TRANSLATING EMOTIONS - THE REPRESENTATION AND PROCESSING OF EMOTION-LADEN AND EVALUATIVE WORDS IN BILINGUAL AND MONOLINGUAL INDIVIDUALS FROM SERBIA

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ABSTRACT

The aim of this study was to analyze, compare and contrast emotion-laden and evaluative words in monolingual and bilingual individuals from Serbia. More precisely, our research goal was to prepare an interethnic comparison of affective and connotative meaning systems in Hungarian and Serbian monolingual and Hungarian-Serbian bilingual individuals.

The empirical part of the study paid special attention to emotion-laden and evaluative words at a verbal level, examining specific concepts related to emotions. Our participants were bilinguals and monolinguals from Vojvodina, Serbia. The research method used was the semantic differential technique developed by Charles Osgood, which allows the participants to express their attitudes. Here they rated positive and negative emotion, emotion-laden, emotion-evocative and evaluative concepts and neutral words.

Our results show that mainly there are no differences between the monolingual and bilingual groups, but few words exist that have a different emotional meaning and charge in Serbian and Hungarian language.

Keywords: bilingualism, emotion, semantic differential, Serbia, Serbian, Hungarian

TRADURRE LE EMOZIONI – LA RAPPRESENTAZIONE ED ELABORAZIONE DI PAROLE CARICHE DI EMOZIONI ED ESPRESSIONI VALUTATIVE IN PERSONE BILINGUI E MONOLINGUI IN SERBIA

SINTESI

Lo scopo della presente ricerca era analizzare, paragonare e porre in contrasto parole cariche di emozioni e quelle valutative in persone monolingui e bilingui di Serbia. Più precisamente, il nostro obiettivo di ricerca era di eseguire un confronto interetnico tra i sistemi di significati affettivi e connotativi in persone ungheresi e serbe monolingui e in persone bilingui ungheresi-serbe.

Nella parte empirica della ricerca abbiamo prestato particolare attenzione alle parole cariche di emozioni ed espressioni valutative a livello verbale, esaminando concetti specifici legati alle emozioni. I partecipanti alla nostra ricerca erano persone bilingui e monolingui da Vojvodina, Serbia. Il metodo di ricerca utilizzato è stata la tecnica del differenziale semantico sviluppata da Charles Osgood, che permette ai partecipanti di esprimere i loro giudizi. Qui venivano valutate emozioni positive e negative, concetti carichi di emozione, evocativi di emozioni e valutativi, nonché parole neutrali.

I risultati della nostra ricerca mostrano che principalmente non ci sono differenze tra gruppi monolingui e bilingui, esistono però alcune parole che possiedono un significato e carica emozionale diversi in serbo e in ungherese.

Parole chiave: bilinguismo, emozione, differenziale semantico, Serbia, il serbo, l'ungherese

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The aim of this study is to compare the processing of emotion, emotion-laden and evaluative words of monolingual and bilingual individuals living in Serbia. We want to see if the affective and connotative meaning-systems of monolingual and bilingual participants differ across languages, find similarities and distinctions between the interpretations of verbally expressed emotion words, emotion-laden and evaluative terms. In emotion research adjectives are frequently used (Altarriba, Bauer, Benvenuto, 1999). In contrast with this, we used nouns, because the semantic differential as a method requires their usage.

The difference between emotion words and emotion-laden words is that emotion words have directly an affective meaning referring to emotional states (e.g. sad) or processes (e.g. to worry) and are related to pleasantness and arousal (Pavlenko, 2008, Altarriba, Bauer, Benvenuto, 1999). Emotion-laden words are words which do not refer directly to emotions, but they express them or elicit them from the interlocutors (e.g. cancer) (Pavlenko, 2008). The third group consists of emotion-related words, which again do not name the emotion, but tell us about behaviors related to particular emotions (e.g. to scream) (Pavlenko, 2008). Language emotionality has been studied by using six types of emotion-laden words (Pavlenko, 2008), from which we used neutral and aversive words; in the case of positive words, we used terms associated with positive values. This was done because in Pavlenko's (2008) emotion-laden word categorization at the positive end there is just one category: endearments. Our list was thus composed of emotion, emotion-laden, evaluative words and words closely associated with positive or negative values. A preliminary rating procedure of twenty-eight subjects from Serbia ensured that the list contained the most positive, negative or neutral words, which were selected from a bigger list.

To explore the emotion lexicon, by varying the valence of words, we utilized the semantic differential scale as a method in monolinguals and bilinguals in Serbian and Hungarian language. The relevancy of this study lies in the fact that the emotion lexicon has not been studied and compared so far in Hungarian and Serbian – our research is the first one exploring this field in Serbia and it provides novel information about the Hungarian and Serbian, as well as the monolingual and bilingual emotion lexicon.

In the past few years there has been a noticeable growth in interest among psychologists for the interactions between language and emotional experience. Questions often raised are connected to real or perceived personality changes in bilinguals when they switch between languages. A prevalently accepted view is that in most cases the mother tongue is the language of the heart; and that emotions can be authentically lived through in their real emotionality in this language. Many studies have examined and proved this statement, but the discussion is still open, because a smaller group of psychologists have found conflicting results.

Three areas of psychology serve as the theoretical background and partially each contributes in a different way to the questions raised in this study. The first deals with the nature of human emotions, the second with the phenomenon of bilingualism, and the third source is a specific combination of the two previously mentioned branches.

The third stream is the most important for our research; Aneta Pavlenko initiated this "new wave" in 2002 and she has been studying bilingualism and emotions ever since. The introductory questions of Pavlenko's book, *Emotions and multilingualism* define the most significant points of the research: 1. "Do bilingual individuals perceive and express emotions in the same way in both spoken languages?", 2. "Is it true that our first language stays the language of emotional expressiveness and is most intensively emotionally charged?" and 3. "What role do emotions play in acquiring a second language?".

According to Pavlenko (2005), interest for studying the connections between emotions and language has grown significantly in the past twenty-five years. A vast amount of scientific research has been done on the topic; however, the author points out to one problem: all of the research has been done from a monolingual perspective, ignoring the fact that nowadays an individual knowing only one language is more the exception than the rule. She stresses that this "monolingual bias" exists for two reasons. Firstly, bilingual and multilingual individuals are not explored because their language competencies do not offer a clear and easily-analyzed picture for researchers. Furthermore, bilingual and multilingual abilities and competencies are often considered as insignificant when dealing with the first language of bilingual and multilingual individuals.

Pavlenko (2005, 4) wanted to highlight that bilingual individuals are a useful and specific research group and accentuated the inclusion of the two- and multi-language lens into emotion research (2006a, xiii). Several fields support this, e.g. bilinguals can give us valuable information about the extent to which practice can affect genetically determined attributes (Pléh, 2007, 10).

BILINGUAL SELVES AND EMOTIONAL FUNCTIONING

Man's psychological reality can be divided into thoughts, intentions and emotions. For a long time, psychological research had overshadowed topics dealing with emotions, mostly ignoring them as an "unresearchable part of verbal behavior" and considered them a "residual category" (Besnier, 1990, 420).

In the 1970's – 1980's, however, with the appearance of the popular post-cognitive approach in psychology, scientists gradually began to explore and include emotions into the information processing models, despite the fact that the cognitive and emotional worlds

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still appeared to be contrasted categories. According to Besnier (1990), cognition-emotion is a dichotomous category, which can be compared to the rational-irrational and objective-subjective oppositions.

The difficulties in studying emotions arise partly from the fact that emotions do not yet have a whole, unified and universally accepted definition. As far as the specific nature of emotions is concerned, scientists name and highlight various aspects of emotions as crucial.

Many researchers agree that the mother tongue is the language of emotions and feelings in multi- or bilingual individuals (Harris, Berko Gleason, Aycicegi, 2006, Pavlenko, 2008). They cannot offer, however, a full explanation as to why the first language most often dominates, or why exceptions to this rule exist. There are several possible reasons why bilinguals often seem more emotionally neutral and "flat" in their second language. One of them is that they do not have the level of linguistic competence in their second language necessary for finding the exact expression or they may be anxious, tense, focusing more on "correctness" in second language use. Another factor could be that they need to make a greater effort when using their second language, additionally unpleasant memories could flood individuals when the second language is activated (e.g. immigrants).

Panayioutou believes (2006, 188) that in emotion research, language inevitably embeds itself between emotions and the human being who feels them, and thus, one possible method of studying emotions is to approach them at a verbal level. According to the author, the evaluative component of emotions is largely culturally determined. She believes that there are "culturally untranslatable" (2006, 188) emotion concepts, which are not equivalent in meaning in the two languages, because their contents vary, despite the fact that their labels are the same. Panayiotou studied concepts of *guilt* and *shame* from two different linguistic and cultural backgrounds – English and Greek. As social and moral concepts they are inevitably influenced and (re)formed by cultural effects, connected to interactions between individuals. Her results showed that bilinguals have two emotional "universes" (2006, 204), two different, but connected systems that can affect each other. This can be explained by the bilingual individuals' capability to sense subtle language variations and similarities, thanks to more profound experiences with cultural differences than monolinguals.

A similar view is shared by Marian and Kaushanskaya (2004, 199) who also examined the "worlds" of bilingual individuals. Participants were asked to respond to preselected words with a story from their lives connected to the first or the second language. Their description was more emotional when the linguistic context of the events in the story matched the language used to recount the story. This finding is in accordance with a more general view of Bower and Forgas (2003, 105) that the same mood enhances recall of events in that mood – which is called the phenomenon of mood dependency. It seems that in bilinguals there is some sort of language-dependency. These two studies highlighted the importance of research on emotions at the verbal level using self-report meaures in a broader context of culture which can show fine variations in language emotionality.

Stepanova Sachs and Coley (2006) have dealt with the terms of *jealousy* and *envy* in Russian and English and have found evidence for conceptual restructuring in bilinguals (Pavlenko, 2008). Monolingual Russian participants used the concept of *jealousy* and *envy* in separate situations. In contrast, monolingual English speakers used both *jealousy* and *envy* interchangeably. In English bilinguals responded like the monolingual English group, but in Russian the distinction between *envy* and *jealousy* was blurred and they were not strictly dissimilar as we would expect based on the results of the monolingual Russian group. The concepts have become shifted in such a way that the similarities in meaning in the concepts of jealousy and envy have been highlighted. Bilinguals in using their second language (English), but also in their native language have adopted the same behavior as the monolingual English group.

In contrast with the previously described researchers, Dewaele (2008) selected a positive emotion to study: the emotional weight of the expression *I love you*. His findings can be divided into three categories: nearly half of the participants experienced the concept of *love* most profoundly in their first language, less than a third judged the weight of the concept to be similar in both the first and second (or later-learned) languages, and a quarter of the participants felt a greater emotional effect in their second language. Dewaele's results thus show that the participants' first language is not always the one most closely linked to emotions and it presumably mirrors intimate experiences with people speaking another language or second language socialization effects, which leads us to the conclusion that environmental factors are very important in this field.

Aneta Pavlenko (2006b) points out that the ease and level of comfort we feel when talking about our emotions in our mother tongue stands in sharp contrast with the feeling of artificiality bilingual individuals feel when talking about the same matter in their second language. Writers who publish their works in more than one language refer to their second language as the "step-mother tongue" (Pavlenko, 2006b, 22). Pavlenko explains the fact that we generally prefer to express our emotions in our native language by stating that "emotional linguistic conditioning" (2006b, 22) occurs in childhood. At the base of this is a classical conditioning-based learning process and it occurs due to the complete activation of the limbic system and affective memory. According to the Theory of Language Embodiment in the process of acquiring a native language there are two separate, but intertwined processes: the first is the conceptual development – when the denotative, primary and base meaning of concepts is formed (Pavlenko, 2005, 154-155).

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Representations developed in this process absorb information from all sensory organs and systems (including, among others, vision, hearing and olfaction) and the meanings are further modified by the fine changes occurring during socialization. Affective language conditioning happens in parallel with this process, through which the word's emotional and connotative meaning is established from the individual's personal and emotionally-charged experiences and memories. During the course of acquiring a first language, in the development of connotative and denotative meanings, both the sensory images and the physiological changes become parts of the concepts themselves. In acquiring a second language, on the other hand, especially in a classroom setting, this does not happen, so the words of one's mother tongue are "embodied" (2005, 155) in contrast with those of a foreign or second language. Second language words are not connected at all to personal, autobiographical memories or to our affective memory system. Only in the case of second language learning in a natural environment can the emotional conditioning of varying strength occur.

Harris, Berko Gleason and Aycicegi (2006) also believe that an individual's first language is more closely tied to emotions because it is acquired when childhood attachment is shaped and in intensive emotional contexts. They think early language learning in a natural environment is one of the determining factors for the emotionality of a language. An intriguing point of their theoretical stance is the fact that the second language can be the dominant language for emotions, even if it is learned in adulthood and if it is the less-proficient language. The learning context is the crucial component – it must be considerably emotionally charged, containing interpersonal situations that resemble situations involving interactions and relationships with childhood caregivers. They do not deny or exclude the effects of maturation processes, the relevancy of the amount of time spent learning the language, or the level of competence. But emotional settings are of high importance compared to formal or classroom learning environments, because they connect emotions to language learning.

One of our aims is to see whether connotative meanings differ in Hungarian and Serbian in subjects who live in a mixed linguistic environment, balancing between Hungarian and Serbian language. We assume that this population has many opportunities to "embody" second language words and to experience them in emotional contexts at a very early age. The question about the structure of the semantic space of their two respective languages – the similarities and differences - thus seems an intriguing one to explore.

THE AIMS OF THE RESEARCH

The aim of this research was to make an intercultural comparison of affective meanings in mono- and bilingual individuals. Based on previous research done in foreign countries we hypothesized that certain differences exist in the connotative meanings and emotional experiences of emotionally charged concepts and evaluative words between monolingual and bilingual groups from Vojvodina, Serbia. In addition we wanted to examine which language is the emotionally dominant in our groups and how are contents with emotional valence perceived in Hungarian and Serbian.

The research was oriented towards comparing emotional reactions and interpretations connected to the Hungarian and Serbian languages in Hungarian and Serbian monolingual groups and in Hungarian-Serbian bilingual individuals. The research was based on Pavlenko's new area of research and on previous studies (Pavlenko, 2005, 153-154, Harris, Berko Gleason, Aycicegi, 2006, Dewaele, 2008), which examined the emotionality of languages by comparing mono- and bilingual groups through verbal behavior and various reactions.

So far, there is no unifying theory on the question of whether the mother tongue is always the dominant language of emotions and emotional charge, whether the emotionally dominant language could change in time and if so, under what conditions. According to Pavlenko (Pavlenko, 2005), emotion concepts have emotional weight if their words invoke sensory images and physiological reactions. The mono- and bilingual populations are subjected to significantly different effects in age of language acquisition, language use and experiences through socialization, they have varying paths of life, with different languages dominating at different times.

The main question of our research was whether the "original" (not translated) and translated equivalents of certain positive, negative or neutral, emotion-activating and emotion-laden and evaluative words differ in emotional meaning in Hungarian and Serbian languages. We wanted to take into account if the words emotional-experiential, cultural shades, perception and intensity match or differ in Hungarian and Serbian, when mono- and bilingual groups are compared. Another question we wished to answer in our research was which language is emotionally dominant in the bilingual group of participants, the native or the second language.

HYPOTHESES

Our study has relied on the following suppositions:

I. The emotional intensity and connotative meaning of emotionally charged and evaluative words in the bilingual group will be stronger in the dominant, the Hungarian language, than in the second language in accordance with the direction of the category (the positive concepts will be assigned a positive value, the negatives a more negative one).

II. There will be more differences in evaluation between the bilingual group and the Serbian group, than

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between the bilingual group and the Hungarian group because the first language of the bilingual individuals is Hungarian.

SAMPLE

Eighty-seven individuals participated in the study. Three groups of participants were formed; the first group included monolingual Hungarian individuals (N=29), the second monolingual Serbian individuals (N=29) and the third bilingual Hungarian-Serbian individuals (N=29). The age of participants ranged from 15 to 21 years.

The research took place in two Serbian cities, Novi Sad and Subotica. The two cities are characterized by different language influences. There are more people whose native language is Hungarian in Subotica, but the Serbian language is also present in the environment, so people can choose on their own decision to use either language. Individuals, who know both of the languages usually choose on their own will do they wish to speak Hungarian or Serbian in their wider social environment.

The Serbian language dominates all aspects of life in Novi Sad, thus the number of areas, places where, and people with whom one could speak Hungarian decreases. These usually include the family environment, school (if the student attends a school where he/she is in a class whose language of instruction is Hungarian), or sometimes the circle of friends.

The Hungarian monolingual participants were chosen from the student body of the Teacher Training Faculty in Hungarian Language from Subotica. The Serbian monolingual group consisted of third- and fourth-grade grammar-school students from Novi Sad, while the bilingual group was composed of students from the same school and age group, whose language of instruction is Hungarian. These students were predominantly from Hungarian families, who live in Novi Sad.

We categorized the bilingual individuals according to one of Csilla Bartha's (Bartha, 1999, 40) definitions of bilingualism, using which bilingual is a person whose everyday environment demands the parallel or alternating use of both languages. The bilingual individuals' dominant characteristic is the fact that they learned Hungarian from their parents in a family setting, and they have been exposed to Serbian from an early age thanks to their wider surroundings. Outside their families, in shops and in the streets, they communicate in Serbian most of the time, on a daily basis, and they also have obligatory Serbian language classes in school from their infancy.

Testing was done in groups, in written form, and every participant was required to fill out a rating scale in one or in the case of the bilingual group, two languages. The monolingual groups were surveyed in their mother tongues. The bilingual group filled out the Hungarian scale and its Serbian counterpart.

METHOD OF THE RESEARCH

The testing was completed using the semantic differential scale. The semantic differential is usually used for measuring an attitude towards something, and in the context of our research it is important that this scale is also often used to reveal the emotional meaning of concepts. This method was developed by Charles Osgood (Osgood, Suci, Tannenbaum, 1957) to capture the emotional aspect of meaning. His aim was to uncover the variance in the perception of different individuals in terms of the connotations connected to certain words. Connotative meaning is defined as the word's oblique, emotional meaning, which contains personal and individual differences. For the expression of attitudes towards the concepts, bipolar adjective pairs are used. The rating is usually done on a seven-point Likert-scale. Participants have to circle an answer according to their perception of the intensity and direction of the concept, in accordance with their personal net of associations.

Osgood defines "meaning" as a mediating representational process, a complex reaction, which can be divided into finite, but unknown components (Osgood, Suci, Tannenbaum, 1957, 31). In his opinion, the semantic space is multi-dimensional; this was his starting point for many studies conducted to find out which factors appear most frequently in meaning, and to what meaning can be traced back to. Nowadays, data gathered with the semantic differential method is connected to three factors: evaluation-potency-activity. These three factors or triad are the most frequently appearing factor-group in Osgood's results, and thus he believes that they can be used to describe the semantic space most appropriately as they are recurring dimensions.

The first part of the scale we constructed contained the independent variables, covering questions concerning language use and competence.

The main part of the semantic differential was comprised of emotionally evocative and emotion-laden and evaluative words, chosen from a longer list. One group of the words was positively charged, another negatively and the third contained neutral words.

The initial list we started from has covered twenty positive, twenty negative and twenty neutral nouns from Hungarian. The words included in the list were chosen intuitively from everyday language use, assuming that they have positive, negative or neutral associations and emotional charge. The main criterion was to select pleasant and unpleasant nouns and emotionally neutral words. The emotion category at the positive end included concepts referring to virtues, characteristics of high value - which elicit respect, positive affect and admiration, whereas the negative list enumerated reprehensible or negative aspects of life and people.

For ensuring the selection of words that are the best exemplars of a category and that they have the strongest emotion-evocative power and carry the emotional

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charge desired we included a step of rating the Hungarian words' positivity, negativity or neutrality asking for the opinion of twenty-eight raters (Serbian ratings on a valence dimension of 24 of them can be found in Dragan Janković's Connotative Dictionary, 2000a, 2000b). The evaluation was done on a rating scale ranging from 1 to 10. According to the results we removed 8 words from each category, so that we were left with the twelve words that had received the highest ratings per category. The positive list consisted of highly valued and preferred traits or states, emotionally charged, emotion-laden and evaluative words, whereas the negative list counted undesirable traits, states, emotion, emotion-laden and evaluative words. In putting together the neutral list the main objective was to find words which do not elicit emotions (or just do it minimally).

The new, shortened list was used for construing the semantic differential. There were twelve positive words from which one refers directly to a positive emotion: happiness – thus counts for an emotion word. The others were behaviors or states of high and positive value in everyday life: goodness, independence, self-confidence, caring, righteousness (nouns were formed from adjectives). Emotion-laden and emotionally charged words were: safety, peace, purity, success, interesting, harmony. In the negative category one word referred to a mood – bad mood, the others were aversive, negative emotion-laden and emotion-related words: devil, death, evil, stupidity, aggression, nervousness, manipulation, lie, and words referring to pejorative personality traits: unreliability, meanness, dependence. The neutral list was construed with an effort to find the most suitable words which are normally not connected to feelings (or they are at a very low intensity), thus they named concrete objects (e.g. spoon or wardrobe) and things from nature: tree, river. The list of thirty-six nouns used in the study was the following (the terms are shown here with their translated equivalents in Hungarian and Serbian): I. positive: goodness - jóság - dobrota, happiness - boldogság - sreća, independence - önállóság - samostalnost, self-confidence - magabiztosság - samopouzdanost, caring - gondoskodás – brižljivost, safety - biztonság – sigurnost, rightousness - igazságosság – pravičnost, peace - béke – mir, purity - tisztaság – čistoća, interesting - érdekesség – interesantno, harmony - harmónia – harmonija, success - eredményesség – uspešnost; II. negative: devil – ördög - đavo, death - halál - smrt, evil - gonoszság - zloba, bad mood - rosszkedv - mrzovoljnost, unreliability - megbízhatatlanság - nepouzdanost, stupidity - butaság - glupost, agression - agresszió - agresija, meanness - aljasság - podlost, nervousness - idegesség - nervoza, manipulation - manipuláció - manipulacija, lie - hazugság - laž, dependence - önállótlanság - nesamostalnost; III. neutral: spoon - kanál – kašika, glass - pohár – čaša, pencil case - tolltartó - peratonica, tree - fa – drvo, river - folyó – reka, shoelace - cipőfűző – pertla, wardrobe - szekrény – ormar, window - ablak – prozor,

boot - csizma – čizma, dish - edény – posuda, postcard - képeslap – razglednica, notebook - füzet – sveska. The correctness of the list of Hungarian words was verified by a teacher of Hungarian language and literature and the correctness of the list and the translation of Serbian words by a teacher of Serbian language and literature. Participants gave their answers in the semantic differential using the 7-point Likert scale. They evaluated the words according to the following bipolar adjective pairs: good-bad, worthless-valuable, sweet-sour (they construe the dimension of evaluation), big-small, weak-strong, heavy-light (the dimension of potency), passive-active, slow-fast, cold-warm (the dimension of activity).

PROCESSING THE RESULTS

The results were processed using non-parametric statistics and Multidimensional scaling. For calculating the results, the SPSS Statistics 17.0 statistical program was used. The independent group was compared on the Mann-Whitney U test. The dependent sample consisted of the bilingual groups' first and second language answers, these results were compared using the Wilcoxon-test. The results were assessed according to the evaluation-potency-activity triad of factors. This process stems from Osgood (Osgood, Suci, Tannenbaum, 1957, 78-79, 87), who believes that the participants' responses on the polar adjective scales should be evaluated together, as this will offer more reliable and representative results than studying results from separate scales.

After this we conducted a Multidimensional Scaling procedure for the most salient group of results, to see the specific arrangement of the semantic space between concepts.

RESULTS

According to our results, statistically significant differences exist in the mono- and bilingual groups' evaluations of certain emotionally charged, emotion-laden and evaluative words. Some differences in the bilingual group were also found, when we compared the first and second language evaluations of words.

Significant results are shown in tables and graphs below.

The following abbreviations are used in the tables:

abbreviation .e – evaluation factor

abbreviation .p– potency factor

abbreviation .a – activity factor

significance – asymptotic significance; the definition of the level of significance (p <0.05)

The y-axis of the graph shows the mean of each group, and the x-axis contains the list of the words. On the graphs we marked the monolingual groups with a darker shade, except in the last comparison where the darker shade stands for the bilinguals first language answers, whereas the lighter for the bilingual groups' second language ans-

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1. The significant differences between the evaluations of the monolingual Hungarian and the monolingual Serbian groups

	goodness.e	caring.e	aggression.e	lie.e	dependence.e	postcard.a
Mann-Whitney U	276.00	289.00	288.50	292.50	277.50	296.50
Z	-2.29	-2.12	-2.10	-2.06	-2.24	-1.97
Significance	.02	.03	.04	.04	.03	.05
r	.30	.28	.28	.27	.29	.26
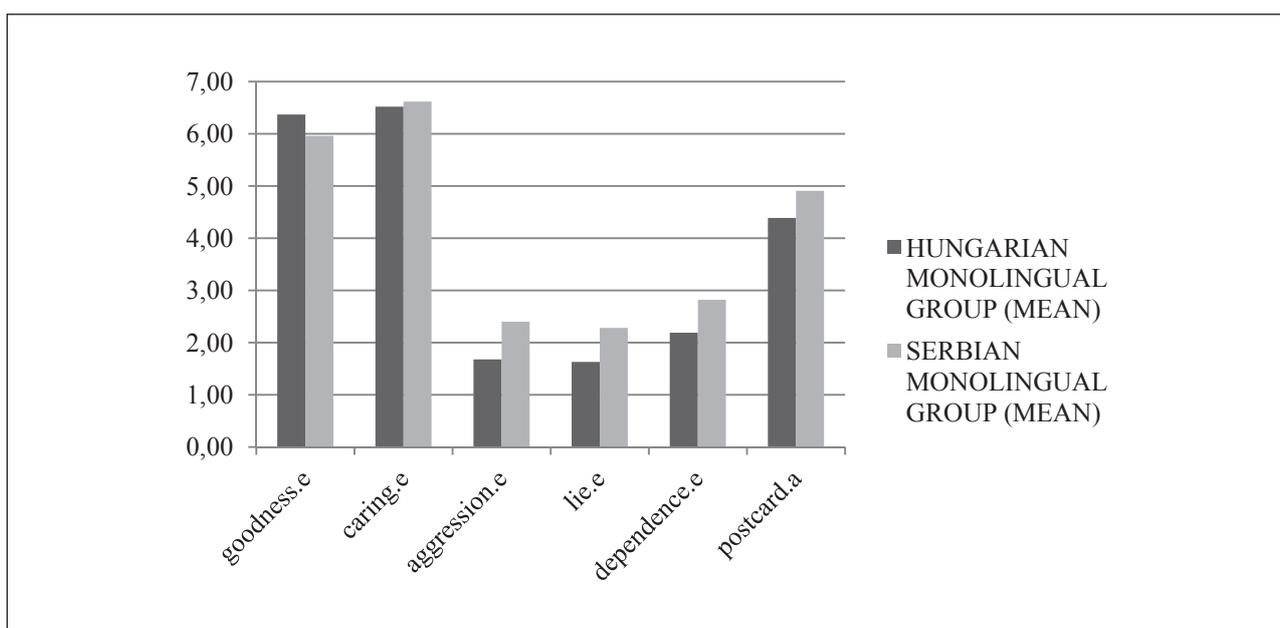
Graph 1: The differences between the monolingual Hungarian (darker shade) and the monolingual Serbian groups (lighter shade)

wers and in the monolingual-monolingual comparison, where the darker shade is for the monolingual Hungarian group. In the tables r shows the effect size, where 0.1 means small, 0.3 medium and 0.5 a large effect.

In Graph 1 we can see that the Hungarian participants rated *goodness* as better, more valuable and sweeter than the Serbian monolingual participants did. The second significant difference was observed with the word *caring* – the Serbian group rated this word as better, more valuable and sweeter, in comparison with the

Hungarian participants' ratings. *Aggression* was rated as better, more valuable and sweeter by the Serbian monolingual group. In addition to this, *lie* and *dependence* were also rated as better, more valuable and sweeter by the Serbian monolingual group. From the neutral word group, the Serbian group judged *postcard* as more active, faster and warm than in the Hungarian group.

In Graph 2 it is shown the first significant difference observed occurred with the word *caring* which was better, more valuable and sweeter in the Hungar-

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2. The significant differences between the monolingual Hungarian individuals and the bilingual groups' evaluations of Hungarian words

	caring.a	interesting.a	harmony.p	death.a	manipulation.e	lie.a	window.p
Mann-Whitney U	236.50	277.50	224.50	295.00	275.50	291.50	276.00
Z	-2.94	-2.24	-3.06	-1.99	-2.29	-2.02	-2.31
Significance	.00	.03	.00	.05	.02	.04	.02
r	.38	.29	.40	.26	.30	.27	.30
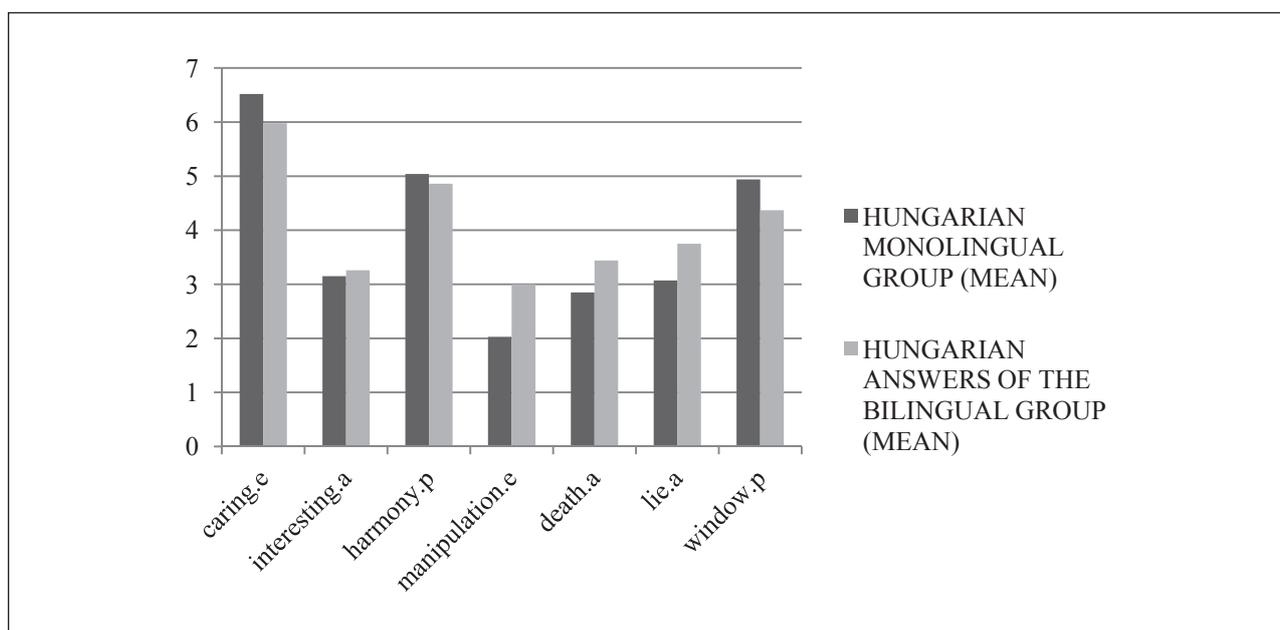
Graph 2: The differences in the responses of the Hungarian monolingual group (darker shade) and the bilingual participants' responses in Hungarian (lighter shade)

ian monolingual group. The second word was *interesting* which was evaluated by the bilingual group in Hungarian as more active, faster and warmer. *Harmony* was bigger, stronger and heavier in the monolingual group. *Death* was rated by the bilingual Hungarian group as more active, fast and hot. *Manipulation* in Hungarian by the bilingual group was judged as better,

more valuable and sweeter. In the same group, *lie* was deemed to be more active, fast and hot. Furthermore, *window* was judged to be bigger, stronger, heavier by the monolingual Hungarian group.

In Graph 3 we can see that the bilingual group rated the positive word *harmony* as bigger, heavier, stronger and *self-confidence* as more active, faster and warmer

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3. The significant differences between the evaluations of the Serbian words in the bilingual group and the Hungarian words by the monolingual Hungarian group

	harmony.p	self-confidence.a	bad mood.e	bad mood.a	unreliability.e	aggression.e
Mann-Whitney U	235.00	290.00	279.00	295.00	276.00	256.00
Z	-2.91	-2.05	-2.25	-1.96	-2.28	-2.60
Significance	.00	.04	.02	.05	.02	.01
r	.38	.27	.30	.26	.30	.34

	meanness.e	nervousness.p	manipulation.e	manipulation.a	lie.e
Mann-Whitney U	290.00	232.50	220.00	261.00	285.50
Z	-2.11	-2.94	-3.15	-2.52	-2.15
Significance	.04	.00	.00	.01	.03
r	.28	.39	.41	.33	.28

	lie.a	river.p	postcard.p	tree.a	window.p
Mann-Whitney U	273.00	290.50	296.00	273.00	247.50
Z	-2.30	-2.05	-1.99	-2.34	-2.76
Significance	.02	.04	.05	.02	.00
r	.30	0.27	0.26	0.31	0.36
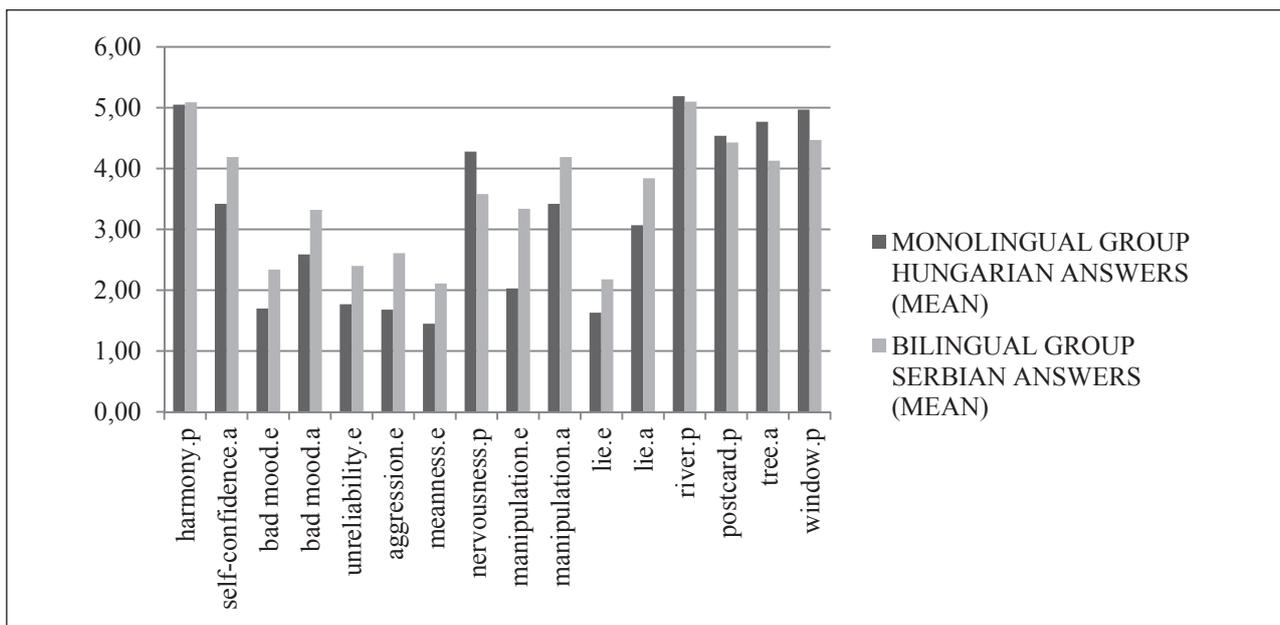
Graph 3: Differences in the responses of the monolingual Hungarian group (darker shade) and the bilingual group's Serbian word responses (lighter shade)

than the monolinguals in Hungarian. *Bad mood* was also rated as better, more valuable and sweeter, more active, faster and warmer than in Hungarian. *Unreliability, aggression* and *meanness* were more positively and intensely rated in Serbian: as better, more valuable and sweeter. *Manipulation* was better, more valuable, sweeter and more active, quicker and warmer and *lie* was judged as better, more valuable, sweeter, more ac-

tive, quicker and warmer by the bilingual group, whereas *nervousness* was bigger, stronger and heavier in the Hungarian monolingual group. *River*, *postcard* and *window* were considered as bigger, stronger, heavier in the monolingual group and in addition *tree* was also more active, faster and warmer in this group.

In Graph 4 the bilingual group rated the Hungarian word *happiness* more prominently: it is seen as better,

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4. The significant differences between the responses of the monolingual Serbian group and the Hungarian responses of the bilingual group

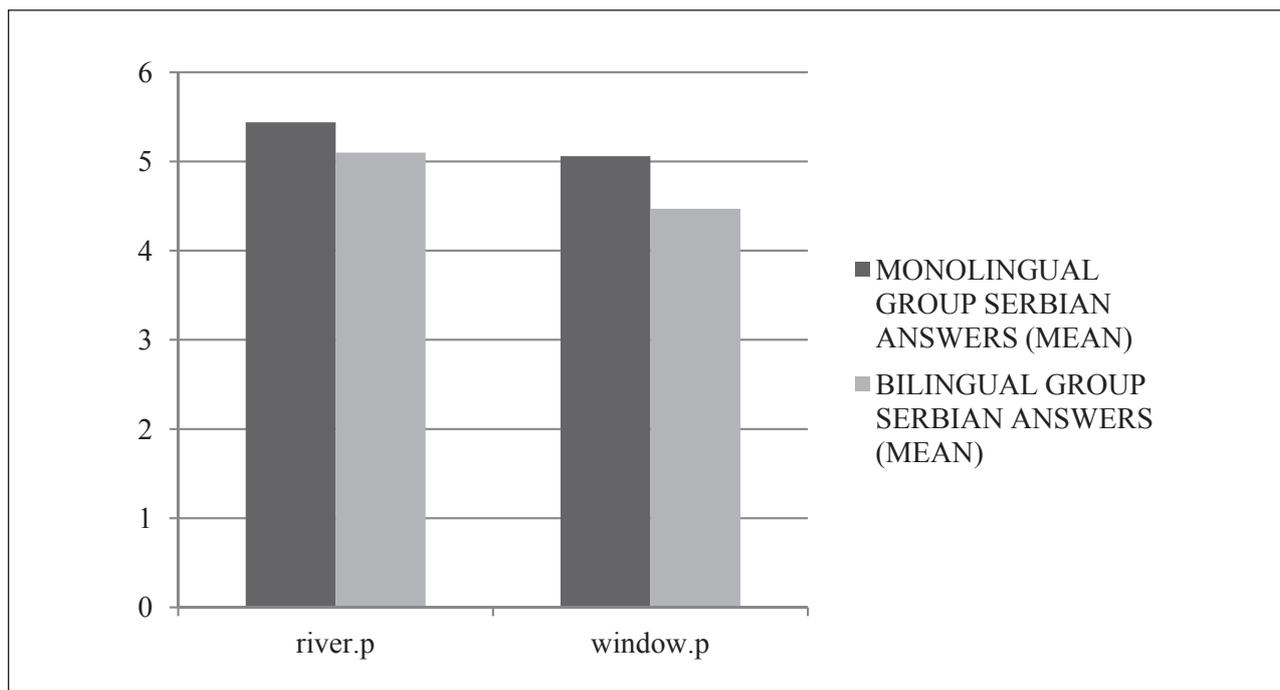|	happiness.e	river.a	window.p
Mann-Whitney U	290.00	289.00	268.50
Z	-2.28	-2.06	-2.41
Significance	.02	.04	.01
r	.30	.27	.32
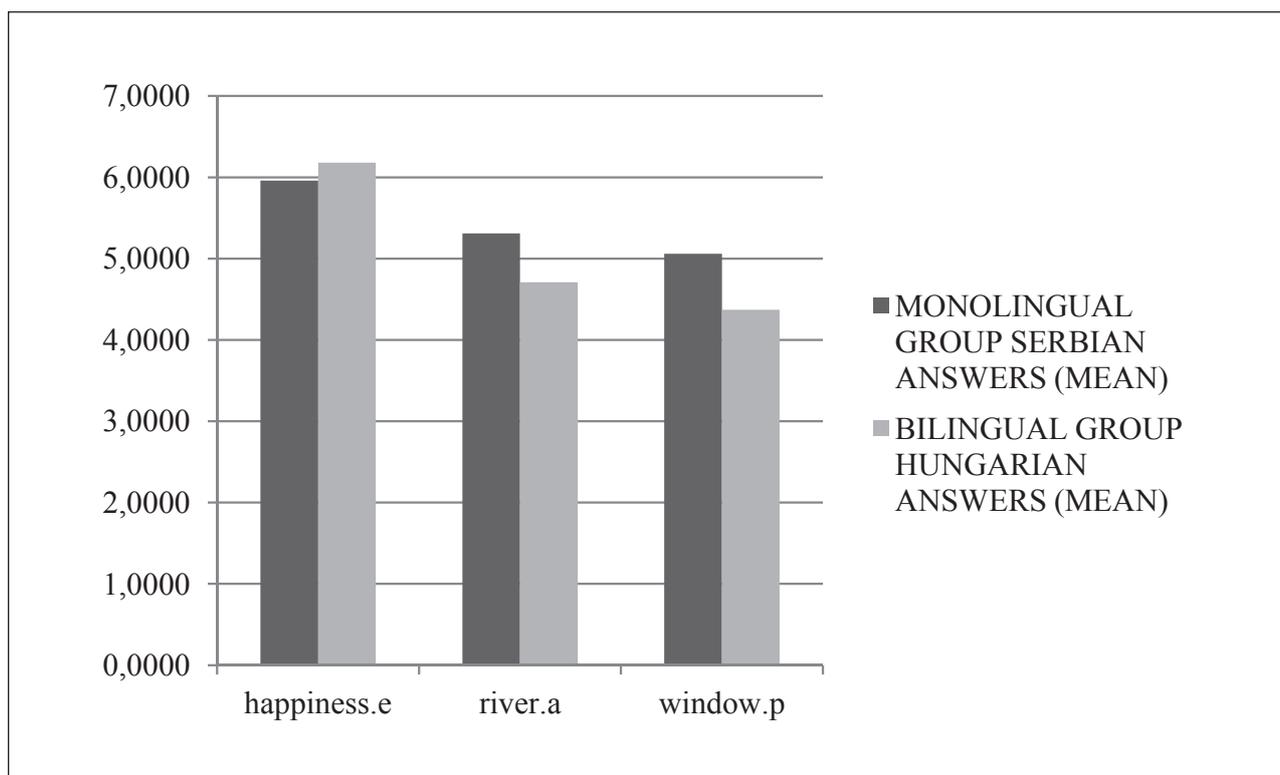
Graph 4: The differences in the responses of the monolingual Serbian group (darker shade) and the Hungarian responses of the bilingual group (lighter shade)

5. The significant differences between the responses of the monolingual Serbian group and the Serbian responses of the bilingual group

	river.p	window.p
Mann-Whitney U	228.00	228.50
Z	-3.04	-3.04
Significance	.00	.00
r	.40	.40

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Graph 5: The differences in the responses of the monolingual Serbian group (darker shade) and the Serbian responses of the bilingual group (lighter shade)
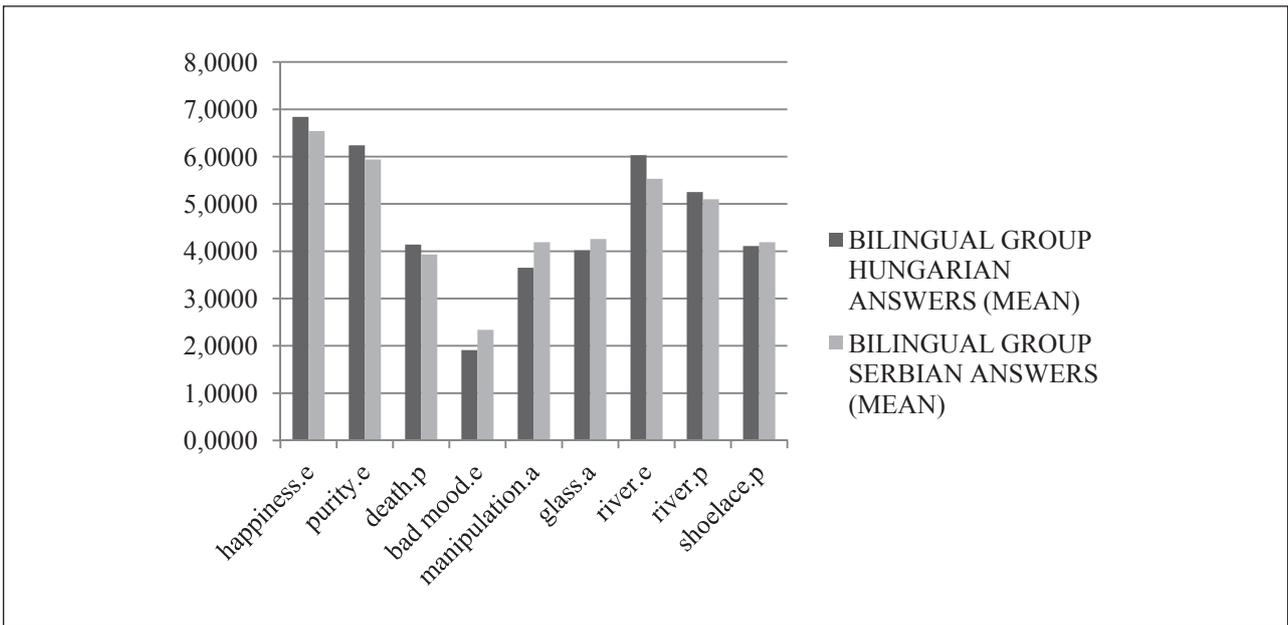
more valuable and sweeter in this group than in the monolingual Serbian group. In the neutral word group, however, the Serbian monolingual group gave a more intensive rating to the word *river*: it is thus more active, quick and warm, further, the word *window* is bigger, stronger and heavier in Serbian.

6. The comparison of the bilingual group's evaluations of Hungarian and Serbian words using the Wilcoxon-test

	happiness.e.srb – happiness.e.hu	purity.e.srb – purity.e.hu	death.p.srb – death.p.hu	bad mood.e.srb – bad mood.e.hu	manipulation.a.srb – manipilation.a.hu	glass.a.srb – glass.a.hu	river.e.srb – river.e.hu
Z	-2.58	-2.20	-2.26	-2.84	-2.53	-1.97	-2.60
Significance	.01	.03	.02	.00	.01	.05	.01
r	0.34	0.29	0.30	0.37	0.33	0.26	0.34

	river.p.srb – river.p.hu	shoelace.p.srb – shoelace.p.hu
Z	-2.05	-2.05
Significance	.04	.04
r	0.27	0.27

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Graph 6: The bilingual group's results in their first (Hungarian) and second (Serbian) language

In Graph 5 we can see that the Serbian monolingual group rated the neutral word *river* and *window* as bigger, stronger and heavier than the bilinguals in Serbian.

In Graph 6 we can see that the the bilingual group judged the Hungarian *happiness* and *purity* as better, sweeter and more valuable than the Serbian equivalent of the word. *Death* was perceived as bigger, stronger and heavier in Hungarian. The Serbian word for *bad mood* was rated as better, more valuable and sweeter. *Manipulation* and *glass* in Serbian was judged as more active,

7. Multidimensional Scaling – bilingual groups' Serbian answers and the monolingual Hungarian group

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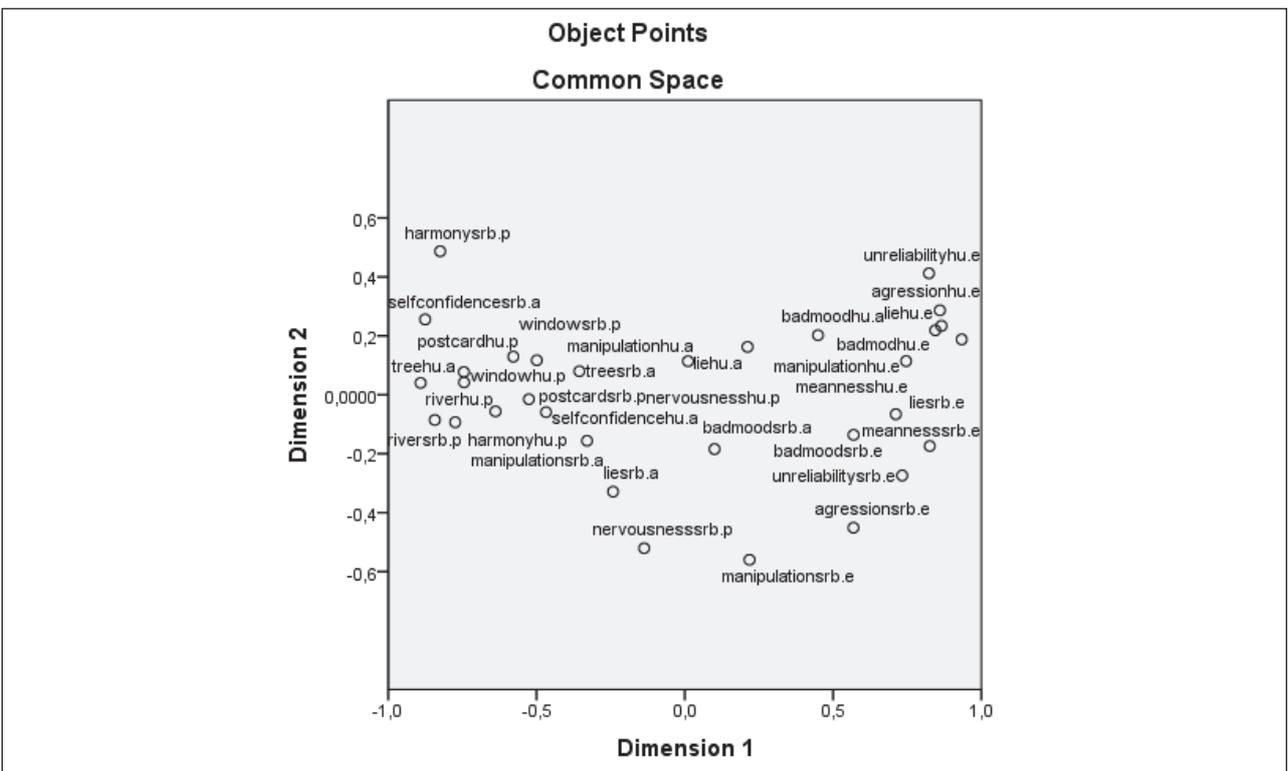
faster, hotter than in Hungarian. *River* was rated as better, sweeter, more valuable, bigger, stronger and heavier in the Hungarian language. *Shoelace* was bigger, stronger and heavier in the second language.

We wanted to give a visual demonstration of the proximities and distances between the concepts that mostly differ in the bilingual groups' Serbian answers and the monolingual Hungarian answers. For this we used the Multidimensional Scaling as a method. From the picture above we can make a judgment about the semantic space, the composition and organization of the concepts taken into account: S-stress was 0.02 for this comparison and as we can see, the words here and their translated pairs have no overlapping meaning, although the neutral pairs are mostly nearby, whereas the negative and positive pairs are more distant. Additionally, there is a separation by valence, where the negative group is the most unequivocal whole. On the other side, as we can see language might also have some effect in grouping the words.

CONCLUSIONS

The results of our study show that there are differences between the monolingual Hungarian, the monolingual Serbian and the bilingual groups' evaluations and between the two monolingual groups, as well as within the bilingual group in ratings of emotionally charged, evaluative and emotion-laden words referring to behavior, values, states and personality traits. However, there are no significant differences between most of the words.

The question of our study was if the monolingual and bilingual participants' emotional worlds, the emotional intensity and the connotative meanings of emotion words, emotion-laden words and evaluative words were the same in their first and in their second language and in Hungarian and Serbian language. To study this, three groups of participants were compared in their evaluation of emotionally charged and evaluative words using the semantic differential scale: two monolingual groups (Hungarian and Serbian) and one bilingual (Hungarian-Serbian) group. One of our points of departure was that differences exist in the intensity of emotionally charged and evaluative concepts connected to a particular language; another point was that in bilingual individuals, the mother tongue is the dominant language for emotional functioning.

Our results regarding the differences are the following.

Generally, the most significant differences were found between the bilingual Serbian answers and the monolingual Hungarian groups' evaluations, where the number of differently perceived words was thirteen. Surprisingly, on the other side, just two differences were found between the second language answers in the bilingual group compared to the monolingual Serbian answers and three between monolingual Serbian and bilingual Hungarian answers.

The differences between the monolingual groups were: the monolingual Hungarian group rated the positive word – *goodness* and the Serbian group the positive *caring* with higher numbers. The emotionally negative words – *aggression*, *lie*, *dependence* were more positive in the Serbian group. Also the neutral *postcard* was seen as more active, faster and hotter by this group.

From these results we can conclude that in the monolingual Hungarian group there is a trend to evaluate more extremely the words towards their real emotional charge than in the Serbian group (except one positive word).

Comparing the Hungarian monolingual group with the bilingual Hungarian answers, the neutral *window* and the positive *caring* and *harmony* were more positively rated in the monolingual one. The concepts of the positive *interesting*, the negative *death*, *manipulation* and *lie* were given higher grades in the bilingual Hungarian answers. In this case these results also show that the bilingual group has not seen some negative words in their real negativity, and that they tend to think about negative words in a slightly more positive way than the monolingual group does. Additionally, one positive word was more positive in the bilingual and a neutral and two positive ones were more positive in the monolingual group.

The smallest overlap in results was found between the bilingual Serbian answers and the monolingual Hungarian answers. The bilinguals rated in Serbian the positive *self-confidence* and *harmony* more positively, and from the negative group of words *bad mood*, *unreliability*, *aggression*, *meanness, manipulation* and *lie* as more acceptable than their monolingual Hungarian counterparts. *Nervousness* was more positively rated in the monolingual Hungarian group. Four neutral words – *postcard*, *river*, *window* and *tree* were perceived as more positive in the Hungarian than in the other group. The most numerous differences were found between these groups, again with the bilingual group giving higher grades to negative and also more positive grades to positive words, while the monolinguals highlighted neutral concepts and one negative as more positive. This means that the bilinguals in their second language do not perceive the real negativity and monolinguals the neutrality of some words.

In the monolingual Serbian group and the bilinguals' Hungarian answers there was one difference in a positive concept of *happiness*, rated as more positive in the bilingual group, and two neutral words – *river* and *window* – rated more positive in the monolingual Serbian group.

In the Serbian answers regarding monolinguals and bilinguals we have found significant differences on two neutral words *river* and *window* which were more positively rated in the monolingual group. The result that there are no differences in the words with emotional valence could be interpreted as the sign of some accul-

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turation effect and shift. Maybe it is due to the impact of socialization in a multilingual context. The bilinguals' second language, Serbian may function similarly to the monolingual Serbian group's language. Serbian is in this case the language of the environment – used and spoken in the city of Novi Sad. It probably has its main impact on socio-cultural grounds. The Hungarian monolingual group is from a different city, with different cultural- and value systems which might affect the answers.

If we add up the results so far we can see that there is a specific orientation in the monolingual group to rate more positively some neutral words.

Our last comparison took into account the bilingual answers – both in Hungarian and Serbian as their first- and their second language. We found significant differences in eight words. We will list the results from the angle of the second, presumably less dominant language: in two positive words – *happiness* and *purity* we found that the Serbian answers were more negative than their Hungarian pairs. The negative *death* was more negative in Serbian, whereas *bad mood* and *manipulation* were seen as more positive in Serbian language. Regarding the neutral words, two words – *glass* and *shoelace* - were more positive in Serbian, while *river* was more negatively seen in Serbian, than in Hungarian.

Within this group, the neutral, positive and negative words were sometimes rated as more positive or negative interchangeably in the first or second language, pointing towards a conclusion that there is a mixed dominance in emotionality in the case of bilinguals. We emphasize that we must take these results with reserve, because the emotionality of the majority of words did not show significant differences, meaning that in most of the analyzed groups of concepts there are no differences in the emotional expression and experience in the first and the second language in the bilingual group. This can be due to affective conditioning and socialization effects which happened early on in life, in naturalistic contexts in the bilingual group examined.

MAIN CONCLUSION AND FURTHER RESEARCH

Our first hypothesis, that the bilingual group will give more extreme and more intense emotional ratings to emotion, emotion-laden and evaluative terms in the native language is partially supported by our results. Most of the differences in the bilingual group showed mixed language emotionality, but just in the case of eight words, whereas in the case of the remaining twenty-eight words there were no differences, which means that both languages might function at the same level of emotional force.

As far as our second hypothesis is concerned, the most significant differences are observed between the responses of the bilingual groups' Serbian answers and the monolingual Hungarian responses and there are just slight differences between the monolingual Serbian and bilingual Serbian answers, as well as between the mono-

lingual Hungarian and the bilingual Serbian. There are additional differences when we look to the monolingual Serbian – monolingual Hungarian and the monolingual Hungarian – bilingual Hungarian comparisons. Thus, the first language does not have a deeper impact on connotative meaning and word rating similarities, so this hypothesis is not supported.

The presence of the differences found between monolingual-monolingual, monolingual-bilingual comparisons could be in part explained as a consequence of environmental influences, socialization, various socio-economic and cultural effects. Since the monolingual Hungarian group attends university in Subotica, participants from this group may have assimilated more into their Hungarian setting, in contrast with the bilingual group's participants, who study in Novi Sad, where the cultural values of the majority group are ever-present. The bilingual group might have assimilated into or adjusted to the dominant – Serbian – culture more intensively.

Regarding the positive, negative and neutral categories of words, we have found an interesting result: the monolingual groups have several times chosen neutral words as more positive and in the bilingual group negative words were frequently seen as more positive. This difference implicates that there might be an additional dissociation in the perception of different emotional categories.

One possible explanation for these shifts of positive, neutral and negative words towards the negative or positive poles of the scale could be that there is a course of shaping completely personal connotations or individual interpretations for these words.

All of our results taken into account indicate that a certain shift towards Serbian culture can be perceived, but it is questionable to what extent is this connected to the phenomenon of Cultural Frame Switching (Ramirez-Esparza et al., 2006), which refers to a shift in the individuals' set of values, ideology and to the adjustment to the governing principles of the currently activated culture.

Another explanation lies in the Theory of Language Embodiment and the processes of early affective linguistic conditioning. Our bilingual participants are in a multilingual context since early childhood, so they might have acquired affective connotations through the association with emotionally charged memories and experiences in both languages.

A different view emphasizes the importance of childhood attachment in forming the emotional force of words. It might be that in bilinguals from Serbia operates a combined variant of these four explanations, all of them contributing in a specific way and in a specific time.

Further research could analyze more deeply the social influences, environmental and cultural variables which can mediate the connection between language and emotionality, as well as if there is a kind of category effect in the process of evaluating words with different emotional valence.

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PREVAJANJE ČUSTEV – PREDSTAVLJANJE IN PREDELOVANJE S ČUSTVI NABITIH IN VREDNOTENJSKIH BESED PRI DVOJEZIČNIH IN ENOJEZIČNIH POSAMEZNIKIH IZ SRBIJE

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POVZETEK

Številne psihološke študije in izkušnje so pokazale, da morajo dvojezične osebe v svojem življenju pogosto loviti ravnotežje med dvema kulturama in različnima jezikoma. Neredko trčijo ob nesklaja med družbenimi vlogami, ki izvirajo iz različnih kulturnih vrednot in predstavljajo resničen izziv: izražati in doživljati čustva v dveh jezikih. Slednja tema je bila v psihološkem znanstvenem raziskovanju dolgo zapostavljena, dokler se v njem pred kratkim ni pojavilo novo področje raziskovanja.

Odprla ga je Aneta Pavlenko, obravnava pa vprašanja, ki se tičejo delovanja in zgradbe čustvenih svetov v dvo- in večjezičnih kontekstih. Cilj novega raziskovalnega področja je opredeliti repertoar čustev pri dvo- in večjezičnih posameznikih – kako si predstavljajo, predelujejo, izražajo in doživljajo čustva v svojem prvem in drugem jeziku.

Namen naše raziskave je bil ugotoviti, kako madžarsko-srbski dvojezični govorci iz Vojvodine v Srbiji čustveno delujejo v svojih dveh jezikih, ter odkriti, kakšne so podobnosti in razlike, če take govorce primerjamo z enojezičnimi madžarskimi in srbskimi skupinami iz iste države.

Uporabili smo metodo Osgoodovega semantičnega diferenciala. Sodelujoči v naši raziskavi so morali oceniti različne čustvene, s čustvi nabite, vrednotenjske in čustva vzbujajoče besede na sedemstopenjski Likertovi lestvici. Ponujene so jim bile tri kategorije samostalnikov: pozitivne, negativne in nevtralne besede. Dvojezični posamezniki so ocenjevali besede v madžarskem in srbskem jeziku.

Rezultati naše raziskave so pokazali, da obstaja nekaj bistvenih razlik med ocenami madžarskih in srbskih besed. Pri primerjavi odzivov in ocen enojezičnih skupin v obeh jezikih smo zabeležili različne ocene, kot tudi pri primerjavi odgovorov enojezičnih in dvojezičnih govorcev. Poleg tega smo znotraj dvojezične skupine odkrili nekaj razlik pri ocenah madžarskih in srbskih besed, kar kaže na razlike v čustvenosti posameznikovega prvega in drugega jezika. Obstaja veliko besed, pri katerih nismo našli nobenih razlik, zato lahko na podlagi naše raziskave sklepamo, da med čustvenostjo madžarskega in srbskega jezika ni pomembnih razlik, čeprav obstaja nekaj jezikovno specifičnih interpretacij čustev.

Ključne besede: dvojezičnost, čustvo, semantični diferencial, Srbija, srbščina, madžarščina

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