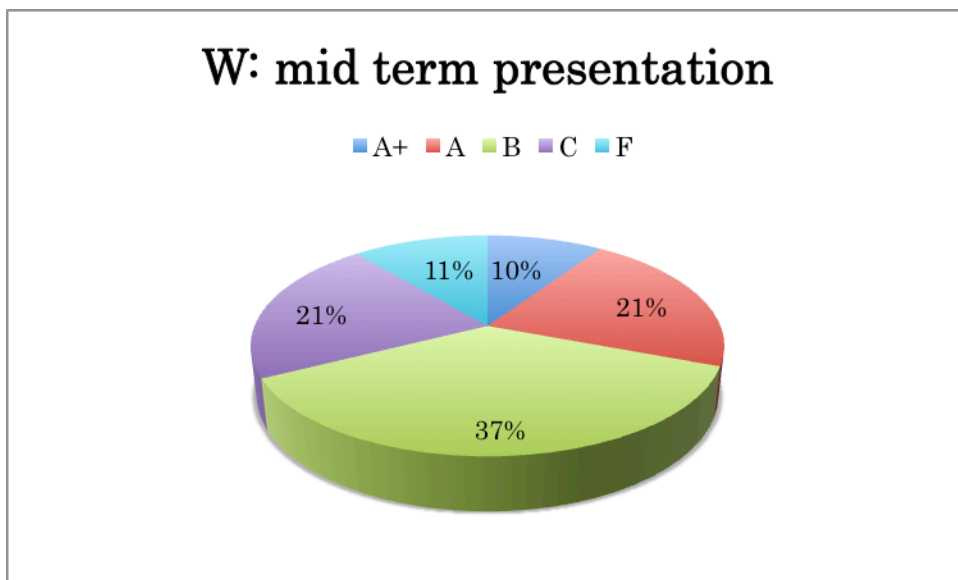


To compare graph 1 and 2, women in this study showed better grades than men in this study. While 7% of women scored an A+, only 3% of men scored an A+. While 39% of women scored an A, only 28% of men scored an A. In total of both A+ and A, 46% of women scored above an A grade as opposed to 31% of men scored above an A grades. As for women in this study, nearly the half of women got either an A+ or A grade. In addition, only 4% of women got a F grade while 14% of men got a F grade.

Graph 3

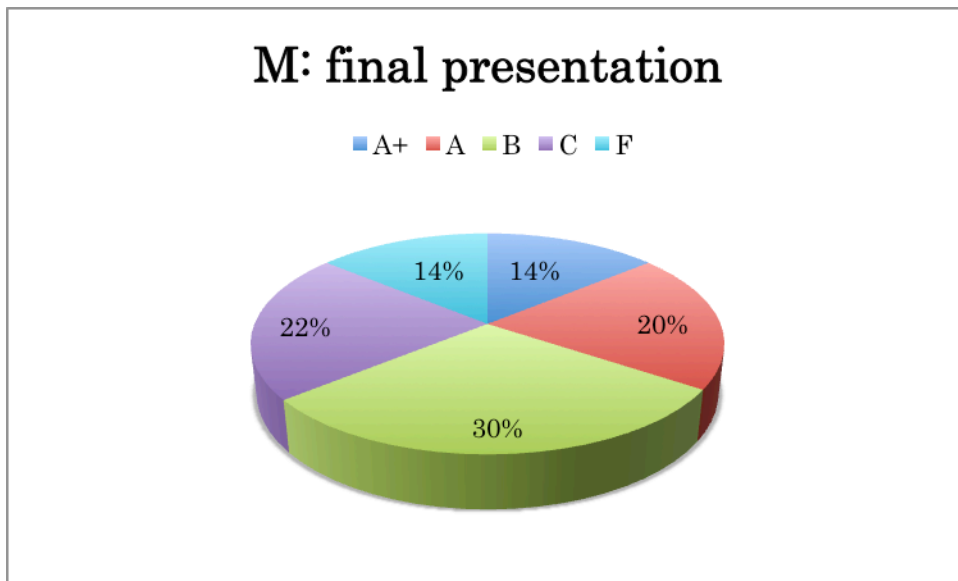


Graph 4

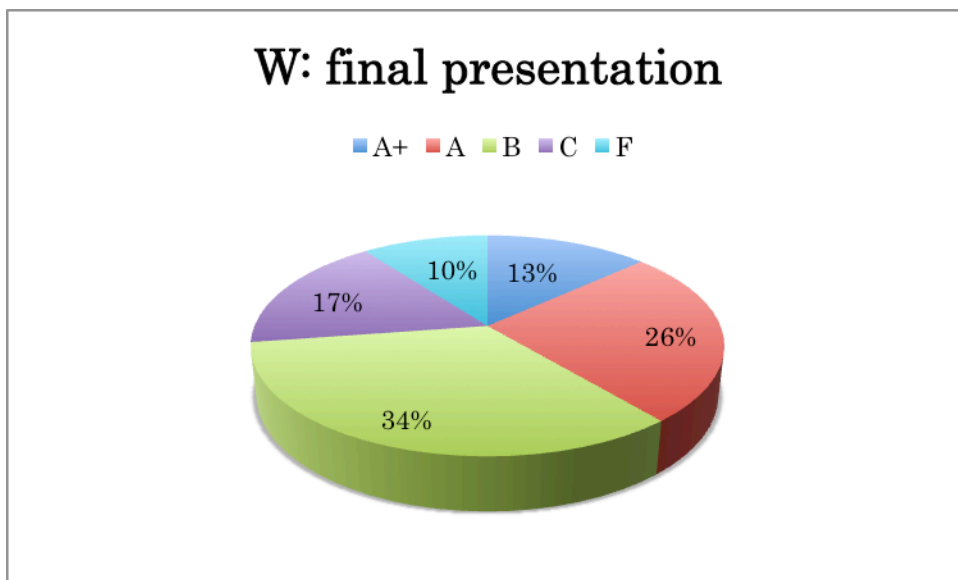


Both graph 3 and 4 show the results of scores of mid term presentations. 21% of both men and women got an A grade but there is a slight difference of an A+ between men and women. While 10% of women got an A+, only 4% of men got an A+ for the mid term presentations. As for a F grade, 19% of men got an F but 11% of women got a F grade.

Graph 5

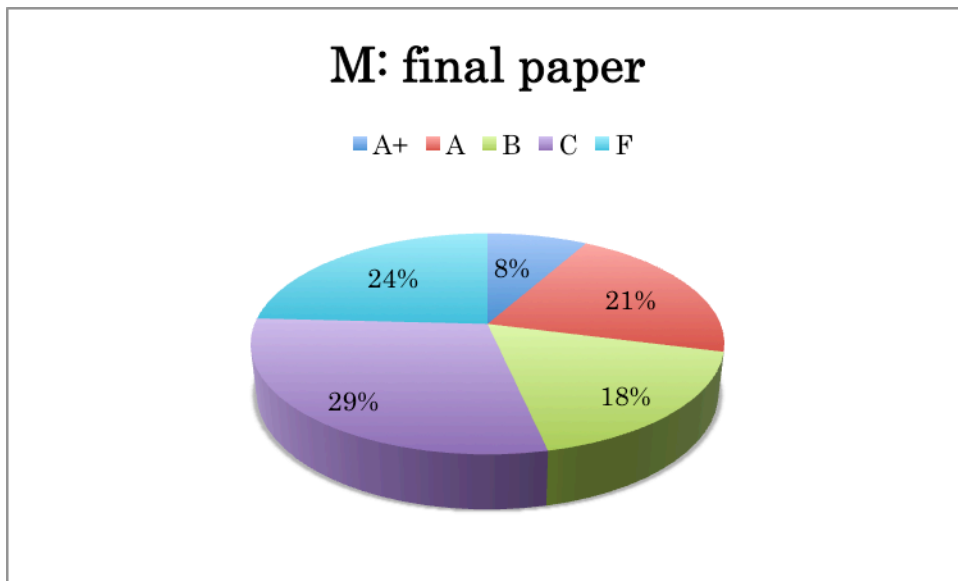


Graph 6

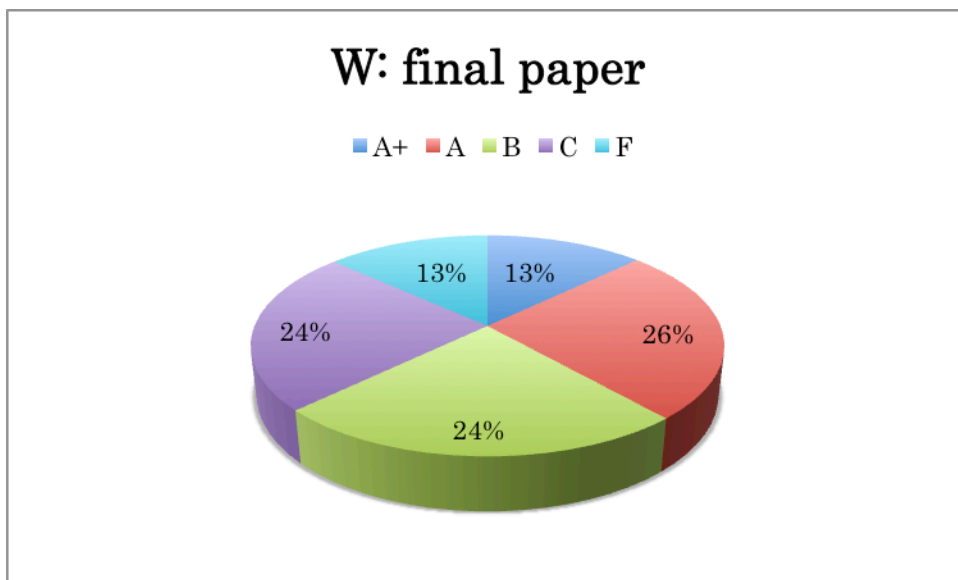


Both graph 5 and 6 show the results of scores of final presentations. 14% of men got an A+ and 20% of men got an A for their final presentations. Thus in total of both A+ and A, 34% of men got both A+ and A. As opposed to men, 13% of women got an A+ and 26% of women got an A for their final presentations. In total, 39% of women got either A+ or A. In addition, 14% of men got a F grade while 10% of women got a F grade. Interestingly, as for the results of their final presentations, men scored more A+ than women as well as men scored more F than women.

Graph 7

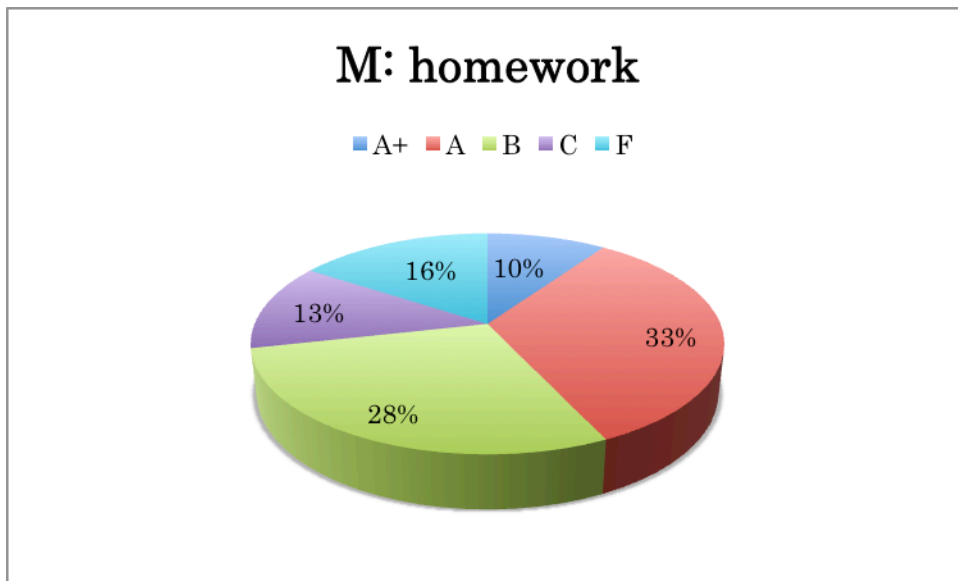


Graph 8

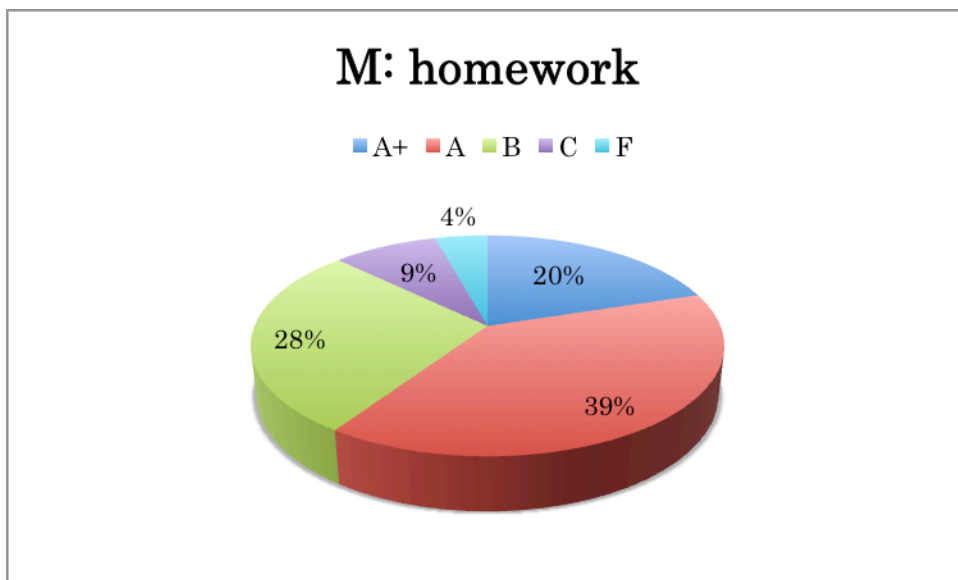


Both graph 7 and 8 show the results of final paper grades. 8% of men scored an A+ and 21% of men scored an A for their final paper while 13% of women scored an A+ and 26% of women scored an A. Thus the total of 29% of men scored whether an A+ or A, 39% of women scored either an A+ or A grade for their final paper. There is a big difference on a F score between men and women. 24% of men got a F while 13% of women got a F.

Graph 9



Graph 10



Finally homework scores are shown. 43% of men got either an A+ (10%) or A (33%) for their homework while 59% of women got either an A+ (20%) or A (39%). Once again, there is a big difference on a F score between men and women. While 16% of men scored a F, only 4% of women got a F.

In short, as all results showed, women overall scored better than men in this study with one exception. Men scored more A+ than women for their final presentation. In addition, women scored more A+ and A than men did, and also women had fewer F than men had.

Discussions

Results of this study showed similar results such as Guimond and Rousell (2001) and Heinzmann (2009). Women in this study showed overall better scores in their English subjects. As was explained earlier, English was one of the compulsory subjects for students who are majoring in whatever field they were. Kobayashi (2002) concluded Japanese female university students tended to choose English as their major at their university because they thought having good English skills would give them an opportunity to get a better job in the future. However, his theory could be applied to women in this study. This study investigated Japanese university students who were majoring sport and health science. Therefore, students in this department finish studying English as their subjects after they move on to their 3rd grade when they start to learn special subjects in sport and health science. In addition, since they are not majoring in English, some might be interested in learning English but the others might not be interested in English at all. They need to pass English subjects to get credits which are required for their graduation. However, as the results of this study showed, women performed in their English subject better than men. Women in this study could see English was one of important subjects for their future career and thus they might have studied it more than men in this study did.

Overall, women in this study performed better in English than men did but there was an interesting result which was seen in the scores of their final presentation grades. In this study, men scored more A+ scores for their final presentation than women did. This result only showed that men did better than women in this study. This phenomenon could be explained by one of the male gender stereotypes that men tended to be competitive (Holmes, 2003). Students in this study must do both mid term presentations and final presentations which are assessed by their lecturer. The author of this study gave students results after their presentations in person. He also gives overall feedback about their presentations after his students finish their presentations in class. As the results of the mid term presentation scores showed, male students in general did not perform well on their mid term presentation. Therefore, they could have thought that they needed to recover their scores on their final presentations. Thus they could have prepared their final presentations well in advance and then they were able to perform well on their final presentations.

Conclusion

This study explored one of the gender stereotypes that women were better at learning languages than men. Many past studies showed that women who were learning a language in institutions such as high schools and universities showed better results in their classes than men (Heinzmann, 2009; Guimond and Rousell, 2001; DiPrete and Jennings, 2012). The aim of this study was to examine whether female students performed better at learning English at university level. The total of both 393 male and 234 female university students participated in this study. The data was quantitatively analyzed and it showed that women in this study tended to perform better in their English subjects than men in this study. The results of this study in general showed the gender stereotype that women were better at learning languages than men. In general, women in this study scored more A+ and fewer F than men did. However, there was one exception where male students scored more A+ than female students in their final presentations. This could be explained as one of the male

gender stereotypes that men were competitive (Holmes, 2003) because men in this study tried to recover their scores from their mid term presentation in which they scored badly. This study focused on examining gender differences on their grades of English subjects. Therefore, further research is needed to explore whether male students still perform better in science subjects than female students. This study suggests that language teachers could be aware of gender stereotypes in language classes which still exist.

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