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## AN INSIGHT INTO THE LANGUAGE LEARNING STYLES OF CROATIAN ELEMENTARY SCHOOL EFL LEARNERS

### Summary

*This paper deals with the language learning styles of Croatian learners of English. The aim of the study was to gain an insight into the preferred learning styles of a group of elementary school learners and to find out whether the gender and success of the learners influence their preferred learning styles. Cohen and Oxford's (2001) Learning Style Survey for Young Learners was used to test 5 dimensions and 11 subscales of learning styles. It was found that the learners' preferred styles are field-independent, closure-oriented, global and auditory, and that there are significant differences in some dimensions of learning styles with regard to success and gender.*

**Key words:** *language learning styles, learning styles dimensions, elementary school learners*

### Introduction

Although language learning styles have been researched for several decades, they remain without a unanimous definition or classification of the concept and they are among the most conflicting areas of research in second language acquisition. Most scholars agree that learning styles are preferences within an individual that influence his/her learning behaviour, operating on a continuum rather than being dichotomous (Oxford, 2001; Ellis, 2008). Learning styles depend on people's ways of internalizing their environment. This process of internalization is a mixture of the physical, affective and cognitive domains, all of which thus merge in learning styles, leading them to mediate between emotion and cognition (Brown, 2007). A learner's choice of a learning style may also depend on the context in which a particular task is being performed (Dörnyei and Skehan, 2003, in Brown, 2007). Styles do not only depend on the individual's environment but also on his/her developmental and biological characteristics.

In this article we will discuss the most influential definitions of learning styles and learning style dimensions and present the results of research into the preferred language learning styles of a group of Croatian elementary school learners.

## **Learning styles and learning styles dimensions**

Definitions of learning styles usually emphasize the fact that learning styles are stable, durable, consistent and deeply ingrained characteristics of an individual. Keefe (1979, in Ellis, 2008:660) thus defines learning styles as “the characteristic cognitive, affective and psychological behaviours that serve as relatively stable indicators of how learners perceive, interact and respond to the learning environment”. Skehan offers two noteworthy definitions of learning styles, claiming that they are “a general disposition, voluntary or not, toward processing information in a particular way” (Skehan, 1991, in Brown, 2007:120). His more recent definition describes learning styles as “the characteristic manner in which an individual chooses to approach a learning task” (Skehan, 2001:237). Another definition of learning styles has been offered by Oxford (2001), who characterizes learning styles as the general approaches that learners use in acquiring a new language or in learning any other subject. Oxford (2001) claims that in order for a student to have a good performance and to experience confidence instead of anxiety, there has to be harmony between the student (in terms of style and strategy preferences) and the combination of instructional methodology and materials. When such a harmonious relationship does not exist, serious breakdowns can happen in student-teacher interaction, which can in turn lead to a student’s complete rejection of the teaching methodology, the teacher and the subject. The most recent definition is that by Ellis, who defines learning styles as “the characteristic ways in which individuals orientate to problem solving” (Ellis, 2008:660).

In their Learning Style Survey (LSS), a version of which was used in this article, Cohen, Oxford and Chi (2001) divide learning styles into three separate groups (perceptual, psychological and cognitive learning styles) and numerous learning styles dimensions. These dimensions represent the basis for the classification and analysis of learning styles in the present study.

Perceptual learning styles are sensory preferences which “refer to the physical, perceptual learning channels with which the student is the most comfortable” (Oxford, 2001: 3). This dimension includes visual, auditory, kinaesthetic and tactile learning style. Visual learners like reading, drawing and graphically presented information; auditory learners prefer listening activities; kinaesthetic (movement-oriented) learners like activities which involve bodily responses, whereas tactile (touch-oriented) learners are best at hands-on learning, such as building models (Brown, 2007; Ellis, 2008). Psychological learning styles include the differences between extraverted and

introverted learners and the differences between closure-oriented or judging learners and open or perceiving learners. Oxford (2001) states that extraverted learners enjoy interacting with the outside world, while introverted learners are more oriented towards their own inner world of ideas. Closure-oriented learners like to receive specific information and tasks with deadlines and are primarily interested in coming to conclusions as soon as possible, which makes this type of learner very hard working. Conversely, open learners like constant shifts in perception and take language learning less seriously. This is why they are often more successful than closure-oriented learners in achieving fluency. Cognitive learning styles include field dependence/independence (FD/I) and global/particular dimensions. Global learners take pleasure in figuring out the main idea and like communicating even if their language abilities are not perfect. On the other hand, particular learners need specific examples in order to grasp new concepts, but because of their attention to detail, they are very good at learning new vocabulary. Field-dependent learners are described as those who need background information in order to understand something and who have difficulty if they have to deal with various features of language at the same time, as opposed to field-independent learners who can cope with numerous language elements at once without being distracted, but may have some difficulty if a more holistic approach to language material is needed (Cohen and Weaver, 2005).

## **Previous research on language learning styles**

As already mentioned, there is a variety of classifications and consequently a variety of questionnaires in the field of learning styles research. Selecting one of them to base research on is not an easy task, since there is no agreement among researchers on the validity and reliability of any of the existing research tools.

The validity and reliability of the questionnaire used in this research, Cohen, Oxford and Chi's LSS (2001), were tested in a study conducted by Cesur and Fer (2009). The questionnaire was administered to 768 Turkish university students. Unlike the present study, which uses the Learning Style Survey for Young Learners (Cohen and Oxford, 2001), the version that they tested is the full version of the LSS. The results showed that the reliability of the questionnaire was acceptable, since Pearson's correlation between Turkish and English versions of the LSS ranged between 0.36 to 0.83, except for three items (46, 86 and 87, none of which appear in the survey for young learners). In testing the internal consistency of the LSS, the authors concluded that five of the nine dimensions in the survey had an insufficient consistency level. That is, internal consistency was not confirmed for the following eleven subscales: tactile, closure-oriented and open, global and particular, sharpener and leveler, field-independent and field-dependent, metaphoric and literal. The external reliability of the LSS was found to be acceptable.

A second study (Cesur, 2009) using the same survey was also carried out among Turkish university students, this time in order to check the correlation between students' learning styles and their achievement in a foreign language, and to find out whether learning styles can predict achievement in language learning. Since the study was conducted by one of the authors of the study previously mentioned, it focuses only on the subscales and dimensions which were proved to be consistent by the previous study: visual and auditory, extraverted and introverted, random and sequential, synthesizing and analytic, deductive and inductive, impulsive and reflective. The author came to the conclusion that a correlation exists between achievement in language learning and the following learning styles: impulsive, deductive, inductive, reflective, extraverted and synthesizing. It was also established that learning styles are not meaningful predictors of achievement in foreign languages, i.e. they do not significantly explain or predict success in learning languages. The only style that was proved to influence language learning was the auditory style. However, its influence turned out to be negative. In his conclusion, the author encourages language teachers to provide learners with an auditory style of learning with learning activities suitable for this style.

It is important to mention the research conducted in Croatia by Medved Krajnović and Opić (2008). The participants were 50 adult learners, mostly students, at different levels of English language proficiency (from elementary to upper-intermediate). This study was based on the Croatian version of Felder and Soloman's Index of Learning Style questionnaire (source: [www.engr.ncsu.edu](http://www.engr.ncsu.edu)), testing four dimensions of learning styles: active/reflective, sensory/intuitive, visual/verbal and FI/FD. The results showed a rather balanced situation in all four dimensions, that is, most of the learners had no strong preferences for any of the styles. The learners only expressed a somewhat stronger preference for the visual style, which is in accordance with some previous studies (e.g. Felder and Henriques, 1995). The study also indicated that there is a weak preference among learners for the verbal style (2% of the students indicated a strong preference and 12% expressed a moderate preference for this style). The participants also expressed a somewhat stronger preference for active, sensory and field independent styles, as opposed to reflective, intuitive and field dependent styles.

## The study

### The aim

This research aims at investigating the learning styles of Croatian elementary school learners. More specifically, the aim is to answer the following questions:

1. What are the learners' preferred language learning styles?
2. Is there a significant difference in learners' language learning style preferences with regard to their gender and success in language learning?

## Participants

The elementary school learners participating in this study were taken from two levels: grade 7 and grade 8 (Table 1). The approximate average age for each group was 13 and 14 years, respectively.

Table 1: Breakdown of the sample

		Class		Total	% within class
		7 <sup>th</sup>	8 <sup>th</sup>		
<b>Gender</b>	<b>F</b>	23	41	64	53.3
	<b>M</b>	17	39	56	46.7
Total		40	80	120	100

Learners were asked to provide information regarding their final grade in English at the end of the previous school year. Participants' grades (Table 2) are almost equally distributed, with a slightly higher percentage of learners with grade 5 (27.8 %).

Table 2: Learners' success across grades

		Class		Total	% within grades
		7 <sup>th</sup>	8 <sup>th</sup>		
<b>Grade</b>	<b>2</b> (sufficient)	3	26	29	25.2
	<b>3</b> (good)	14	15	29	25.2
	<b>4</b> (very good)	8	17	25	21.7
	<b>5</b> (excellent)	12	20	32	27.8
Total		37	78	115	100

## Instrument

The study was based on the LSS for Young Learners developed by Cohen and Oxford (2001). This survey is a simplified and shortened version of the LSS (Cohen, Oxford and Chi, 2001).

The version for young learners includes four learning style dimensions: visual/auditory/tactile, extraverted/introverted, closure-oriented/open and global/particular dimension. Since FD/I is one of the most researched dimensions in the area of learning styles, it was decided that part 9 in the adult version should also be included in the present study in order to obtain more reliable results. The survey consists of 53 items in I-form, with 23 questions in the first part, 8 questions in parts 2, 3 and 4 respectively, and 6 questions in the last part. The scale that was used in this study went from 0 to 4 (0 - never; 4 - always). The participants were asked to circle a number to express the degree to which a certain statement refers to their usual behaviour. The questionnaire was translated into Croatian. During the translation process a number of adjustments were made in order to make the survey culturally closer and more understandable to the participants. For example, some general expressions like "talks"

and “the speaker” in item 1.6 (“I understand *talks* better when the *speaker* writes on the board.”) and “things” in item 1.8 (“I remember *things* better if I discuss them with someone.”) were replaced with more specific terms which are closer to the experience of elementary school learners (talks = content; speaker = teacher; things = lessons).

The questionnaire used in this study has an acceptable internal consistency with a Cronbach alpha coefficient reported of .77 (Pallant, 2001).

## Procedure

The Croatian version of the LSS for Young Learners was administered in June 2010 to 121 learners attending the 7<sup>th</sup> and 8<sup>th</sup> grades of an elementary school in Split-Dalmatia County. The participants filled in the questionnaires during their regular FL classes.

Quantitative analysis was performed on the collected data. The analysis was carried out using *SPSS for Windows 13.0*.

## Results and discussion

### Visual style

Table 3 presents the results of quantitative analysis of the data gathered in the part of the questionnaire dealing with the visual style subscale.

Table 3: Results of descriptive statistics for visual style

Variable	N	Min	Max	M	SD	Mo	Frequency* (%)		
							R	S	A
<b>ITEM 1.1:</b> I remember something better if I write it down.	121	0.00	4.00	2.70	0.972	3	10.8	26.4	62.8
<b>ITEM 1.2:</b> When I listen, I see pictures, numbers, or words in my head.	120	0.00	4.00	2.23	1.247	2	28.1	28.1	43.0
<b>ITEM 1.3:</b> I highlight the text in different colours when I read.	120	0.00	4.00	1.36	1.395	0	59.5	15.7	23.9
<b>ITEM 1.4:</b> I need written directions for tasks.	121	0.00	4.00	1.71	1.186	2	42.1	33.9	24.0
<b>ITEM 1.5:</b> I have to look at people to understand what they say.	120	0.00	4.00	1.58	1.388	0	53.7	19.0	26.4
<b>ITEM 1.6:</b> I understand content better when the teacher writes on the board.	121	0.00	4.00	2.31	1.224	3	24.7	26.4	48.8
<b>ITEM 1.7:</b> Charts, diagrams and maps help me understand what someone says.	117	0.00	4.00	1.63	1.243	2	44.6	27.3	24.8

\* Note: Values represent percentages. R= collapsed scores for Never and Rarely, S= Sometimes, A= collapsed scores for Often and Always

N – number of participants

Max – maximum score

SD – standard deviation

Min – minimum score

M – mean value

Mo – mode (dominant value)

The mean value for most items ranges between 1.3 and 2.7, indicating that there is no significant preference or dislike for the visual style. However, certain results indicate a low preference for this style, such as item 1.3 and item 1.5 for which, despite having a mean close to 1.5, the most frequent answer (mode) was “never”. On the other hand, more than 60% of the participants agreed that they remembered something better if they wrote it down (item 1.1). Approximately 25% of the learners claim that this statement is sometimes true for them. It can be concluded that most learners think that writing things down usually helps them to learn something better, showing that it is very important to encourage learners to write down all important data. Another item with interesting results is item 1.6 (“I understand content better when the teacher writes on the board.”) with almost 50% of the answers “often” or “always”. It seems that this contains the same message for teachers – namely, that they should write on the board everything that might be important for the learners.

### ***Auditory style***

The results of quantitative analysis of the data referring to the auditory style subscale are presented in Table 4.

*Table 4: Results of descriptive statistics for auditory style*

Variable	N	Min	Max	M	SD	Mo	Frequency (%)		
							R	S	A
<b>ITEM 1.8:</b> I remember lessons better if I discuss them with someone.	120	0.00	4.00	2.31	1.471	4	31.4	15.7	52.1
<b>ITEM 1.9:</b> I like for someone to give me the instructions out loud.	121	0.00	4.00	2.12	1.199	2	28.1	38.0	33.9
<b>ITEM 1.10:</b> I like to listen to music when I study.	120	0.00	4.00	1.71	1.480	0	45.4	24.0	29.8
<b>ITEM 1.11:</b> I can understand what people say even when I cannot see them.	120	0.00	4.00	2.84	1.152	4	14.0	19.8	65.3
<b>ITEM 1.12:</b> I easily remember jokes that I hear.	120	0.00	4.00	2.99	0.992	3	9.9	16.5	72.8
<b>ITEM 1.13:</b> I can tell who a person is just by their voices (e.g., on the phone).	121	0.00	4.00	3.27	0.866	4	4.9	9.9	85.1
<b>ITEM 1.14:</b> When I turn on the TV, I listen to the sound more than I watch the screen.	120	0.00	4.00	1.82	1.296	2	39.7	27.3	32.2

The results for auditory style seem to indicate a somewhat stronger preference for the auditory than for the visual style. The mean value for all items is around 2 or higher, and for three of the items the mode is 4 (“always”). The statement that seems the most interesting for discovering the learning habits of the learners is item 1.8.

The results for this item show that approximately 50% of the learners like to talk to someone about the lesson in order to remember it better. Similarly, more than one-third of the participants like to hear the instructions given out loud (1.9). It can be concluded that it is necessary to present lessons both in writing and by speaking in order to encourage learners with different learning styles to participate in the activities. It is also interesting to note that almost 50% of the learners answered “never” and “rarely” for item 1.10, showing that most learners do not like to be distracted by music while trying to study.

### *Tactile/Kinaesthetic style*

Quantitative analysis was performed on the data regarding the tactile/kinaesthetic style subscales. The results are presented in Table 5.

*Table 5: Results of descriptive statistics for tactile/kinaesthetic style*

Variable	N	Min	Max	M	SD	Mo	Frequency (%)		
							R	S	A
<b>ITEM 1.15:</b> I just start to do things, rather than paying attention to the instructions.	120	0.00	4.00	1.66	1.149	1	46.3	27.3	25.7
<b>ITEM 1.16:</b> I need to take breaks a lot when I study.	121	0.00	4.00	2.28	1.279	1	32.2	24.0	43.8
<b>ITEM 1.17:</b> I need to eat something when I read or study.	120	0.00	4.00	1.50	1.372	0	55.3	15.7	28.1
<b>ITEM 1.18:</b> If I have a choice between sitting and standing, I'd rather stand.	118	0.00	4.00	.97	1.082	0	67.8	20.7	9.1
<b>ITEM 1.19:</b> I get nervous when I sit still too long.	118	0.00	4.00	1.72	1.414	0	45.4	23.1	28.9
<b>ITEM 1.20:</b> I think better when I move around (e.g., pacing or my tapping feet).	121	0.00	4.00	1.93	1.296	2*	38.0	24.8	37.2
<b>ITEM 1.21:</b> I play with or bite on my pens during talks.	121	0.00	4.00	1.51	1.324	0	52.1	24.0	23.9
<b>ITEM 1.22:</b> I move my hands a lot when I speak.	120	0.00	4.00	1.32	1.195	0	59.5	24.0	15.7
<b>ITEM 1.23:</b> I draw lots of pictures in my notebook during class.	121	0.00	4.00	1.81	1.287	1	43.8	24.0	32.3

\* Multiple modes exist. The smallest value is shown.

Comparing the table for the tactile/kinaesthetic style with the two previous ones it is obvious that the participants show less preference for this style than for the previous ones. The mean values for all items are below 2, except for item 1.16 (“I need to take breaks a lot when I study.”; mean value: 2.28). Namely, over 40% of the participants answered “always” or “often” to item 1.16, indicating that the learners do take many breaks during their study time. However, it is not clearly specified whether or not the breaks include movement, so this item might not be a good indicator of

tactile/kinaesthetic style. On the other hand, almost 50% of the learners disagreed with the statement that they got nervous when sitting still too long (item 1.19). Correspondingly, more than two-thirds expressed a preference for sitting instead of standing (item 1.18), leading to the conclusion that the participants probably do not mind sitting down for a longer time and that they are not very fond of learning through movement. It is possible that this style would be higher on the list of the learners' most preferred styles had they been offered more opportunities in class to use this style. Namely, in Croatian classrooms standing up or moving around during lessons is usually considered to be a sign of misbehaviour. This fact might be the reason for so many participants disagreeing with the statements in this part of the questionnaire.

### *Extraverted and introverted styles*

The results of the quantitative analysis of the data gathered in the second part of the questionnaire, dealing with the extraverted and introverted styles, are presented in Table 6.

*Table 6: Results of descriptive statistics for extraverted and introverted styles*

Variable	N	Min	Max	M	SD	Mo	Frequency (%)		
							R	S	A
<b>ITEM 2.1:</b> I learn better when I study with others than by myself.	121	0.00	4.00	1.74	1.446	0	48.0	19.8	32.3
<b>ITEM 2.2:</b> I learn better in the classroom than with a private tutor.	120	0.00	4.00	2.36	1.581	4	31.4	16.5	51.2
<b>ITEM 2.3:</b> It is easy for me to talk to strangers.	121	0.00	4.00	2.32	1.163	2	24.8	29.8	45.5
<b>ITEM 2.4:</b> Talking with lots of other students in class gives me energy.	120	0.00	4.00	2.33	1.225	3	24.8	24.8	49.6
<b>ITEM 2.5:</b> I prefer individual or one-on-one games and activities.	119	0.00	4.00	1.86	1.122	2	37.2	33.1	28.1
<b>ITEM 2.6:</b> After working in a large group, I am really tired.	121	0.00	4.00	1.26	1.047	1	59.5	28.9	11.6
<b>ITEM 2.7:</b> When I am in a large group, I tend to keep silent and just listen.	121	0.00	4.00	1.12	1.192	0	66.9	17.4	15.7
<b>ITEM 2.8:</b> Before I try something, I want to understand it real well.	120	0.00	4.00	2.93	.941	3	6.6	19.8	72.7

Items 2.1, 2.2, 2.3 and 2.4 refer to the results for the extraverted style, while the rest of them refer to the results for the introverted style. The mean and mode values indicate a somewhat stronger preference for the extraverted style. Although almost 50% participants disagreed with the statement that they learned better in company than alone (item 2.1), over 50% of them stated that they often or always learned better in class than during private tutoring (item 2.2). Also, almost 50% of the participants claim that talking to a lot of other students in class gives them energy (item 2.4) and

that they are never or rarely tired after group work (item 2.6). The only item with a high percentage of the answers “often” or “always” for the introverted style is item 2.8. Almost three quarters of the learners claim that they want to understand something before trying to do it. However, this does not seem to indicate a particular preference for the style it is supposed to measure, since trying to understand something before trying it in practice does not necessarily mean that a person is introverted.

### *Closure-oriented and open-oriented styles*

Table 7 shows the results of the quantitative analysis of the data gathered in the third part of the questionnaire, referring to closure-oriented and open-oriented styles.

*Table 7: Results of descriptive statistics for closure-oriented and open-oriented styles*

Variable	N	Min	Max	M	SD	Mo	Frequency (%)		
							R	S	A
<b>ITEM 3.1:</b> I like to plan language study sessions carefully and do lessons on time or early.	121	0.00	4.00	2.25	1.233	3	30.6	24.8	44.6
<b>ITEM 3.2:</b> My class notes, handouts, and other materials are carefully organized.	120	0.00	4.00	2.20	1.234	1	33.0	24.8	41.3
<b>ITEM 3.3:</b> I like to be certain about what things mean in the target language.	120	0.00	4.00	3.05	1.144	4	12.4	12.4	74.4
<b>ITEM 3.4:</b> I like to know how to use grammar rules and why I need to use them.	119	0.00	4.00	2.74	1.218	3*	17.3	16.5	64.4
<b>ITEM 3.5:</b> I don't care too much about finishing assignments on time.	121	0.00	4.00	1.45	1.232	0	51.3	26.4	22.4
<b>ITEM 3.6:</b> I have many piles of papers on my desk at home.	120	0.00	4.00	2.00	1.550	4	43.0	14.0	42.1
<b>ITEM 3.7:</b> I don't worry about understanding everything in class.	120	0.00	4.00	1.67	1.272	2	47.1	28.1	24.0
<b>ITEM 3.8:</b> I don't feel the need to come to quick conclusions in class.	120	0.00	4.00	1.68	1.094	2	42.1	35.5	21.5

\* Multiple modes exist. The smallest value is shown.

As it can be seen from Table 7, the mean values for the closure-oriented style (items 3.1, 3.2, 3.3 and 3.4) range from 2.20 to 3.05, while the mean values for the open-oriented style (items 3.5, 3.6, 3.7 and 3.8) range from 1.45 to 2.00, leading to the conclusion that the participants have a stronger preference for the closure-oriented than for the open-oriented style. Almost a half of the learners expressed their preference for planning and learning lessons on time or early (item 3.1), and as many as 74% of them claim that they like to be certain about the meaning of words when learning English (item 3.3). Similarly, around two-thirds of the learners like to know how and why they need to use grammar rules (item 3.4). All these answers indicate that the learners like deadlines, that they value good organization and have a low

tolerance for ambiguity, which is something that teachers should keep in mind when planning their lessons.

The answers for the second group of items also support this, expressing a weaker preference for the open-oriented style, with almost opposite results when compared to those for the closure-oriented style. Namely, more than 40% of the participants expressed agreement with all the items representing the closure-oriented style, while more than 40% of them expressed disagreement with each item representing the open-oriented subscale. These results seem to indicate that Croatian learners prefer the “traditional” or “mainstream” learning styles or that they believe their answers in this questionnaire are supposed to reflect such an approach to learning. Since the statements for the closure-oriented style seem to contain the teachers’ usual demands (studying on time and thoroughly, being tidy), it is possible that a certain number of participants chose to circle the answers expected of them, rather than being honest.

### *Global and particular styles*

The following table contains the results of the quantitative analysis of the data gathered in the fourth part of the survey (global and particular styles subscales).

*Table 8: Results of descriptive statistics for global and particular styles*

Variable	N	Min	Max	M	SD	Mo	Frequency (%)		
							R	S	A
<b>ITEM 4.1:</b> I prefer short and simple answers rather than long explanations.	121	0.00	4.00	2.96	1.248	4	13.2	19.8	67.0
<b>ITEM 4.2:</b> I don't pay attention to details if they don't seem important to the task.	120	0.00	4.00	2.11	1.295	2	28.9	32.2	38.1
<b>ITEM 4.3:</b> I get the main idea, and that's enough for me.	121	0.00	4.00	2.32	1.156	2	24.0	31.4	44.6
<b>ITEM 4.4:</b> When I tell a story, I forget lots of details.	121	0.00	4.00	1.69	1.265	1	47.9	23.1	28.9
<b>ITEM 4.5:</b> I need specific examples in order to understand fully.	120	0.00	4.00	1.93	1.221	1	39.7	26.4	33.1
<b>ITEM 4.6:</b> I'm good at catching new phrases or words when I hear them.	121	0.00	4.00	2.74	1.094	3	14.9	24.0	61.2
<b>ITEM 4.7:</b> I enjoy activities where I fill in the blank with missing words I hear.	119	0.00	4.00	2.35	1.338	3	25.6	23.1	49.6
<b>ITEM 4.8:</b> When I tell a joke, I remember the details, but forget the punch line.	120	0.00	4.00	1.25	1.259	0	62.0	19.0	18.2

Table 8 shows the almost equal preference for the global (items 4.1, 4.2, 4.3 and 4.4) and particular (items 4.5, 4.6, 4.7 and 4.8) styles, with a very slight advantage for the global style. For example, more than two-thirds of the participants expressed their preference for short answers instead of long, detailed explanations (item 4.1), indicating that most students are “global” learners. On the other hand, 61% of the

learners said that they were often or always successful in remembering new phrases when they heard them (item 4.6), pointing to the fact that many of them are at the same time “particular” learners as well. Almost half of the participants (44%) claim that it is enough for them to get the main idea of a lesson or an activity (item 4.3) and that they prefer relatively simpler activities, such as filling in the blanks (item 4.7).

### *Field independent and field dependent styles*

The FD/I styles subscales were investigated in the fifth part of the questionnaire. The results obtained by the quantitative analysis of the data are presented in Table 9.

Table 9: Results of descriptive statistics for FD/I styles

Variable	N	Min	Max	M	SD	Mo	Frequency (%)		
							R	S	A
<b>ITEM 5.1:</b> I can separate out the relevant and important information in a given context.	119	0.00	4.00	2.93	1.047	4	11.6	17.4	69.4
<b>ITEM 5.2:</b> When I produce an oral or written message in a target language, I make sure that all the grammatical structures are in agreement.	121	0.00	4.00	3.06	1.206	4	13.2	12.4	74.4
<b>ITEM 5.3:</b> I attend to grammar, but I also think about whether I am talking to my teachers or my friends	121	0.00	4.00	2.60	1.294	4	20.7	21.5	57.8
<b>ITEM 5.4:</b> When speaking or writing, a focus on grammar would be at the expense of attention to content.	119	0.00	4.00	1.50	1.192	1	52.1	24.8	21.5
<b>ITEM 5.5:</b> It is a challenge for me to focus on communication in speech or writing while paying attention to grammatical agreement.	120	0.00	4.00	1.49	1.264	0	52.1	20.7	26.5
<b>ITEM 5.6:</b> When I am using lengthy sentences in a target language, I get distracted and neglect aspects of grammar and style.	121	0.00	4.00	1.69	1.373	0	47.1	19.8	33.0

This is the dimension with the greatest difference between the two styles. There is a much stronger preference for the field-independent style, which is clear from the fact that the mode value for items 5.1, 5.2 and 5.3 (FI style) is 4 (“always”). The mode value for items 5.4, 5.5, and 5.6 (FD style) is 1 and 0. This means that most learners believe themselves to be able to handle different language elements at once, such as being attentive to both grammar and vocabulary while speaking, and that they do not easily get distracted. However, taking into consideration the content of the items representing the respective styles, it is not surprising that most students were more prone to stating that the first three items were mostly true for them. Namely, FI items express mostly positive facts about learning (e.g. item 5.2) while FD items mostly sound negative (e.g. item 5.5).

### ***Significance of differences: results of independent-samples t-tests***

Independent-samples t-tests were performed in order to find out whether there is a significant difference in the participants' preferred learning styles with regard to their gender and success. According to Pallant (2001), there is a significant difference between two groups of participants if the p (2-tailed) value is equal to or lower than 0.05. The last column in the tables (eta squared) represents the magnitude of the differences in the means between learner groups. The results are interpreted in the following manner: 0.01 = small effect; 0.06 = moderate effect; 0.14 = large effect (Pallant, 2001).

The independent-samples t-test was used to examine whether male and female learners differ in their learning styles preferences. The results are presented in Table 10.

*Table 10: Significance of differences: results of independent-samples t-test for gender*

Dimension	Gender	N	M	SD	t	p (2-tailed)	Eta squared
<b>VAK*</b>	F	59	46.254	9.321	0.848	0.398	0.006554
	M	52	44.692	10.079			
<b>EI**</b>	F	63	16.063	4.052	0.035	0.973	0.000010
	M	53	16.037	3.942			
<b>CO***</b>	F	63	17.762	4.245	1.969	0.051	0.032889
	M	53	16.132	4.661			
<b>GP****</b>	F	64	17.594	4.706	0.810	0.420	0.005624
	M	54	16.889	4.717			
<b>FD/I</b>	F	62	13.274	3.712	0.022	0.982	0.000004
	M	54	13.259	3.530			

\* Visual/auditory/tactile-kinaesthetic

\*\*\* Closure-oriented/Open-oriented

N – number of participants

SD – standard deviation

p (2-tailed) – significance of the difference

\*\* Extraverted/introverted

\*\*\*\* Global/particular

M – mean value

t – t-value

Eta squared – magnitude of the difference

The results of the independent-samples t-test lead to the conclusion that there is no significant difference between the preferred language learning styles of male and female learners, except for the closure-oriented/open-oriented dimension (p (2-tailed) = 0.051). It seems that male and female learners differ to a certain degree in their preference for a close-oriented or an open-oriented style. However, the magnitude of the differences in means was between small and moderate (eta squared = 0.03), meaning that only 3% of the variance in the results can be explained by the difference in gender. The reason for this discrepancy in answers might be the fact that the closure-oriented style items describe neat, tidy and organized learners, while the opposite set of statements describes an untidy and rather uninterested learner. It may be assumed that female learners tried to present themselves as neat and well prepared

learners. Conversely, because of different expectations of society for male and female learners, young teenage boys might be more likely to indicate through their answers that they do not worry so much about school assignments. However, further research is necessary to confirm these conclusions.

The significance of the differences in preferred learning styles between the learners with higher and lower grades was tested using the independent-samples t-test. Only learners with the lowest (2) and the highest (5) grade were included in this statistical procedure. The results are presented in Table 11.

*Table 11: Significance of differences: results of the independent-samples t-test for learners' success*

Dimension	Grade	N	M	SD	t	p (2-tailed)	Eta squared
<b>VAK</b>	2	25	46.240	9.252	2.088	0.042	0.074705
	5	31	41.516	7.685			
<b>EI</b>	2	26	16.615	3.920	1.399	0.167	0.033770
	5	32	15.156	3.977			
<b>CO</b>	2	25	15.120	5.270	-2.607	0.013	0.109981
	5	32	18.281	3.391			
<b>GP</b>	2	27	17.407	4.245	1.144	0.257	0.022445
	5	32	16.188	3.939			
<b>FD/I</b>	2	26	11.885	4.642	-1.211	0.231	0.025510
	5	32	13.094	2.911			

Learners' success proved to be a somewhat more significant factor in the learning style preferences of the learners than their gender. It can be noted from Table 11 that there is a significant difference between learners with grade 2 and those with grade 5 in the dimension of perceptual learning styles (VAK) and in the closure-oriented/open-oriented (CO) dimension. The magnitude of the differences in means was, in both cases, between moderate and high (eta squared = 0.07; eta squared = 0.11). Reid's study (1987) on perceptual learning styles indicated that the proficiency level was not related to learning style preference, except for the fact that the learning styles of more successful learners were more similar to those of native speakers of English. Cesur's (2009) study has also indicated that learning styles do not influence learners' success, except for the negative influence of the auditory style. Table 11 shows that the mean for perceptual styles was higher in the case of the learners with grade 2 (M = 46.240) as opposed to that of the learners with grade 5 (M = 41.516). As discussed above, the results for perceptual learning styles show that the auditory style is the most preferred style among the perceptual styles tested in this survey. It seems that the auditory style is more preferred by learners with lower grades, which is in accordance with the results of Cesur's study. Namely, he claims that the auditory style has a negative influence on success in language learning. Also, the cause of the negative influence of the auditory style might be the mismatch between learning styles and teaching styles.

It would be interesting to study these two together in order to find out whether the learners' failure could be caused by inadequate teaching styles.

The greatest magnitude of difference between more successful and less successful learners was in the closure-oriented/open-oriented dimension. Comparing the results in Table 11 with the items in Table 7, it can be assumed that the learners with excellent grades are more inclined to the closure-oriented style. Namely, the learners with lower grades are less likely to have expressed a preference for doing lessons earlier than necessary (item 3.1). It is also rather unlikely that the learners with high grades described themselves as untidy and uninterested (item 3.5; item 3.6). Further research is necessary to confirm these conclusions.

## Conclusion

This paper presents the results of research carried out among 7<sup>th</sup> and 8<sup>th</sup> grade learners at an elementary school. The research was done using the Croatian version of the Cohen and Oxford's (2001) LSS for Young Students.

The findings lead to the conclusion that the learners show an inclination towards the field independent, closure-oriented, auditory and global styles of learning. However, the learners cannot be placed neatly into any single preference category since they have not expressed a particularly high preference for any of the styles. Although the learners did not fall neatly into any of the suggested categories, there are results in each of the style subscales which indicate a stronger or weaker preference for a particular style. For example, answers for the visual style showed that most of the learners like to have the content of the English language lessons written on the board as well as in their notebooks. More than half of the participants also claimed that they remembered a lesson better if they discussed it with someone (the auditory style). This leads to the conclusion that a good English language lesson should contain both writing and speaking activities in order to provide for the needs of learners with different language learning style preferences. On the other hand, the learners expressed a rather low level of preference for the tactile/kinaesthetic style. It is possible that during the years they have spent in school they have not been given many opportunities to use this style in learning. Namely, in Croatian schools movement is most often regarded as a sign of misbehaviour and is usually sanctioned. The learners' answers also indicated that they preferred the closure-oriented rather than open-oriented style, which means that most of the learners like good organization and deadlines. This could also be a "consequence" of their teacher's style of teaching, which is subject to further research. The greatest difference in results was between the FI and FD styles, with learners expressing a preference for the FI style. The results indicate that the learners believe that they are successful in dealing with various aspects of language at the

same time. However, it must be noted that one of the limitations of this study is the questionnaire used to gather the learners' answers. Namely, many of the statements describing certain learning style dimension – for example statements describing the FD style or the open-oriented style – simply sound negative or lack context. Learners thus may have felt compelled to choose a certain statement simply because it sounded more “positive”.

The independent-samples t-tests were used to find out if there are significant differences in the preferred learning styles explored in this survey with regard to gender and success. The results showed that there were no significant differences in style preferences between boys and girls, with the exception of the closure-oriented and open-oriented dimensions. However, this difference is so small that the conclusions we reached are necessarily based on our own assumptions. Learners' success, on the other hand, is a source of more significant differences in learning style preferences. The results showed that the least successful learners (those with grade 2) and the most successful learners (those with grade 5) differed in the dimension of perceptual learning styles and in the closure-oriented/open-oriented dimensions. Although we presented possible explanations for these results based on similar studies, further research is necessary to clarify our results and confirm our conclusions.

### **Literature**

Brown, H. D. (2007) *Principles of Language Learning and Teaching*, New York, Longman.

Cesur, M. O. (2009) Can learning styles predict Turkish university prep class students' achievement in foreign language? *The First International Congress of Educational Research: Foreign Language Education*: 102-109.

Cesur M. O. & Fer S. (2009) What is validity and reliability study of learning styles survey? *Journal of Theory and Practice in Education*, 5 (2): 289-315.

Cohen, A. D. & Oxford, R. L. (2001) *Learning Style Survey for Young Learners*, Minneapolis, Centre for Advanced Research on Language Acquisition, University of Minnesota.

Cohen, A. D., Oxford, R. L. & Chi, J. C. (2001) *Learning Style Survey*, Minneapolis, Centre for Advanced Research on Language Acquisition, University of Minnesota.

Cohen, A. D. & Weaver, S. J. (2005) *Styles and strategies-based instruction: A teachers' guide*, Minneapolis, Center for Advanced Research on Language Acquisition, University of Minnesota.

Ellis, R. (2008) *The Study of Second Language Acquisition*, Oxford, Oxford University Press.

Felder, R. M. & Henriques, E.R. (1995) *Learning and Teaching Styles in Foreign and*

Second Language Education, *Foreign Language Annals*, 28, 1, 21-31.

Medved Krajnović, M. & Opić, I. (2008) An insight into foreign language learning styles. *Strani jezici*, 37, 1, 17-26.

Oxford, R. L. (2001) Language learning styles and strategies. U: M. Celce-Murcia (ur.): *Teaching English as a Second or Foreign Language*, Boston, Heinle & Heinle / Thompson International, str. 359-366.

Pallant, J. (2001) *SPSS Survival Manual*, Buckingham, Philadelphia, Open University Press.

Reid, J. (1987) The learning style preferences of ESL students, *TESOL Quarterly*, 21: 87-111.

Skehan, P. (2001) *A Cognitive Approach to Language Learning*, Oxford, Oxford University Press.

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## **OSVRT NA STILOVE UČENJA ENGLESKOG JEZIKA U OSNOVNOJ ŠKOLI**

### **Sažetak**

*Ovaj rad obrađuje stilove učenja jezika prisutne kod hrvatskih učenika engleskoga jezika. Cilj istraživanja bio je dobiti uvid u omiljene stilove učenja grupe osnovnoškolaca te ispitati utječu li spol i uspjeh učenika na njihove omiljene stilove učenja. Upitnik korišten u ovom istraživanju je Learning Style Survey for Young Learners Cohena i Oxfordove (2001) koji ispituje 5 dimenzija i 11 vrsta stilova učenja. Zaključeno je da su omiljeni stilovi učenika neovisni, zatvoreni, globalni i auditivni stil te da postoje značajne razlike u nekim dimenzijama stilova učenja, ovisno o uspjehu i spolu učenika.*

**Ključne riječi:** *stilovi učenja stranoga jezika, dimenzije stilova učenja, učenici osnovnoškolske dobi*