

## Effects of Gender on Some Learner-Dependent Variables in Foreign Language Learning

*Jelena Mihaljević Djigunović*  
*Faculty of Philosophy, Zagreb*

The article investigates the effects of gender on several foreign language learning (FLL) variables. Results of an extensive study of these effects are presented and discussed.

The role of gender in FLL is as yet unexplained. There have not been many studies that focused on this issue and what research literature offers at present are, more or less, byproducts from studies devoted to other aspects of FLL. It is commonly held that females are better learners of foreign languages, and some studies support this belief (e.g., Burstall, 1974; Mihaljević, 1991; Ostojić, 1980). On the other hand, research into classroom processes, materials, and the foreign language itself suggests that females are at least potentially disadvantaged (Sunderland, 1992).

One possible reason why the role of gender in FLL is still unclear may be the fact that research results are very difficult to interpret. Possible interpretations should make reference to such complex concepts as neurological differences, general cognitive gender differences, intelligence, aptitude, various environmental influences on gender, and so on.

The aim of the study to be presented in this paper was to investigate gender differences in the following learner-dependent variables: FLL achievement, motivation for learning, attitudes towards FL classes.

### Method

#### *Sample*

The subjects (N = 340) were learners of English as a foreign language (EFL) in several primary and secondary schools in Zagreb, as well as students from several faculties of Zagreb University.

The three age groups included in the study also represent correspondingly increasing proficiency levels.

The number of male and female learners in each group was approximately the same. English was a compulsory school subject or university course for all the subjects.

### *Instruments*

The subjects' grades in English were taken as a measure of EFL achievement.

The types and intensity of motivation for learning were measured by the Likert-type scales of agreement developed by Mihaljević (1991). The scales measure three types of motivation (affective, integrative and pragmatic-communicative) and two demotivators (teaching setting and learning difficulties).

The attitudes towards English classes were measured by the 7-point semantic differential scales developed by Gardner, Smythe & Smythe (1974). The scales were translated into Croatian and slightly adapted for the purposes of this study. The scales measured the learner's evaluation of English classes, his perception of their difficulty and usefulness, as well as their being interesting to the learner. A higher score on each group of scales indicated a more positive reaction on the part of the learner.

### *Procedure*

The subjects were given detailed instructions on how to fill in the questionnaire sections. They were specifically instructed to go through the questionnaire quickly and note down their first reaction to the scale stimuli.

The obtained data were statistically analyzed. One- and two-factor analyses of variance were performed.

## **Results and discussion**

### **EFL ACHIEVEMENT**

The English grades of the subjects were analyzed by means of a two-factor analysis of variance, with gender and age defined as factors. The results are presented in Table 1.

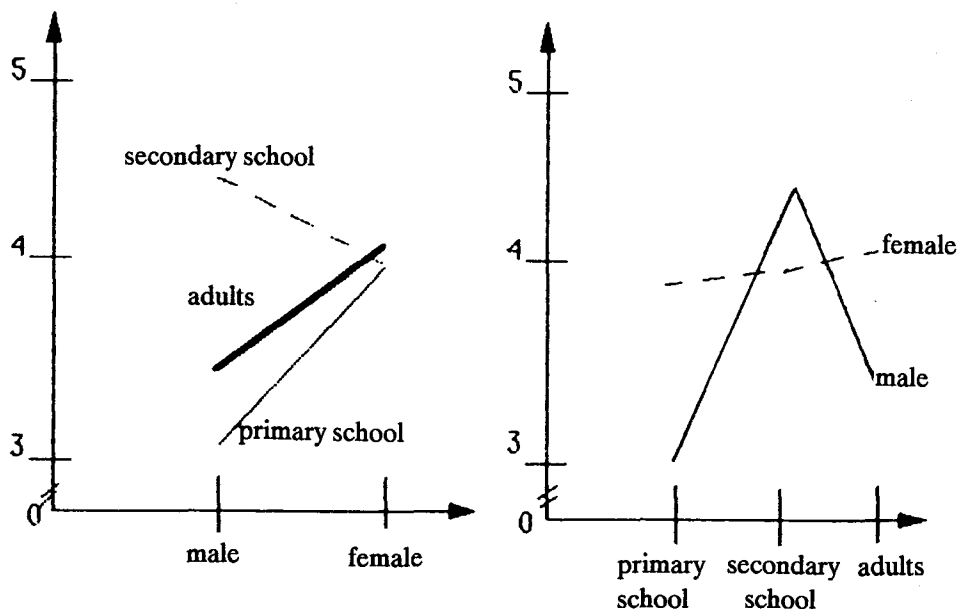
**Table 1: Analysis of variance in grades in English**

Source	Sum of squares	df	F	P
<b>Main effect</b>				
GENDER	8.773	1	9.773	0.002**
AGE	27.904	2	15.543	0.000**
<b>Interaction</b>				
GENDER x AGE	23.653	2	13.176	0.000**

\*\* $p < 0.01$

The results show that significant effects were obtained for both factors and that their interaction is significant too. The cell inspection shows that the female subjects have significantly higher grades in English than the male subjects and that secondary school learners have significantly higher grades than the other two age groups.

The interaction between age and gender is presented graphically in Figures 1 and 2.



Figures 1 & 2: Two-way interaction between gender and age for grades in English

As Figures 1 & 2 indicate, differences in grades among the female subjects are very small, while significant differences exist among the male subjects, with the secondary school male subjects having significantly higher grades in English than the other two age groups of male subjects. It can also be seen that the smallest difference between male and female subjects exists in the secondary school age group, while the other two groups show greater differences, with female subjects having higher grades than male ones.

It is possible that higher grades in English with female subjects are due to the verbal factor, which is, according to several studies, more developed in females. Female learners seem not to oscillate in their EFL achievement as much as males. The fact that the female learners' grades did not drastically increase in the secondary school group

may, perhaps, be ascribed to a more complex affective configuration in females at that sensitive age.

MOTIVATION

The results concerning the types and intensity of motivation for learning EFL were analyzed by means of a two-factor analysis of variance, with gender and age as factors. Table 2 contains the obtained results.

Table 2: Analysis of variance in types and intensity of motivation

Type	Source	Sum of squares	df	F	P
1	Main effect GENDER	183.057	1	2.885	0.091
	AGE	539.193	2	4.249	0.015*
	Interaction GENDER x AGE	91.175	2	0.766	0.466
2	Main effect GENDER	416.929	1	29.203	0.000**
	AGE	263.220	2	9.219	0.000**
	Interaction GENDER x AGE	23.710	3	0.830	0.437
3	Main effect GENDER	18.375	1	1.230	0.268
	AGE	465.915	2	15.596	0.000***
	Interaction GENDER x AGE	1.860	2	0.062	0.940
4	Main effect GENDER	0.313	1	0.015	0.902
	AGE	384.251	2	9.309	0.000***
	Interaction GENDER x AGE	166.761	2	4.040	0.019*
5	Main effect GENDER	0.342	1	0.017	0.897
	AGE	18.072	2	0.445	0.641
	Interaction GENDER x AGE	157.003	2	3.874	0.022*

\*\* $p < 0.01$  \* $p < 0.05$

1 Pragmatic-communicative

As can be seen from Table 2, the only significant effect obtained was for age, while the effects for gender and the interaction of gender and age were not significant. The

cell inspection points to a significantly higher level of this type of motivation for learning English in primary school subjects.

Communicative and pragmatic uses of English, which are among the objectives in the official curriculum in this country, do not seem to be gender-dependent. Both male and female learners want to use English to communicate with foreigners, not necessarily native speakers of English. Both also want to be able to use English in practical life to understand, e.g., operating instructions for machines, lyrics of songs, film dialogues, etc. It seems that, when it comes to the practical value of knowledge of English, this society is rather democratic as far as gender is concerned.

## *2 Affective*

Significant effects were found for both age and gender, but the interaction of the two is not significant. The cell inspection shows that the primary school subjects have a significantly higher level of affective motivation than the secondary school subjects and that the female subjects have a significantly higher level of this type of motivation than the male subjects.

Since affective motivation denotes a wish to learn English because the learner likes the language, it may be assumed that female learners are more affectively motivated because they get more easily emotionally attached to the English language.

## *3 Integrative*

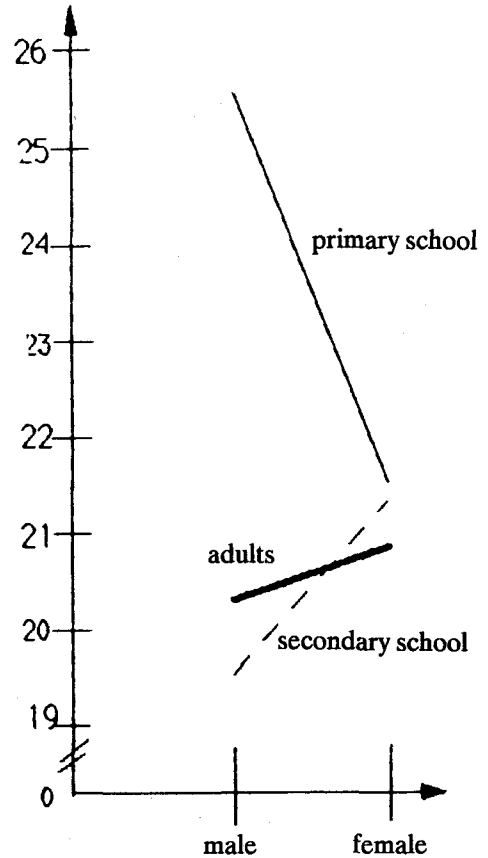
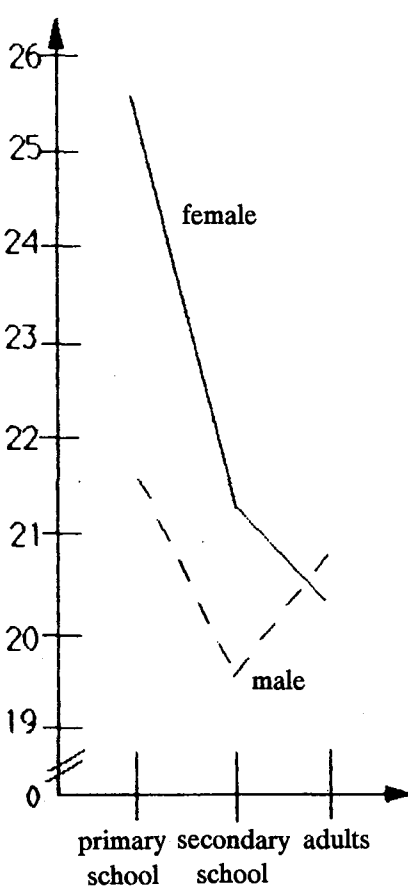
A significant effect was obtained only for age, while the effects for gender and interaction were not significant. A significant difference was found between the primary school subjects and adults, with the primary school subjects having a higher level of integrative motivation.

Although emotional attachment to the foreign language as such seemed to distinguish male from female learners, the same does not seem to be true when it comes to the foreign country and culture. A wish for integration into the foreign culture seems to be connected with age rather than gender. Going to live in a foreign country also means putting the knowledge to action and here, again, female and male learners do not seem to differ.

## *4 Teaching setting as a demotivator*

Table 2 shows that significant effects were obtained for age and the interaction between age and gender, while the effect for gender was not found significant. The cell inspection shows the primary school subjects significantly more demotivated for learning because of various elements comprising the teaching setting (the teacher, teaching methods and materials).

Figures 3 and 4 show graphically the interaction between age and gender.



Figures 3 & 4: Two-way interaction between gender and age for teaching setting as a demotivator

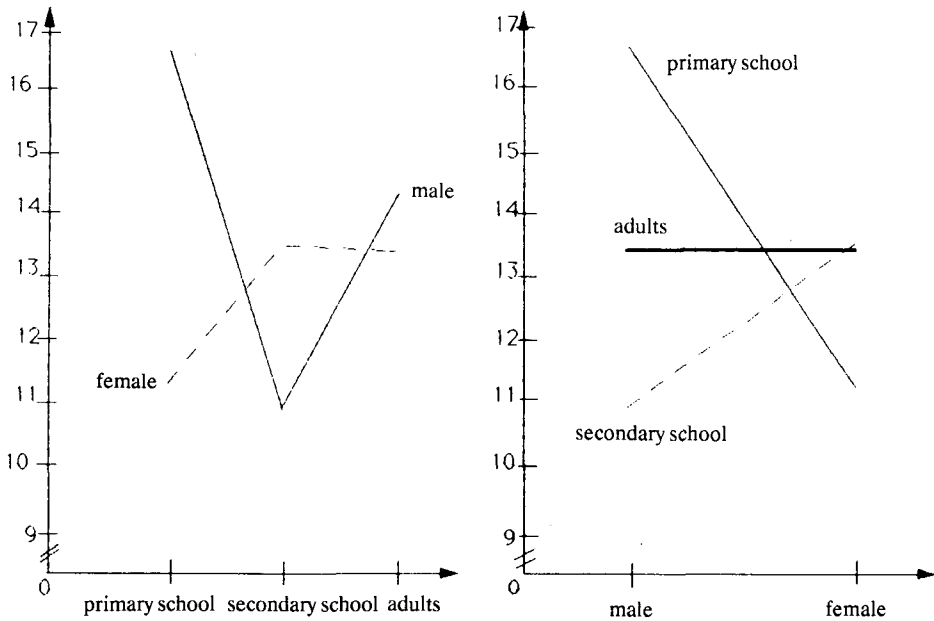
The figures indicate that the greatest differences between male and female subjects exist in the primary school group, while the smallest differences were found in the adult group. Except for the primary school group, it is always the female subjects that are more intensively demotivated by the teaching setting. It can also be noticed that the differences are significantly higher for the male subgroups than the female ones. With the male subjects there is a significant difference between the primary school males and the rest, with a tendency towards higher demotivation in the primary school male group. As far as the female subjects are concerned, the differences between the groups are rather small and seem to decrease with age.

The interaction is caused by too low results in the primary school female group.

It may be possible to explain these findings by the fact that primary school females are less critical of the teacher and other elements of the teaching setting, and are thus less demotivated for learning English by the teaching setting.

### 5 Learning difficulties as a demotivator

While the effects for gender and age are not significant, the interaction between age and gender is statistically significant. The interaction is presented graphically in Figures 5 and 6.



Figures 5 & 6: Two-way interaction between gender and age for learning difficulties as a demotivator

The figures show that the greatest differences between male and female subjects are found in the primary school group, with the male subjects being significantly more demotivated than the female subjects. The smallest differences exist in the adult group. It is only in the secondary school group that the female subjects are more demotivated for learning by learning difficulties. If we look at the male subjects as a group, we can notice that the greatest differences exist between primary and secondary school subjects, with the primary school subjects being significantly more demotivated by

learning difficulties than the secondary school subjects. With the female subjects, the primary school females are significantly less demotivated by learning difficulties than the rest of the female group.

The interaction is caused by too low results in the secondary school male group.

It seems possible that, in contrast to girls, boys of the primary school age are more difficult to control, that they are less attentive in class and, thus, have greater problems in learning. It is interesting that the problem of a lack of pre-knowledge is more prominent with girls than with boys at the secondary school age level. It is possible that the amount of the lack of pre-knowledge is not that different but that girls have a tendency to be more systematic and it inhibits them to a greater extent than boys.

#### ATTITUDES TOWARDS FL CLASSES

Four aspects of the learner's attitudes towards the FL classes were investigated. The scores were analyzed by means of a two-factor analysis of variance, with gender and age defined as factors. The results are presented in Table 3.

Table 3: Analysis of variance in attitudes towards FL classes

Scale source	Sum of squares	df	F	P	
1	Main effect				
	GENDER	285.840	1	3.649	0.057
	AGE	850.396	2	5.428	0.005**
	Interaction				
	GENDER x AGE	548.841	2	3.503	0.031**
2	Main effect				
	GENDER	26.443	1	0.821	0.366
	AGE	324.855	2	5.045	0.007**
	Interaction				
	GENDER x AGE	83.425	2	1.296	0.257
3	Main effect				
	GENDER	32.481	1	2.519	0.114
	AGE	476.573	2	18.478	0.000**
	Interaction				
	GENDER x AGE	3.988	2	0.155	0.857
4	Main effect				
	GENDER	34.088	1	0.938	0.334
	AGE	251.414	2	10.336	0.000**
	Interaction				
	GENDER x AGE	277.429	2	3.816	0.023*

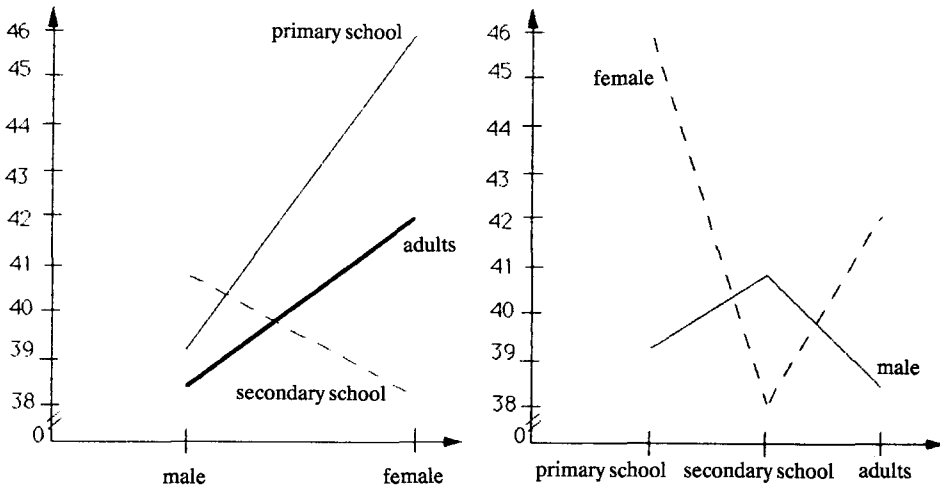
\*\* $p < 0.01$  \* $p < 0.05$



### 1 Evaluation of the English Course

Significant effects were obtained for age and the interaction of age and gender. The cell inspection points to the highest scores in the primary school group and the lowest evaluation of the course by the secondary school learners.

The interaction between age and gender is presented graphically in Figures 7 and 8.



Figures 7 & 8: Two-way interaction between gender and age for course evaluation

The figures indicate that the differences within the female group are greater than within the male group of subjects. In the male group, the greatest difference was found between the adult and the secondary school subgroups, with the secondary school males evaluating the course significantly more highly. In the female group, a significant difference was found between the primary and the secondary school female subgroups, with the primary school females evaluating the course more highly.

The interaction is caused by too high scores in the secondary school male subgroup.

Since course evaluation was found to correlate with FLL achievement (Mihaljević, 1991), it is possible to explain the interaction results by the fact that the secondary school male subjects had significantly higher grades in English than the secondary school female subjects. Two possible assumptions can be made. It may be that male adolescents see their English lessons as important and enjoyable because they have high grades, or, the lessons may actually correspond to their idea of good teaching and this makes them work harder and succeed. Female adolescents may be having more complex demands and expectations and, thus, view the lessons not that highly.

## 2 Difficulty of the English Course

The only significant effect obtained was for age, while the other effects were not significant. The cell inspection shows that the primary school subjects see their English lessons as significantly more difficult than the secondary school subjects.

It is interesting to note that, although the female learners were found to have higher grades than the male learners of EFI, there was no significant difference in the impression of the difficulty of the course.

## 3 Utility of the English Course

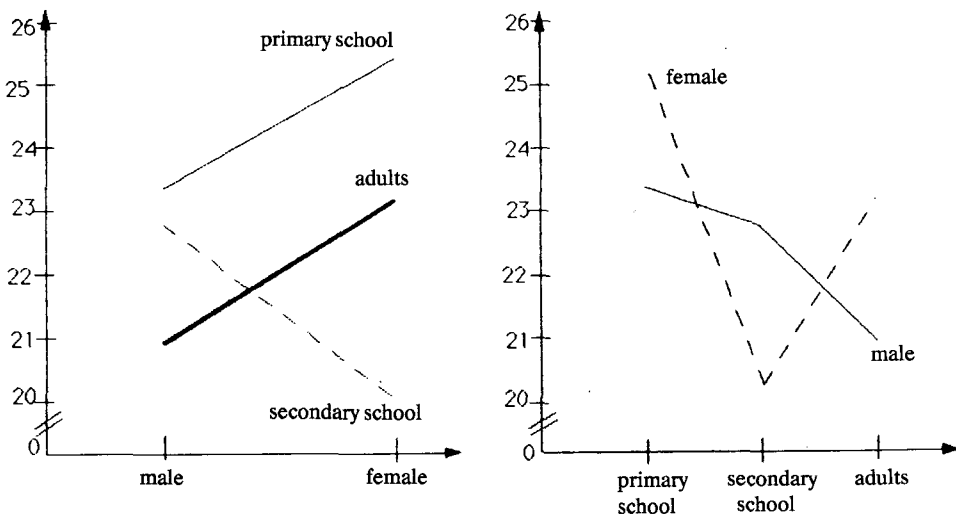
The same pattern of significance seems to hold true for the perception of utility. The primary school subjects viewed the EFL lessons as significantly more useful than the secondary school subjects.

Again, it is noteworthy that the two genders do not differentiate when it comes to the utility of the course.

## 4 Interest

Significant effects were obtained for age and the interaction between age and gender. The cell inspection shows that the primary school subjects viewed their EFL classes as significantly more interesting than the secondary school subjects.

The interaction between age and gender is presented graphically in Figures 9 and 10.



Figures 9 & 10: Two-way interaction between gender and age for interest

As can be seen from Figures 9 and 10, the differences within the female group are greater than those within the male group of subjects. The most significant difference in the male group exists between the primary school and adult males, with the primary school males having higher scores on the scales. In the female group, the primary school female subjects viewed the lessons as significantly more interesting than the secondary school females. The greatest difference between the male and female subjects was found in the primary school group, the smallest difference in the adult group.

The interaction is caused by the high scores for the secondary school male subjects.

Since interest was found to correlate with the inspirativeness of the teacher (Mihaljević, 1991), it seems possible to assume that female adolescents may be exhibiting complex affective learner characteristics.

The sensitive period hypothesis may, thus, hold true for female adolescents. They seem to respond more susceptibly to the teacher and the ways she employs to inspire the learners to learn. Being less practically minded than male adolescents, it may be more vital for female adolescents to be able to perceive their FL teacher as interesting, imaginative, exciting or fascinating in order to consider the FL classes exciting and interesting.

## Conclusion

The study of the effects of gender on achievement, motivation for learning and attitudes towards FL classes produced several interesting and noteworthy findings.

The female learners were shown to be more successful EFL learners. The male learners were found to fluctuate more with age than the female learners.

As far as motivation for learning is concerned, it is interesting to note that it was only the affective type of motivation that differentiated the male from female learners, with the female learners being more intensively motivated than the male learners. Those types of motivation which imply practical use of the knowledge of the FL did not show any significant variance between the two gender groups.

The two demotivators point, in a way, to a similar pattern. The teaching setting as a demotivator seems to be connected with age rather than gender, while male and female learners react differently to the learning difficulties and their demotivation by them is significantly different at different age levels. Male learners seem to be most demotivated by learning difficulties at the primary school age, while the same age is the time when female learners are least demotivated by the difficulties.

In their attitudes towards FL classes, the study found an interesting pattern of variance as well.

The two aspects that seem to be less subjective and elusive (difficulty and utility) do not seem to be gender-dependent, while evaluation and interest of the lessons show differences between the two genders. With evaluation, the greatest differences exist in the primary school age group, with the female learners having significantly higher scores. The female learners also exhibit more fluctuation in course evaluation with age. As far

as interest is concerned, the greatest differences again exist at the primary school age level, and the fluctuations are again more prominent with female learners.

As can be seen, significant differences between the two genders were found only in two out of ten measures included in the study. However, the significant interactions between gender and age seem to suggest that female and male learners do differ at different age levels and that we should be aware of the gender differences within a particular age of the learner.

#### REFERENCES

- BURSTAIL, C., JAMIESON, M., COHEN, S. & HARGREAVES, M. (1974). *Primary French in the Balance*. Windsor: National Foundation for Educational Research
- GARDNER, R. C., SMYTHE, P. C. & BRUNET, G. R. (1977). Intensive Second Language Study: Effects on Attitudes, Motivation and French Achievement, *Language Learning*, 27, 243–261.
- MIHALJEVIĆ, J. (1991). *Nastava engleskog jezika i motivacija za učenje*. Neobjavljena doktorska disertacija. Filozofski fakultet. Zagreb.
- OSTOJIĆ, B. (1980). *Psihološki i društveni faktori i nastava stranih jezika*. Svjetlost. Sarajevo.
- SUNDERLAND, J. (1992). Gender in the EFL classroom. *ELT Journal*, 46, 81–91.

#### EFEKT SPOLA NA NEKE VARIJABLE UČENJA STRANOG JEZIKA KOJE OVIŠE O UČENIKU

Članak ispituje efekt spola na nekoliko varijabli učenja stranog jezika. Iznose se i komentiraju rezultati opsežnog istraživanja ovih efekata.