



Original Research Article

Effects of grade level and gender on foreign language learning process in Bosnian high schools

Received 24 April, 2018

Revised 28 May, 2018

Accepted 7 June, 2018

Published 21 June, 2018

Haris Delić¹,
*Senad Bećirović¹
and
Amna Brdarević Čeljo¹

¹Faculty of Education and Humanities, International Burch University, Francuske revolucije bb, Ilidža 71210, Sarajevo, Bosnia and Herzegovina.

*Corresponding Author Email: senad7@gmail.com

This study aimed at investigating the effects of grade level and gender on the process of foreign language learning among high school students. The participants were 125 male (69.7%) and 81 female (39.3%) high school students attending different grades in Bosnia and Herzegovina. The research showed that there is a statistically significant difference between female and male students in the process of foreign language learning, with males experiencing more difficulties in the process. On the other hand, the analysis indicated that grade level does not have a significant effect on foreign language learning, as the students of all grades seemed to encounter similar difficulties in the process. The Pearson correlation coefficient was also measured and it showed a positive correlation between the impact of foreign language learning on the mother tongue and foreign language learning motivation, on the one hand, and the impact of foreign language learning on the mother tongue and the difficulties in using the target language, on the other hand. This paper may be beneficial to any researcher in the field as foreign language learning, English language learning in particular, is rising in its importance in the Bosnian context, where the number of educational institutions in which English is the medium of instruction increases. Thus, research into the difficulties arising in the process should be one of the main aims of language instructors striving to facilitate the process of foreign language learning.

Key words: Foreign language, learning, grade level, gender, motivation

INTRODUCTION

The world is experiencing a rapid increase in the use of English as a medium of instruction in teaching academic subjects in the countries where the first language is not English (Yaman and Bećirović, 2016). Having English as a medium of instruction (EMI) eases the process of English language learning, as a greater knowledge of the language itself is gained by reading the literature and material for different courses in English. Many factors have contributed to the significance of the mastery of the English language in Bosnia and Herzegovina, the most important one being the country's aim to become a part of international pacts and an equal member of the international community (Bećirović, 2017). The pervasive role that English as the

lingua franca plays in all fields of modern life, from business or science to intercultural communication (Wu, 2001), arouses people's interest in increasing their English language knowledge.

However, the process of learning a foreign language is very complex and depends upon many factors, namely cross-linguistic influences, motivation, the linguistic environment learners find themselves in, aptitude, other individual differences etc. (Ortega, 2013). Cross-linguistic influences can have a positive and negative impact on foreign language learning, as L1 can impact L2 positively and result in a more successful language learning process or it can impact L2 negatively and hinder the learning

process. The impact of motivation is always positive and it is understood as 'the desire to initiate L2 learning and the effort employed to sustain it' (Ortega, 2013) or "the combination of effort plus desire to achieve the goal of learning the language plus favourable attitudes toward learning the language" (Gardner, 1985). Motivation significantly contributes to language learning and impacts language achievement (Dörnyei, 1990; Dörnyei and Ushioda, 2009), in particular in terms of vocabulary, grammar, pronunciation and four basic language skills (Gardner, 1985). The factor which can also largely contribute to a more successful foreign language learning is the use of language learning strategies, which make learning a more simple, quicker, more interesting and effective process, and at the same time more directed towards learners themselves (Oxford, 1990). Language learning strategies are defined as 'specifications, behaviours, steps, or techniques -- such as seeking out conversation partners, or giving oneself encouragement to tackle a difficult language task - used by students to enhance their own learning' (Oxford, 2003) and they help learners to become independent and skilled (Oxford, 2003). Language learning strategies also improve learners' foreign language competence and help them to gain foreign language proficiency (O'Malley and Chamot, 1990). Still both of these factors are very often absent from foreign language classrooms (Beck et al., 1989), which greatly contributes to learners' low proficiency.

The present study investigated how female and male students, as well as students at different grade levels differ in the process of foreign language learning. The study focused on motivation, cross-linguistic influences, learning strategies, and their relationships with the difficulties that may slow down or even stop the pace of the process among high school students.

The importance of gender and grade level in the process of FLA

Gender is one of the most commonly researched factors impacting foreign language learning (Andreou et al., 2005) and it is one of the topics commonly discussed in educational, linguistic and psychological research (Rizvić and Bećirović, 2017; Catalan, 2003; Woolfolk, 2014). Every in-depth research into foreign language learning commonly takes into account gender differences. Thus, achievement on the tests measuring specific abilities has been shown to depend upon gender differences (Woolfolk, 2014), as males achieve more variable results, which often range from very low to rather high, than females. Likewise, Ekstrom (1994) analysed students' achievement in English and math lessons and the results showed that females had better grades in these subjects than males. Kimball (1989) indicated that girls' better behaviour in the classroom and differential teacher expectations might lead to their higher achievement. On the other hand, their higher test anxiety might be related to their lower test achievement (Tobias, 1978). Voyer and Voyer (2014) conducted large-scale

research where they followed a continuation of educational processes in more than 30 countries. The research showed that the grades obtained by female students were consistently higher than the grades obtained by male students and the grade differences between girls and boys were largest for language courses and slightest for math and science (Voyer and Voyer, 2014). Despite greater achievement of female students, in particular in the process of foreign language learning, gender differences in that respect did not seem to be significant (Bećirović, 2017).

Gender seems to impact students' motivation as female students seem to be more motivated than male students in the process of foreign language learning and thus achieve better results (Aslan, 2009; Bećirović, 2017; Balenović, 2011). Likewise, female students seem to use learning strategies more than male students (Bećirović et al., 2017; Green and Oxford, 1995; Oxford and Nyikos, 1989; Razi, 2008; Sheorey, 2006; Poole, 2009), which might also contribute to their greater achievement in the process of foreign language learning. However, some studies pointed to the greater usage of learning strategies by male students (Baily, 1996), while the others showed that some strategy types are used more by females, and the other by males (Cogmen and Saracaloglu, 2009; Goh and Foong, 1997; Lee, 2012; Xu, 2004), which points to the fact that gender ought not to be observed solely and independently of other factors and that more factors ought to be taken into consideration in any research of foreign language learning.

Grade level is also considered to be an important factor in the process of language learning, as the learning process hugely depends on the age of individual learners. Older learners are believed to use learning strategies more frequently than younger learners, and these two learner groups are shown to differ in the types of strategies they use (Oxford, 1990). Thus, mature older learners use more metacognitive strategies, which are used to coordinate the learning process, whereas younger learners use social strategies, which help them to achieve better results by learning through establishing social contacts in the process of language learning (Lawrence, 2007).

This paper investigated the problems arising in the process of foreign language learning, English language learning in particular, among high-school students in the Bosnian EFL context. It focused on the factors that are assumed to have a profound impact on foreign language learning, namely gender and grade level. The identification of those factors and their impact on the process enable better understanding of the situations and steps that need to be taken in order to create a better learning environment as well as to improve the existing one. Quantitative research methods of data collection and analysis were applied. The following research questions guided the study:

1. Is there a significant difference in foreign language learning difficulties between learners characterized according to gender?
2. Is there a significant difference in foreign language learning difficulties by learners characterized according to high school grades?

Table 1. Descriptive analysis of participants

		N	Percentage
Gender	Female	81	39.3
	Male	125	60.7
Grade level	First	43	20.9
	Second	37	18.0
	Third	72	35.0
	Fourth	54	26.2
Total		206	100

Table 2. Descriptive results

	N	Min.	Max.	Mean	SD
Overall Implications	206	2.21	4.57	3.27	.48
Foreign language impact on mother tongue	206	1.50	5.00	3.25	.66
Motivation Implications	206	1.80	5.00	3.42	.66
School environment	206	2.00	4.80	3.10	.47
Target Language difficulties	206	1.64	5.00	3.28	.68

3. Is there a significant correlation among different subscales of foreign language learning implications?

The following null hypotheses were tested:

H₀₁ There is no significant difference in foreign language learning difficulties between learners characterized according to gender.

H₀₂ There is no significant difference in foreign language learning difficulties between learners characterized according to high school grades.

H₀₃ There is no significant correlation among different subscales of foreign language learning implications.

Participants

The research sample consisted of 206 high school student participants attending all four high-school grades. The participants were 125 males (60.7 %) and 81 females (39.3%), all of them Bosnians by nationality. A detailed summary of the sample according to the study group and gender is presented Table 1.

Instruments and procedure

The study was conducted using a survey method through the questionnaire. The questionnaire had two sections, i.e. Rebecca Oxford's Strategy Inventory for Language Learning (Oxford, 1990), and Dörnyei's Motivation items used in the 2013 Chinese survey (You and Dörnyei, 2016). The questionnaire consisted of 40 statements in the 5-point Likert scale, ranging from strongly agree to strongly disagree. It was composed of four subscales, namely the impact of foreign language learning on the mother tongue ($\alpha = 0.51$), foreign language learning motivation ($\alpha = 0.50$), the negative impact of school environment and atmosphere ($\alpha = 0.97$), difficulties in learning the target language ($\alpha = 0.86$).

Data analysis

Data were analysed using the Statistical Package for Social Sciences (SPSS, v. 22). Following the guidelines for the questionnaire analysis, frequencies and means, including the subscales, were computed to ascertain the types and frequencies of the implications carried by the participants. Firstly, the descriptive analysis including means, standard deviation and frequencies was conducted. Then, the Independent Samples T-Test and One Way ANOVA were used to show the differences between study groups.

RESULTS

Descriptive results

Table 2 shows the descriptive results of questionnaire's subscales which examined the implications most commonly incorporated in students' language learning. The subscales presented in the table were made up based on the field each question fits in, namely mother tongue implications, motivation implications, school environment implications, and target language difficulties implications.

Results of descriptive statistics indicate that all four compared subscales had very similar means. However, the highest mean score ($M = 3.42$, $SD = .66$) was achieved on the motivation implications subscale, followed by the target language difficulties subscale ($M = 3.28$, $SD = .68$), then by the implications based on the impact of the second language on the mother tongue ($M = 3.25$, $SD = .66$), and in the end by the school environment implications ($M = 3.28$, $SD = .68$). Based on these results, we can conclude that the main factor that causes implications in students' language acquisition process is motivation, and the factor that causes the least number of implications is school environment.

Table 3. Differences based on gender

Gender	N	Mean	SD	<i>p</i>
Female	81	3.16	.44	.009
Male	125	3.34	.49	

Table 4. Differences based on study groups

Grades	N	Mean	SD	<i>p</i>
First grade	43	3.22	.40	.116
Second grade	39	3.40	.50	
Third grade	70	3.19	.52	
Fourth grade	54	3.33	.46	
Total	206	3.27	.48	
Significance				

Our first research question focuses on the differences between males and females in foreign language learning.

By using the Independent Samples T-Test the first null hypothesis stating that there is no significant difference in foreign language learning difficulties between learners characterized according to gender was tested. The results indicate that there was a significant difference in foreign language learning difficulties $t(204) = -2.64, p = .009, d = 0.39$ between females ($M = 3.16, SD = .44$) and males ($M = 3.34, SD = .49$), thus rejecting the first hypothesis. The male group had a higher mean ($M = 3.34$) than the female group ($M = 3.16$), which means that male students have more implications in the process of foreign language learning than female students and the differences between two genders in that respect are not due to chance (Table 3).

The second research question focused on the differences in foreign language learning difficulties between high-school students studying at different grade levels. For that type of measurement, a one-way ANOVA test was used.

A one-way between subjects ANOVA was conducted to compare foreign language learning difficulties among students attending different grade levels. There was an insignificant difference at $p > .05$ between the students $F(3,20) = 1.99, p = .116, \eta^2 = .029$, with the second-grade students having the highest mean ($M = 3.40, SD = 0.50$) and the third-year students the lowest mean ($M = 3.19, SD = 0.52$). Therefore, the statistical analysis has shown that grade level does not have a significant effect on foreign language learning difficulties, thus supporting the second null hypothesis (Table 4).

To test the third hypothesis stating that no correlation exists between different subscales of foreign language learning difficulties, the Pearson correlation coefficient was employed to measure the correlation between: the impact of the foreign language on the mother tongue, foreign language learning motivation, school environment implications, and difficulties in target language learning.

According to the results of the data analysis, the correlation between the foreign language impact on the

mother tongue and motivation for foreign language learning is positive and significant, $r(n = 206) = .23, p > .001$, as well as the correlation between foreign language impact on the mother tongue and difficulties in learning the target language, $r = .58, n = 206, p > .001$. The correlation between the foreign language impact on the mother tongue and school environment was insignificant, $r(n = 206) = -.005, p = .942$. The highest correlation coefficient was displayed between difficulties in learning the target language and foreign language impact on the mother tongue.

As for the foreign language learning motivation, it was shown to have a positive correlation with three other subscales. The correlation between foreign language learning motivation and school environment was insignificant $r(n = 206) = .02, p = .773$, whereas the correlation between motivation and target language difficulties was significant and moderate $r(n = 206) = .47, p > .001$. An insignificant correlation was found between the school environment subscale and the impact of foreign language on the mother tongue, $r(n = 206) = -.06, p = .942$, and there was a low positive and insignificant correlation between school environment implications subscales and target language difficulties, $r(n = 206) = .15, p = .034$. The highest correlation was found between the impact of foreign language on the mother tongue subscale and the target language difficulties subscale $r(n = 206) = .58, p > .001$. (Table 5).

DISCUSSION AND CONCLUSION

The focus of this study was to determine whether gender and grade level have any effect on foreign language learning difficulties. The first null hypothesis suggested that there is no significant difference in foreign language learning difficulties between learners characterized according to gender. However, the results revealed that the mean measured for the male participants was significantly higher,

Table 5. Correlation analysis between foreign language learning subscales

	1	2	3	4
1. Foreign language impact on mother tongue	1	.237**	-.005	.580**
2. Motivation implications	.237**	1	.020	.465**
3. School environment implications	-.005	.020	1	.148*
4. Target language difficulties	.580**	.465**	.148*	1
	.000	.000	.034	

which indicates that male participants experience more difficulties in foreign language learning than female students do, which is not to be ascribed to a pure chance. These results were rather unexpected due to the specificity of the Bosnian context, which is not gender-biased in the aspect of communication (Bećirović, 2012), as males and females have equal opportunities to communicate. In some other societies, such as Pakistan, which is a strongly male-dominated society, males are more willing to communicate in English and are overall more often provided with the opportunity to speak more than their female colleagues (Arshad et al., 2015). The results also diverge from the other study findings conducted in Serbia, the country neighbouring Bosnia and Herzegovina, where gender differences have also been shown to be insignificant in the process of foreign language learning (Brdarević and Asotić, 2017). However, this study was conducted among elementary-school students, which seems to be important since different results were obtained when the effect of gender on foreign language learning, or more specifically on the use of learning strategies, was measured among the university-level students, which showed a significant difference in the use of strategies between students of different genders (Bećirović et al., 2017). Since our results showed that male students experience significantly more difficulties in learning English as a foreign language, instructors should take these findings into consideration and change their teaching approaches. Instructors should reflect on their teaching practice and find out the most effective way to work with their male students.

The second hypothesis was supported, as the results indicated no significant difference between the students at different grade levels in foreign language learning difficulties they encounter. The second-grade students and then the fourth-grade students, followed by the first and then the third grade students achieved the highest mean score. It is rather interesting to notice that the greatest difference exists between the second and third grade students and that the third-grade students achieved the lowest mean. The results diverge from the findings obtained in Bećirović et al. (2017) and Brdarević and Asotić (2017), where grade level had a significant effect on the use of language learning strategies and the overall process of foreign language learning. This is rather

interesting, as the research conducted in Brdarević and Asotić (2017) included elementary-school students and in Bećirović et al. (2017) university-level students, whereas in the current study high-school students were included. Understanding the effect of grade level on academic achievement is important because grade level may have an effect on schools' practices and policies such as curriculum development or classes resizing (Dhuey, 2011). We had expected that the first-grade students would achieve the highest mean score since they are at the beginning of their high-school studies, facing new English language courses and materials. However, this was not the case in this study as the first-year students achieved a lower mean than both the second-year and fourth-year students. This is rather surprising as the second-grade students use upper-intermediate English language books and are commonly very productive, whereas the fourth-year students even use the advanced English language books. Even though the difference is insignificant, instructors ought to identify the reasons why students experience more difficulties with respect to foreign language learning in the fourth grade of their high school than in the first grade. Teaching content could be a plausible reason. However, instructors should find out the way to surmount these difficulties and make their instructions more effective.

The third hypothesis stated that there is no significant correlation among different subscales of foreign language learning implications, namely the impact of foreign language on the mother tongue subscale, motivation for foreign language learning subscale, school environment subscale and target language difficulties subscale. The Pearson correlation coefficient showed that there was a significant positive correlation between all these subscales, apart from the correlation between the impact of foreign language on the mother tongue subscale and the school environment subscale. Thus, the null hypothesis was not supported except in the case of the two aforementioned subscales, whose correlation was rather low. The strongest correlation ($r = .58, p > .001$) was also measured between the foreign language impact on the mother tongue subscale and the school environment subscale. The results might help instructors to plan their lessons effectively and to organize teaching activities so that they systematically and directly reduce the implications of learning English as a

foreign language.

Our research findings can assist English language teachers in planning, preparing and implementing the English language instruction. Any research into foreign language learning difficulties provides clear indicators of what precisely students do when they have difficulties in learning English as a foreign language and in acquiring knowledge in other matters with English as the medium of instruction. Teachers can use the research outcomes and conclusions of the current study in the process of class preparation and course implementation in general with the aim of adequately stimulating students to avoid doing things that stop their progress and consequently to achieve significant results in learning English as a foreign language.

Considering how important the concept of implications is in the process of learning another language, it is crucial for language teachers to understand the range of variables that might wield some influence on implications, both personal and situational (Sinanović and Bećirović, 2016). With this awareness and with this knowledge in mind, it is easier for them to set pedagogical standards and organize their classroom and learning environment as to minimize the possibility for implications and any mishaps in the acquisition process and, by this, facilitate language learning process to its maximums. To do this it is important to organize and design language classes so that they contain a lot of authentic information, many opportunities for students to communicate, and many activities that will require them to do so.

As for further research, we recommend that similar research into difficulties surrounding the process of foreign language learning be conducted in which participants of different ages, and backgrounds, especially in the EFL context, will be involved. It might also be very useful to conduct a longitudinal study that would follow up the cohort of student participants in this study as they progress in their education to gain more insight into their usage of strategies.

Conflict of interests

The authors declare that they have no conflict of interests

REFERENCES

- Arshad Z, Shahbaz M, Al-Bashabsheh AMB (2015). Willingness to communicate in English: A gender-based study. *Int. J. Eng. Edu.* 4(4): 311- 319.
- Aslan O (2009). The role of gender and language learning strategies in learning english (Master dissertation). Available from <http://etd.lib.metu.edu.tr/upload/12611098/index.pdf>.
- Baily CA (1996). Unobtrusive computerized observation of compensation strategies for writing to determine the effectiveness of strategy instruction. In R. L. Oxford (Ed.), *Language learning strategies around the world: Cross-cultural perspectives* (Tech. Rep. 13: 141-150). Honolulu: University of Hawaii, Second Language Teaching & Curriculum Center.
- Balenović K (2011). Motivacija odraslih učenika za učenje engleskog jezika u kontekstu globalizacije. *Napredak.* 152(2): 189-209.
- Bećirović S (2012). The Role of Intercultural Education in Fostering Cross-Cultural Understanding, *Epiphany J. Transdisciplinary Stud.* 5(1): 138-156.
- Bećirović S (2017). The relationship between gender, motivation and achievement in learning English as a foreign language. *European J. Contemporary Educ.* 6(2): 210-219.
- Bećirović S, Brdarević Čeljo A, Sinanović J (2017). The Use of Metacognitive Reading Strategies among students at International Burch University: A Case Study. *European J. Contemporary Educ.* 6: 645-655.
- Beck IL, McKeown MG, Gromoll EW (1989). Learning from social studies texts. *Cognition and Instruction.* Hillsdale, NJ: Erlbaum. 6(2): 99-158.
- Brdarević Čeljo A, Asotić M (2017). The Influence of Social Context, Grade Level and Gender on the Use of Language Learning Strategies in Primary Schools. *Imperial J. Interdisciplinary Res.* 3(12): 7-14.
- Cogmen S, Saracalolu AS (2009). Students' usage of reading strategies in the Faculty of Education. *Procedia Social and Behavioral Sciences.* (1): 248-251.
- Dhuey E (2011). Middle School or Junior High? How Grade Level Configurations Affect Academic Achievement. Centre for Industrial Relations and Human Resources, University of Toronto.
- Dörnyei Z (1990). Conceptualizing Motivation in Foreign Language Learning. *Language Learning.* (40): 46-78.
- Dörnyei Z, Ushioda E (2009). Motivation, language identities and the L2 self: Future research directions. In Z. Dörnyei & E. Ushioda (Eds.), *Motivation, language identity and the L2 self* (p. 350-356). Bristol: Multilingual Matters.
- Ekstrom RB (1994). Gender differences in high school grades: An exploratory study. *College Board Report.* 94(3) ETS RR 94(25). New York.
- Gardner RC (1985). *Social psychology and second language learning: The role of attitudes and motivation.* London: Edward Arnold Publishers.
- Goh C, Foong K (1997). Chinese ESL students' learning strategies: A look at frequency, proficiency, and gender. *Hong Kong. J. Appl. Ling.* 2(1): 39-53.
- Green J, Oxford RL (1995). A closer look at learning strategies, L2 proficiency, and gender. *TESOL Quarterly.* (29): 261-297.
- Kimball MM (1989). A new perspective on women's math achievement. *Psychological Bulletin.* 198-214.
- Lawrence LJ (2007). Cognitive and metacognitive reading strategies revisited: Implications for instruction. *The Reading Matrix.* 7(3): 55-71.
- Lee ML (2012). A study of the selection of reading strategies among genders by EFL college students. *Procedia-Social and Behavioral Sci.* (64): 310-319.
- O'Malley JM, Chamot AU (1990). *Learning strategies in*

- second language acquisition. New York: Cambridge Univ. Press.
- Ortega L (2013). *Understanding Second language acquisition*. New York: Routledge.
- Oxford RL (1990). *Language learning strategies: What every teacher should know*. New York: Newbury House Publishers.
- Oxford RL (2003). *Language Learning Styles and Strategies: An Overview*. *GALA*. 1-25.
- Oxford RL, Nyikos M (1989). Variables affecting choice of language learning strategies by university students. *The Modern Lang. J.* 73: 291-300.
- Poole A (2009). The reading strategies used by male and female Colombian University students. *Profile Issues in Teachers' Professional Development*. 11(1): 29-40.
- Razi S (2008). The impact of learning multiple foreign languages on using metacognitive reading strategies. *The Reading Matrix* 8(1): 117-138.
- Rizvić E, Bećirović S (2017). Willingness to Communicate in English as a Foreign Language in Bosnian-Herzegovinian EFL Context, *European Researcher. Series A – International J. Soc. Sci.* (8)3.
- Sheorey R (2006). *Learning and teaching of English in India*. New Delhi: Sage Publications.
- Sinanović J, Bećirović S (2016). The Determinants of Lifelong Learning. *European Researcher. Series A – International J. Soc. Sci.* 103(2).
- Tobias S (1978). *Overcoming math anxiety*. Boston, Massachusetts: Houghton Mifflin Company.
- Voyer D, Voyer SD (2014) Gender Differences in Scholastic Achievement: A Meta-Analysis. *Psychological Bulletin - American Psychol. Assoc.* 140(4): 1174-1204.
- Woolfolk A (2014). *Educational Psychology*. New York: Pearson.
- Wu YA (2001). English language teaching in China: Trends and challenges. *TESOL Quarterly*. 35(1): 191-194
- Xu YT (2004). The relationships among junior high school students' foreign language anxiety, EFL learning motivation strategy. *National Digital Library of Theses and Dissertations in Taiwan*.
- Yaman A, Bećirović S (2016). Learning English and Media Literacy. *Imperial J. Interdisciplinary Res.* 2(6): 660-663.
- You CJ, Dörnyei Z (2016). Language learning motivation in China: Results of a large-scale stratified survey. *Applied Linguistics*. 37(4): 495-516.