

## GENDER DIFFERENCES IN THE USE OF LEARNING STRATEGIES, MOTIVATION AND COMMUNICATIVE COMPETENCE IN GERMAN AND ENGLISH AS FOREIGN LANGUAGES

*Manuela Karlak\**

*Fakultet za odgojne i obrazovne znanosti Sveučilišta u Osijeku*

*Vesna Bagarić Medve\**

*Filozofski fakultet Sveučilišta u Osijeku*

The aim of this research was to determine the possible differences between female and male Croatian learners of English/German as foreign languages regarding the frequency of use of learning strategies, the intensity of motivation and the level of communicative competence. The results show that there is a statistically significant difference in the use of all types of learning strategies in favour of female learners who are also significantly more motivated in certain motivational dimensions in relation to males. However, the results also show that male learners of English achieve statistically significantly higher results in standardized evaluation in relation to their female peers, whereas in German no statistically significant gender differences were found, irrespective of the measure of communicative competence.

*Keywords: language learning strategies, foreign language acquisition, individual differences in learning.*

### 1. INTRODUCTION

In the field of second language acquisition an important role belongs to factors related to individual differences such as motivation and learning strategies. Much research on individual differences factors has shown that both abovementioned variables, as well as the level of language attainment, are affected by gender.<sup>1</sup>

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\* manuela.putnik@gmail.com, mkarlak@foozos.hr

\* vbagaric@ffos.hr

<sup>1</sup> In this article the term gender is used because it describes the characteristics that a society or culture delineates as masculine or feminine. In the literature on second language acquisition the use of the

As the effect of individual differences factors is always closely connected to the social context, second language acquisition researchers nowadays do not put great emphasis on the importance of gender as a biological category but on the fact that it is socially determined. Thus, according to Nyikos (2008), gender is a much more complex phenomenon which is at least partially socially constructed. The power of sociocultural impacts is, for example, visible in different expectations attached to being a man or a woman, including how one learns and functions in society in general, e.g. with respect to communication, relationships to other people, desirable professions, etc. Accordingly, in the field of second language acquisition gender differences are also shown.

A great number of studies have indicated that the female gender is usually characterized by the more frequent use either of all or of some types of learning strategies (e.g. Alhaisoni, 2012; Božinović & Sindik, 2011; Dreyer & Oxford, 1996; Ehrman & Oxford, 1989; Green & Oxford, 1995; Kaylani, 1996; Lan & Oxford, 2003; Mihaljević Djigunović, 1999; Oxford & Nyikos, 1989), but not in all cases (see Lee & Oxford, 2008; Phakiti, 2003).

Green and Oxford (1995) found out that females use social-affective and memory strategies significantly more often than males. The authors explain that the obtained results indicate that female learners classify themselves more frequently as global learners with a greater introspective ability, pay more attention to affective aspects of learning, are more sociable and lean toward social approval. However, Phakiti (2003), in one of the relatively rare studies which shows a higher use of learning strategies by males, reported that men use metacognitive strategies more frequently.

Furthermore, Green and Oxford (1995) established that women and men differ in their language learning approaches, which may be connected to learning styles, motivation and attitudes. In fact, Lan and Oxford (2003), who discovered a significantly more frequent usage of almost all types of learning strategies in female elementary school learners, connected the use of learning strategies to liking the English language, i.e. to higher motivation in female learners.

Studies on motivation and gender point to the higher motivation of female learners in various motivational dimensions in relation to males (e.g. Gonzales, 2010; Kissau, Kolano & Wang, 2010; Mori & Gobel, 2006; Öztürk & Gürbüz, 2013). Based on a large sample of students, Csizér and Dörnyei (2005), as well as Dörnyei and Clément (2001), found out that girls are more

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term gender is dominant as opposed to the term sex, which is mostly used to refer to biological differences. However, in quite a few articles the two terms are used synonymously.

motivated (as evident in almost all dimensions of motivation) for learning different foreign languages (English, German, French, Italian and Russian) as opposed to boys, which is in line with the research findings of studies carried out in different contexts of language acquisition (e.g. for the Hungarian context see Dörnyei & Csizér, 2002; for the Japanese context see Mori & Gobel, 2006; for the Chinese context You, Dörnyei & Csizér, 2016). Since a positive correlation between motivation and success in language learning was found in many studies, which particularly points to the significant predictor role of motivation (e.g. Karlak, 2014; Karlak & Velki, 2015; Mihaljević Djigunović, 1998; Oxford & Shearin, 1996; Semaan & Yamazaki, 2015), and due to the results of a number of previously mentioned studies in which girls were found to be more motivated for language learning in comparison to boys, a tentative conclusion might be reached that girls are more successful in many aspects of language learning. This was shown in the Croatian learning context by Mihaljević Djigunović (1993) and Zergollern-Miletić (2007): the first author established that female students were more successful in English, and the second that the writing skills in English of female students were not only better but a significant predictor of their language proficiency as well. Moreover, the research findings speak of language learning as being more and more seen as a "girly" subject by boys in many countries (Csizér & Dörnyei, 2005).

Though gender is an almost unavoidable variable in research on motivation, learning strategies and communicative competence of foreign language learners, little systematic research has taken place on gender within these research topics to date (cf. Henry, 2009; Henry & Cliffordson 2013), especially in different learning and social contexts which, as indicated by some studies (e.g. Grainger, 2012; Huang, Hsu & Chen, 2015), can exert a powerful impact on the research results.

The aim of our research was to investigate the Croatian foreign language learning context for gender differences in the frequency of the usage of learning strategies, intensity of motivation and level of communicative competence in German and English as foreign languages. In line with previous research findings we predict that female learners of German as well as of English will more frequently use all types of strategies and that their various foreign language learning motivation dimensions will be higher in relation to male learners. Accordingly, it is expected that female learners' communicative competence will be higher than that of their male colleagues.

## 2. METHOD

### 2.1. Participants

Fourth grade students from 12 Croatian secondary schools participated in the research. The research was carried out in 9 grammar and 3 vocational schools in Osijek and five towns from a wider region of Slavonija (Vukovar, Đakovo, Vinkovci, Županja and Slavonski Brod). The final sample comprised 373 participants, out of which 141 participants fell into the subsample of learners of the German language (GL sample), and 232 constituted the subsample of learners of the English language (EL sample). Female participants were more numerous: there were 256 female students (68.63%) and 117 male students (31.37%). The average age of the participants was 18.04 (SD=0.38). The average number of years the participants had learned the abovementioned foreign languages was 9.57 (SD=2.07), more precisely 9.02 (SD=2.33) for the German language and 9.90 (SD=1.83) for the English language.

### 2.2. Instruments

#### **Questionnaire on Foreign Language Learning Motivation (Karlak, 2014)**

A questionnaire designed by Karlak (2014) was used to gain insight into the motivation for foreign language learning. The questionnaire relies on the theoretical foundations provided by the leading researchers and theoreticians in the field (e.g. Clément, Dörnyei, & Noels, 1994; Dörnyei, 2001; Gardner & Mihaljević Djigunović, 2003; Mihaljević Djigunović, 1998). It consists of a total of 65 items (statements). The variables, including the number of items (k)<sup>2</sup> and item examples, are as follows: affective motivation (k=7, e.g. *English/German is a very interesting language*), integrative motivation (k=6, e.g. *I would like to have many friends from English/German speaking countries*), language use-communicational motivation (k=13, e.g. *English/German enables me to communicate with a lot of people*), attitudes toward speakers of a foreign language (k=3, e.g. *I admire many people coming from English/German speaking countries*), effort (k=4, e.g. *I really try hard to learn English/German*), desire to learn a foreign language (k=3, e.g. *I have a great desire to learn everything in the English/German language*), interest in foreign languages (k=3, e.g. *I really enjoy learning foreign languages*), foreign language anxiety (k=3, e.g. *Sometimes I am afraid that the other students will laugh at me when I speak English/German*), parental support (k=4, e.g. *My parents believe that it is very important for me to learn English/German*), teacher/teaching methods (k=6, e.g. *Our English/German teacher teaches in a very interesting way*), class atmosphere (k=4, e.g. *The*

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<sup>2</sup> The letter "k" refers to the number of (sub)scale items in the applied questionnaire (e.g. Field, 2005; Petz, 2002).

*English/German class atmosphere is very dynamic and motivating*), learning materials (k=3, e.g. *I don't like the English/German book we are using at all (it should be enriched with additional materials, magazines etc.)*), and learning difficulties (k=6, e.g. *English/German is too difficult for me*). The participants were requested to state to what extent they agree or disagree with the statements on a scale from 1 to 5 (1-not at all agreed, 5-absolutely agreed). Factor analysis was used to extract three factors (principal component analysis, varimax rotation, extraction of factors based on the scree test). The factors, including the number of subscale items and Cronbach alpha coefficients ( $\alpha$ ), are as follows: language related motivation (GL k=45;  $\alpha=0.98$ ; EL k=38;  $\alpha=0.94$ ), learning context motivation (GL k=12;  $\alpha=0.85$ ; EL k=13;  $\alpha=0.83$ ) and learner related motivation (GL k=7;  $\alpha=0.61$ ; EL k=12;  $\alpha=0.86$ ). The coefficient of the internal reliability of the questionnaire was  $\alpha=0.96$  for the GL sample and  $\alpha=0.94$  for the EL sample of students.

An additional second-order factor analysis of the three mentioned factors was run in both samples (principal component analysis, oblimin rotation, extraction of factors based on the scree test). Factor analysis of language-related motivation revealed seven second-order factors in the GL sample (educational-professional motivation k=6;  $\alpha=0.92$ ; integrative motivation k=5;  $\alpha=0.78$ ; effort k=5;  $\alpha=0.84$ ; affective motivation k=11;  $\alpha=0.95$ ; language use motivation k=10;  $\alpha=0.94$ ; interest in foreign languages k=3;  $\alpha=0.80$ ; communicational motivation k=5;  $\alpha=0.81$ ), and 8 factors in the EL sample (educational-professional motivation k=7;  $\alpha=0.84$ ; integrative motivation k=3;  $\alpha=0.72$ ; effort k=8;  $\alpha=0.86$ ; affective motivation k=6;  $\alpha=0.90$ ; language use motivation k=2;  $\alpha=0.61$ ; communicational motivation k=6;  $\alpha=0.83$ ; parental attitude k=2;  $\alpha=0.81$ ; attitude toward native speakers of English k=4;  $\alpha=0.70$ ). By means of factor analysis of learning context motivation three factors were extracted from the GL sample (teacher k=7;  $\alpha=0.85$ ; learning materials k=3;  $\alpha=0.66$ ; teacher's competence k=2;  $\alpha=0.65$ ) and two factors in the EL sample (teacher k=9;  $\alpha=0.79$ ; learning materials k=4;  $\alpha=0.67$ ). Factor analysis of learner related motivation revealed two factors in the GL sample (parental support k=4;  $\alpha=0.83$ ; German language anxiety k=3,  $\alpha=0.77$ ) and two factors in the EL sample (linguistic self-confidence k=10;  $\alpha=0.92$ ; parental interest k=2;  $\alpha=0.68$ ).<sup>3</sup>

### **Strategy Inventory for Language Learning (Oxford, 1990)**

A slightly adapted version of the SILL (Strategy Inventory for Language Learning) (Oxford, 1990), i.e. a piloted version of the SILL 7.0 questionnaire

<sup>3</sup> For a detailed description of factors see Karlak (2014).

which consists of 50 items (statements), was used to investigate language learning strategies. The SILL is used to measure the frequency of usage of six types of language learning strategies. Those are: memory strategies (k=9, e.g. *I use new English/German words in a sentence so I can remember them*), cognitive strategies (k=14, e.g. *I practice the sounds of English/German*), compensation strategies (k=6, e.g. *To understand unfamiliar English/German words, I make guesses*), metacognitive strategies (k=9, e.g. *I have clear goals for improving my English/German skills*), affective strategies (k=6, e.g. *I encourage myself to speak English/German even when I am afraid of making a mistake*) and social strategies (k=6, e.g. *I ask English/German speakers to correct me when I talk*). The participants are required to estimate how often they use particular learning strategies on a scale from 1 to 5 (1-never or almost never, 5-always or almost always). An adapted version of the SILL used in this study differs from the original questionnaire made by Oxford (1990) in the altered formulation of only one item.<sup>4</sup> Factor analysis was used to extract three factors from the GL sample (principal component analysis, oblimin rotation, extraction of factors based on the scree test): communicative-metacognitive strategies (k=22;  $\alpha=0.94$ ), social-affective strategies (k=10,  $\alpha=0.74$ ) and cognitive strategies (k=11;  $\alpha=0.81$ ). In the EL sample, four factors were extracted (principal component analysis, oblimin rotation, extraction of factors based on the scree test): communicative-metacognitive strategies (k=17;  $\alpha=0.90$ ), social-affective strategies (k=7;  $\alpha=0.72$ ), cognitive strategies (k=9;  $\alpha=0.73$ ) and memory strategies (k=9;  $\alpha=0.73$ ).<sup>5</sup> The internal reliability coefficient of the questionnaire on language learning strategies was  $\alpha=0.93$  in the GL sample and  $\alpha=0.90$  in the EL sample (Karlak, 2014).

### **Measures of Communicative Language Competence in a Foreign Language**

The level of communicative language competence in the foreign language was established on two levels: first, by means of a standardized evaluation process used in the State Secondary School Leaving Exam (Matura), i.e. the total grade (score)<sup>6</sup> and the percentage of correct answers, and second, by means of a class evaluation, i.e. the grade in the foreign language obtained at the end of the first school semester (the fourth year of secondary schooling). Student success in German on the State Secondary School Leaving Exam was  $M=3.58$

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<sup>4</sup> It is the item: "*While reading, I do not look each unfamiliar word up in the dictionary,*" which has been changed from a negative into an affirmative statement based on suggestions made by participants of the pilot study.

<sup>5</sup> For a description of strategy types see Karlak (2014).

<sup>6</sup> The total grade is made up of the sum of scores of the tripartite State Secondary School Leaving Exam: listening comprehension, reading comprehension, and writing.

(SD=0.99), and the mean percentage of correct answers in this exam was  $M=70.44$  (SD=17.67), while class evaluation grades for German yielded  $M=3.55$  (SD=1.32). In English, student success on the State Secondary School Leaving Exam was  $M=3.78$  (SD=0.72), and the mean percentage of correct answers in this exam was  $M=73.01$  (SD=11.55), while class evaluation grades yielded  $M=3.63$  (SD=1.09).

General data on participants were also collected and they included information on: age, gender, and years of learning the foreign language (for details see Karlak, 2014).

### **2. 3. Data Collection**

Data collection took place in schools during foreign language class time. Before approaching the participants, the first researcher contacted the school principals of the selected schools personally and provided them with information about the purpose of the study and details of the administering of questionnaires. She also asked for their assistance in carrying out the study. Prior to filling in the questionnaires, the first researcher explained to the participants that the study would be carried out on an entirely voluntary basis and that no one but the researcher would have access to the participants' data. She also emphasized the fact that the questionnaire was not anonymous due to the post hoc matching of questionnaire data with the State Secondary School Leaving Exam results. The participants were asked to fill in and sign a written consent form to grant the researcher access into their State Secondary School Leaving Exam results. After that the participants were asked to read the questionnaire instructions carefully and to provide complete and candid answers. All the participants filled in the questionnaires. However, a few (1.58%,  $N=6$ ) did not sign the statement granting the researchers access to the results of their State Secondary School Leaving Exam. The information obtained from these participants was not used in the subsequent data analysis because of the impossibility of post hoc matching test results with the questionnaire data. Filling in the questionnaires lasted no longer than 40 minutes. After the State Secondary School Leaving Exam was over, the first researcher contacted the school principals and collected the data about student grades in English/German.

### **3. RESULTS**

In order to find out about any possible gender differences in the use of learning strategies, motivation and communicative competence in the GL and

EL samples, one-way analysis of variance was carried out. The results are shown in Table 1.

Table 1. Gender differences in the use of learning strategies, motivation and communicative competence for the GL (females N=114, males N=27) and EL (females N=142, males N=90) samples (ANOVA)

Variable	Gender	M	SD	df	F	p
<b>GL</b>						
Learning strategies	f	2.84	0.54	1	9.801	0.002**
	m	2.48	0.59			
Motivation	f	3.28	0.52	1	1.755	0.187
	m	3.13	0.62			
Grade - standardized evaluation	f	3.53	1.01	1	1.850	0.176
	m	3.81	0.92			
Mean percentage of correct answers in the GL exam	f	69.34	18.15	1	2.345	0.128
	m	75.10	14.90			
Grade - class evaluation	f	3.63	1.28	1	2.513	0.115
	m	3.19	1.47			
<b>EL</b>						
Learning strategies	f	2.82	0.39	1	21.583	0.000**
	m	2.56	0.42			
Motivation	f	3.54	0.48	1	1.746	0.188
	m	3.46	0.45			
Grade - standardized evaluation	f	3.67	0.73	1	8.274	0.004**
	m	3.94	0.68			
Mean percentage of correct answers in the EL exam	f	70.97	11.71	1	12.067	0.001**
	m	76.25	10.57			
Grade - class evaluation	f	3.61	1.10	1	.084	0.772
	m	3.66	1.08			

\*\*p<0.01

The results of the analysis of variance indicate statistically significant gender differences in the frequency of the use of learning strategies in the GL (F=9.801, p<0.01) and the EL sample (F=21.583, p<0.01), with higher scores obtained by female learners. Interestingly, statistically significant gender differences were found related to the level of communicative competence (grade obtained in standardized evaluation) in the EL sample which is found to be significantly higher in boys, i.e. male learners of English (F=8.274, p<0.01), which is also confirmed by a statistically significant difference in the mean percentage of correct answers in the English language exam (F=12.067, p<0.01). Since the results showed significant gender differences in the use of learning strategies, we were interested in finding out if there were such differences in the use of specific types of learning strategies in the two samples of language learners. The results of the analysis of variance are shown in Table 2.

Table 2. Gender differences in the use of respective types of learning strategies for the GL (females N=114, males N=27) and EL (females N=142, males N=90) samples (ANOVA)

Variable	Gender	M	SD	df	F	p
<b>GL</b>						
Communicative-metacognitive strat.	f	2.91	0.74	1	4.045	0.046*
	m	2.58	0.89			
Cognitive strat.	f	2.87	0.64	1	9.782	0.002**
	m	2.44	0.62			
Social-affective strat.	f	2.75	0.64	1	6.641	0.011*
	m	2.41	0.53			
<b>EL</b>						
Communicative-metacognitive strat.	f	3.32	0.70	1	9.189	0.003**
	m	3.04	0.67			
Cognitive strat.	f	2.31	0.61	1	15.716	0.000**
	m	2.01	0.50			
Memory strat.	f	2.69	0.58	1	16.685	0.000**
	m	2.39	0.53			
Social-affective strat.	f	3.12	0.67	1	12.689	0.000**
	m	2.78	0.74			

\*\*p<0.01

\*p<0.05

Table 2 clearly shows that the results of the analysis of variance are quite similar for the GL and the EL samples because they point to a statistically significant more frequent use of all types of strategies by female foreign language learners. Female learners of English more frequently use communicative-metacognitive strategies (F=9.189, p<0.01), cognitive strategies (F=15.716, p<0.01), memory strategies (F=16.685, p<0.01), and social-affective strategies (F=12.689, p<0.01). Whereas in the EL sample all established differences are significant at the 1% level, in the GL sample differences were found at the 1% level only for the use of cognitive strategies (F=9.782, p<0.01) which female learners use more frequently, and at the 5% level of significance for the use of communicative-metacognitive learning strategies (F=4.045, p<0.05) and social-affective strategies (F=6.641, p<0.05).

Although no statistically significant gender differences were found in overall motivation (Table 1), we decided to further investigate certain (sub)components of motivation by means of one-way analysis of variance in order to find out possible gender differences in the two samples. The results are shown in Table 3.

Table 3. Gender differences in (sub)components of motivation for the GL (females N=114, males N=27) and EL (females N=142, males N=90) samples (ANOVA)

Variable	Gender	M	SD	df	F	p
<b>GL</b>						
1. LANGUAGE RELATED MOT.	f	3.27	0.85	1	1.116	0.293
	m	3.06	1.06			
Educational-professional mot.	f	3.57	1.03	1	2.543	0.113
	m	3.20	1.21			

Integrative mot.	f	2.63	0.82	1	0.517	0.473
	m	2.49	1.13			
Affective mot.	f	3.17	1.11	1	0.961	0.329
	m	2.93	1.11			
Language use mot.	f	3.28	1.09	1	0.024	0.878
	m	3.32	1.27			
Communicational mot.	f	3.23	0.81	1	0.057	0.812
	m	3.27	1.01			
Interest in foreign languages	f	3.85	0.98	1	6.547	0.012*
	m	3.30	1.15			
Effort	f	3.42	0.88	1	6.614	0.011*
	m	2.90	1.13			
2. LEARNER RELATED MOT.	f	3.34	0.68	1	1.553	0.215
	m	3.16	0.63			
Parental support	f	2.88	1.01	1	4.775	0.031*
	m	2.42	0.94			
German language anxiety	f	3.96	1.01	1	0.887	0.348
	m	4.16	0.86			
3. LEARNING CONTEXT MOT.	f	3.24	0.73	1	0.263	0.609
	m	3.16	0.66			
Teacher	f	3.16	0.87	1	0.047	0.828
	m	3.12	0.85			
Teacher's competence	f	4.10	1.03	1	0.722	0.397
	m	4.28	0.85			
Learning materials	f	2.85	0.89	1	3.358	0.069
	m	2.51	0.87			
EL						
1. LANGUAGE RELATED MOT.	f	3.85	0.53	1	12.545	0.000**
	m	3.59	0.56			
Educational-professional mot.	f	4.38	0.65	1	3.025	0.083
	m	4.23	0.62			
Integrative mot.	f	2.49	1.04	1	1.837	0.177
	m	2.30	1.06			
Affective mot.	f	4.20	0.74	1	10.713	0.001**
	m	3.86	0.82			
Language use mot.	f	4.54	0.58	1	0.462	0.497
	m	4.59	0.55			
Communicational mot.	f	4.21	0.72	1	17.689	0.000**
	m	3.81	0.70			
Parental attitude	f	4.24	0.89	1	6.442	0.012*
	m	3.92	1.01			
Attitude toward native speakers of English	f	3.26	0.78	1	2.531	0.113
	m	3.09	0.78			
Effort	f	3.38	0.75	1	10.594	0.001**
	m	3.06	0.68			
2. LEARNER RELATED MOT.	f	3.63	0.75	1	0.686	0.408
	m	3.71	0.63			
Linguistic self-confidence	f	3.87	0.93	1	1.177	0.279
	m	4.00	0.79			
Parental interest	f	2.42	1.05	1	1.600	0.207
	m	2.25	0.95			
3. LEARNING CONTEXT MOT.	f	3.14	0.61	1	0.653	0.408
	m	3.07	0.69			
Teacher	f	3.23	0.66	1	1.057	0.305
	m	3.13	0.73			
Learning materials	f	2.95	.80	1	0.015	0.904
	m	2.94	.83			

\*\*p&lt;0.01

\*p&lt;0.05

The results in Table 3 show that there are several (sub)components of motivation for which statistically significant gender differences were found that point to higher motivational intensity in females. For example, female learners of German exhibit a significantly greater interest in learning foreign languages ( $F=6.547$ ,  $p<0.05$ ) than male learners, they invest more effort in learning German ( $F=6.614$ ,  $p<0.05$ ) and have a stronger parental support for learning German ( $F=4.775$ ,  $p<0.05$ ). Female learners of English, in comparison to males, view the learning of English as significantly more valuable, which is measured by language-related motivation ( $F=12.545$ ,  $p<0.01$ ). Also, they have a higher affective motivation ( $F=10.713$ ,  $p<0.01$ ) as well as communicational motivation ( $F=17.689$ ,  $p<0.01$ ). In addition, they invest more effort in learning English ( $F=10.594$ ,  $p<0.01$ ) and the parental attitude ( $F=6.442$ ,  $p<0.05$ ) toward learning English is stronger in relation to male learners of English.

#### 4. DISCUSSION

The research results presented above point to gender differences in the use of learning strategies in German and English as foreign languages. In accordance with our predictions, boys and girls statistically significantly differ in the frequency of overall use as well as using all specific types of strategies, i.e. female learners reported to use strategies more often (see Tables 1 and 2), which is partly in accordance with the results of similar research (e.g. Alhaisoni, 2012; Božinović & Sindik, 2011; Dreyer & Oxford, 1996; Ehrman & Oxford, 1989; Green & Oxford, 1995; Kaylani, 1996; Lan & Oxford, 2003; Mihaljević Djigunović, 1999; Oxford & Nyikos, 1989).

Although no statistically significant differences were found in overall motivation between boys and girls, a closer look at individual (sub)components of motivation still reveals certain gender-dependent differences. Namely, female learners of German show a significantly greater interest in learning foreign languages, they invest more effort into learning and have stronger parental support for learning German (see Table 3). In the EL sample, gender differences predominate, mostly as a result of the generally better status of English in society and the expectations of society members in relation to this global language. For example, findings on language-related motivation show that female learners view learning English as more valuable than male learners. They have higher affective motivation (see Mihaljević Djigunović, 1993) and communicational motivation. Like female learners of German, they invest more effort in learning. The parental attitude toward learning English is more positive in relation to male learners, i.e. female learners' parents put more stress on the importance of learning English (Table

3), which is also confirmed by the finding that female learners of English, in relation to all other subsamples of students, i.e. male learners of English and male and female learners of German, have been learning this language on average somewhat longer (for details see Karlak, 2014). Similarly, Dörnyei, Csizér and Neméth (2006) found significantly higher values of established motivational dimensions and motivated behaviour in female students, irrespective of the foreign language being learned. However, a deeper analysis of (sub)components of motivation in the two samples (English and German) shows that in the GL sample, the differences between females and males lie in predominantly general motivational dimensions, such as interest in foreign languages or learning effort (Table 3). These dimensions denote foreign language learning in general, and as such do not refer to characteristics or specificities exclusive to the German language. This leads to the conclusion that, measured by language related motivation, the German language has an almost equal personal value to male and female learners, which is expected due to the generally poorer status of German as a foreign language in the Croatian educational system as well as in the wider social context (see for example Karlak & Šimić, 2016; Pavičić & Bagarić, 2004; Pavičić Takač & Bagarić, 2010). German as an elective course is often marginalized. According to Karlak and Šimić (2016: 78), "upon entering the formal education system the students receive the clear message that some languages, i.e. English, are more valuable than the others." In their research on the criteria for the selection of a foreign language to be introduced as an obligatory subject in grade 1, Pavičić and Bagarić (2004: 138) also found that "the headmasters' decision was primarily based on the parents' preference for the English language." Furthermore, the research results of Pavičić Takač and Bagarić Medve (2010: 97) showed that "the English learning context and the German learning context in Croatia are different in many respects. The English learning context is richer in that it offers abundant opportunities for the receptive use of the English language outside the school. Within this context there are many sociolinguistic factors which support the linguistic development of English learners. The German learning context lacks such factors. Even if they do exist, they are not utilized to a degree that would facilitate language development."

In the EL sample, however, the dimensions of motivation which refer to significantly higher motivation in female learners in comparison to males are much more personal in nature, for example the language-related motivation that indicates the value of learning English, or the affective motivation that refers to the love of a language, and the communicational motivation that denotes the communicational value of a language. In other words, the findings

suggest that the superior status of English in the formal learning context as well as in the wider extracurricular context contributes to a stronger emotional attachment of female learners to that language.

Moreover, the research results point to a possible connection of motivation and learning strategies (see Appendix 2), i.e. gender differences in the use of strategies may be explained by the higher specific motivation of female students for investing effort in learning a foreign language. A potential explanation for this may be the fact that the knowledge of foreign languages, as well as professions associated with this knowledge, are frequently associated in Croatia with the female gender, as is regularly evident, for example, in the large number of female students enrolled in language grammar schools or faculties specialised in languages. The fact that employment in the area of foreign languages presents a socially desirable profession, which can offer many opportunities for women, is confirmed by the finding that female learners of German and English receive a significantly stronger parental support than male learners of these languages. Similarly, Kissau (2007) found that boys are perceived to receive less encouragement than girls to study the French language. Kaylani (1996) and Nyikos (2008) also point to the power of sociocultural impacts. In this regard, Bussey and Bandura (1999: 676) stress that "some of the most important aspects of people's lives, such as the talents they cultivate, the conceptions they hold of themselves and others, the sociostructural opportunities and constraints they encounter, and the social life and occupational paths they pursue are heavily prescribed by societal gender-typing", i.e. by the family, education system, media, culture etc. Therefore, we believe that despite clear results in favour of the female gender, strategy use should not be easily ascribed to gender as a biological category without taking into consideration specific cultural and contextual factors - like a longer stay in German speaking countries which was reported by many female learners of German (see Karlak, 2014), the impact of which, with motivation as a mediator, probably reflects the use of strategies of certain individual groups of people in a certain sociocultural context.

Further, if we consider the higher intensities of specific motivation types of female learners of English and the significantly more frequent use of all types of strategies, it is surprising that our research findings show that gender differences exist also in relation to communicative competence but with higher results in the sample of male learners of English. This finding is, for instance, contrary to Mihaljević Djigunović (1993) and Zergollern-Miletić (2007), who established that in the Croatian learning context, female learners are more successful than male learners. Interestingly, in spite of a lower intensity of

language-related motivation, affective motivation, communicational motivation, effort and parental attitude, as well as the significantly less frequent use of all learning strategy types, male learners of English achieved significantly higher results, outperforming female learners in standardized evaluation. Moreover, in the extracurricular context, female learners of English practise their listening skills in English significantly more frequently than male learners ( $F=4.853$ ,  $p<0.05$ ; see Appendix 1). Regarding learning strategies, it may be that the learners of English have developed special combinations of strategies, possibly some strategies that were not included in the questionnaire but that they regard as more effective and, thus, use them more frequently. That is why it would be extremely useful to conduct qualitative research which could shed more light on this issue. A possible explanation for the so-called "inefficiency" of the aforementioned motivation types could be the fact that no significant correlations were found between the mentioned components of motivation and the grade obtained in standardized evaluation (see Appendix 3). The only (sub)component of language-related motivation which correlates with communicative competence is language use motivation, for which, however, no gender differences were found. A potential explanation may as well lie in the structure of the State Secondary School Leaving Exam, which is a standardized written exam that unfortunately does not test speaking skills, an area in which female learners might achieve better results. Namely, some authors express the opinion that women are characterized as being more eloquent and fluent in using language (e.g. Cameron, 2008; Wang, 2015). A reason for that might be their using both sides of the brain in performing linguistic tasks, particularly communication tasks, such as listening and speaking, as well as activating more brain centres than men do (Legato, 2005a in Nyikos, 2008). However, males are characterized by better visual-spatial abilities as well as better mathematical reasoning abilities which is why they are more successful in mathematics, engineering and the physical sciences (Benbow et al., 2000). It is therefore possible to assume that the State Secondary School Leaving Exam, as a written exam that requires certain logical, visual-spatial and perceptive abilities, is more suitable for male learners of English in comparison to female learners. Yet, the lack of a statistically significant difference in the GL sample that could enable making bolder generalizations concerning the gender-dependency of communicative competence tested in a standardized exam leads to the conclusion that the differences found in English could be ascribed to factors not included in this research, e.g. intelligence, aptitude or some personality traits (see Ehrman & Oxford, 1989) that could have significantly affected the results of the State

Secondary School Leaving Exam. In this sense, a possible explanation of such results might be given by Clément and Kruidenier (1985 in Kondo-Brown, 2001) who suggest that "contextualized performance", in our case class evaluation, is more closely linked to motivation, whereas performance in standardized tests is more closely related to aptitude.

It is also possible to assume that because of the stronger parental support, i.e. a more positive attitude of parents towards learning English (Table 3), female learners of English are faced with much more pressure before and during taking the State Secondary School Leaving Exam, i.e. the evaluation of their communicative competence in a foreign language. Thus, their exam results could also have been influenced by their tendency to lean toward social approval and their intent to meet the expectations of significant others. The research findings by Karlak and Velki (2015: 645) speak to this assumption, namely that gender is a "significant predictor of grades obtained in the standardized evaluations as well as the percentage of correct answers on this exam whereby success is better predicted with male students".<sup>7</sup> The authors, furthermore, conclude that "taking an exam such as the State Secondary School Leaving Exam is probably more stressful for most female students because they suffer greater societal pressure since female students mostly choose their careers in the field of languages, be it in education, translation or other related professions" (Karlak & Velki, 2015: 645). The significant link between learner-related motivation and success in standardized evaluation is also confirmed by the moderate positive correlation of that grade with linguistic self-confidence, as well as by a weak negative correlation in the case of parental interest (see Appendix 3), which indicates that an overly active parental role may have an adverse effect on the learning process and its outcome. The fact that female and male learners of English do not statistically differ in a significant manner in the grade obtained in class evaluation probably speaks to such an interpretation of results.

## 5. CONCLUSION

In this study, we have found statistically significant gender differences between female and male students in both the GL and the EL samples in relation to all types of learning strategies and certain (sub)components of motivation with higher values in females. For example, female learners of German, in relation to their male peers, show a greater interest in learning

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<sup>7</sup> In the Karlak and Velki (2015) study, the male and female genders refer to the total sample of students, i.e. there is no subdivision of the sample in GL and EL.

foreign languages, they invest more effort in learning German and receive stronger parental support in learning this language. In relation to male learners, female learners of English view learning English as more valuable, they have higher intensities of affective and communicational motivation, invest more effort and the parental attitude toward their learning of English is more positive. A comparison of findings in the two foreign languages shows that a greater use of learning strategies is a characteristic of the female gender, irrespective of the language being learned (we could almost call it universal), whereby motivation is much more variable in the respective languages, which may be linked to the dichotomy of world-non-world language. In accordance with this, the comparison of findings for German and English again speaks to the significantly different acquisition contexts of two (foreign) languages in Croatia, with German remaining a foreign language and English more and more becoming a second language, at least in this population of Croatian secondary school students. An interesting finding is also the fact that in the English language a significant gender difference was found in favour of male students in relation to their communicative competence (grade obtained in standardized evaluation). The established differences, however, most likely cannot be ascribed to gender as a biological category per se, but are linked to powerful sociocultural factors which affect the respective genders to a different extent. Therefore, like Nyikos (2008: 79), we believe that more research is necessary in order to clarify "how gender [...] takes its place in a complex web of characteristics that define us as human beings and as learners."

The research results also point to certain practical implications, especially the need to strengthen foreign language learning motivation in male students by teachers as well as parents in order to enhance their emotional attachment to the foreign language they are learning, which, *inter alia*, might contribute to a more positive view of foreign languages not being exclusively female subjects. Moreover, in the long run, this could very likely reduce certain societal pressure regarding foreign languages and related professions in females, which might have a favourable impact on foreign language acquisition in the formal as well as in the wider social contexts.

A potential shortcoming of this study is, without a doubt, the imbalance of both samples of students regarding gender, i.e. there are considerably more female students who took part in the research, particularly in the GL sample. It was extremely difficult to find enough participants who registered for the German language State Secondary School Leaving Exam, which is a direct indication of the generally lower motivation for learning German as a foreign

language in this part of Croatia, particularly among male learners. Future studies should therefore equally represent male and female students in order to yield more reliable results.

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## **SPOLNE RAZLIKE U UPORABI STRATEGIJA UČENJA, MOTIVACIJI I KOMUNIKACIJSKOJ JEZIČNOJ KOMPETENCIJI U NJEMAČKOM I ENGLSKOM KAO STRANIM JEZICIMA**

Cilj istraživanja koje se prikazuje u ovome radu bio je provjeriti postoje li u hrvatskome kontekstu ovladavanja inim jezikom razlike između učenica i učenika njemačkoga/engleskoga jezika u učestalosti uporabe strategija učenja, intenzitetu motivacije i razini komunikacijske jezične kompetencije. Rezultati su pokazali da učenice statistički značajno češće rabe sve tipove strategija učenja u odnosu na učenike te da su značajno više motivirane u određenim dimenzijama motivacije. Nalazi ukazuju i da učenici engleskog u odnosu na učenice postižu statistički značajno više rezultate u standardiziranome vrjednovanju, dok u njemačkome jeziku nisu utvrđene spolne razlike, i to neovisno o vrsti vrjednovanja komunikacijske jezične kompetencije.

*Ključne riječi: individualne razlike u učenju, strategije učenja jezika, ovladavanje stranim jezikom.*

**APPENDIX 1**

*Gender differences in listening, reading, speaking and writing in the extracurricular EL acquisition context (females N=142, males N=90) (ANOVA)*

Variable	Gender	M	SD	df	F	p
Listening	f	4.52	0.81	1	4.853	0.029*
	m	4.27	0.92			
Reading	f	3.53	0.99	1	1.586	0.209
	m	3.34	1.21			
Speaking	f	3.04	0.98	1	2.543	0.112
	m	2.82	1.01			
Writing	f	3.20	1.14	1	1.167	0.281
	m	3.03	1.11			

\*p<0.05

**APPENDIX 2**

*Correlations between language learning strategies, grades obtained in standardized and class evaluation and respective motivational (sub)components in the female GL sample (N=114) and the female EL sample (N=142) (Pearson coefficient)*

Variable	Learning strategies	Grade - standardized evaluation	Grade - class evaluation
<b>GL</b>			
1. LANGUAGE RELATED MOT.	0.550**	0.439**	0.702**
Educational-professional mot.	0.445**	0.377**	0.664**
Integrative mot.	0.355**	0.152	0.370**
Affective mot.	0.503**	0.382**	0.635**
Language use mot.	0.398**	0.582**	0.763**
Communicational mot.	0.505**	0.237*	0.464**
Interest in foreign languages	0.364**	0.215*	0.470**
Effort	0.752**	0.292**	0.442**
2. LEARNER RELATED MOT.	0.453**	0.193*	0.294**
Parental support	0.440**	-0.048	-0.040
German language anxiety	0.118	0.364**	0.505**
3. LEARNING CONTEXT MOT.	0.177	-0.068	-0.201*
Teacher	0.203*	-0.101	-0.258**
Teacher's competence	-0.050	-0.079	-0.097
Learning materials	0.163	0.067	-0.009
<b>EL</b>			
1. LANGUAGE RELATED MOT.	0.456**	0.189*	0.085
Educational-professional mot.	0.292**	0.165*	0.072
Integrative mot.	0.251**	0.111	0.025
Affective mot.	0.313**	0.086	-0.070
Language use mot.	0.258**	0.207*	0.080
Communicational mot.	0.356**	0.207*	0.076
Parental attitude	0.118	0.065	0.000
Attitude toward native speakers of English	0.424**	-0.033	-0.120

Effort	0.407**	0.196*	0.253**
2. LEARNER RELATED MOT.	0.123	0.321**	0.513**
Linguistic self-confidence	0.071	0.356**	0.549**
Parental interest	0.210*	-0.181*	-0.215*
3. LEARNING CONTEXT MOT.	0.258**	-0.059	0.119
Teacher	0.166*	-0.066	0.125
Learning materials	0.334**	-0.024	0.064

\*\* p<0.01

\* p<0.05

### APPENDIX 3

*Correlations between language learning strategies, grades obtained in standardized and class evaluation and respective motivational (sub)components in the EL sample (N=232) (Pearson coefficient)*

Variable	Learning strategies	Grade - standardized evaluation	Grade - class evaluation
1. LANGUAGE RELATED MOT.	0.472**	0.078	0.142*
Educational-professional mot.	0.324**	0.089	0.115
Integrative mot.	0.256**	0.064	0.079
Affective mot.	0.323**	0.000	0.034
Language use mot.	0.251**	0.208**	0.114
Communicational mot.	0.413**	0.111	0.125
Parental attitude	0.116	-0.062	-0.003
Attitude toward native speakers of English	0.430**	-0.065	-0.057
Effort	0.440**	0.105	0.262**
2. LEARNER RELATED MOT.	0.033	0.279**	0.490**
Linguistic self-confidence	-0.017	0.316**	0.521**
Parental interest	0.206**	-0.189**	-0.197**
3. LEARNING CONTEXT MOT.	0.356**	-0.013	0.052
Teacher	0.288**	-0.035	0.021
Learning materials	0.372**	0.034	0.095

\*\* p<0.01

\* p<0.05