Correlation between Netspeak elements and asynchronous discussion

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Abstract: - Asynchronous discussion can take place no matter how distant the collocutors are and therefore is playing a very important role of any e-learning system. Online discussion allows students to consider and examine other people's thoughts and opinions on a specific topic and answer them in a concise and logical way. Within the ICT course taught in a first semester at Zagreb School of Economics and Management, we use two types of online discussion, so called opened and closed discussions. Opened discussions represent every day, informal communication between the students and the professors; while the closed ones are related strictly to the course topics. In this paper we will analyze the use of some particular elements of language in closed discussion on two levels: professor - student and student - student. Netspeak is a new language of information communication found on Internet in a form of chat, text messages and msn. It is rapidly developed, more direct, natural and for its features is close to a spoken language. Analyzed parts of the Netspeak in this paper are those the most subjected to changes, as for Croatian language those are the omission of diacritical marks, increasing use of acronyms and abbreviations, prolongation of graphemes, the use of uppercase when lower cases are required and the introduction of signs meaning actual state of mind or mood, so called emoticons. We expected the discussion between students and professors to be formal, highly respecting the norms of the written Croatian language and the discussion between students to be less formal, more near to the Netspeak. As well we wanted to see whether there are some relations among students using Netspeak, Discussion Quality, Dominant Members and Discussion Moderators.

Key-Words: - online discussion, Netspeak, e-learning, Information and Communication Technologies, education, asynchronous, language

1 Introduction

Very important parts of every e-learning system are discussions. [1]-[3] In paper, "Important role of Asynchronous Discussion in E-Learning System", the authors define open and closed discussion [4]. Open discussions provide constant communication between students and professors regarding teaching materials but also on topics not closely connected to teaching materials. Discussions can also be a professor-student, student-student and student-professor. [5, 6]

- **Discussion professor student.** Professor opens the discussion and students are commenting and asking questions. Those could be comments of the in class lectures, exercises, seminars, quizzes, discussions, various information etc.
- **Discussion student professor.** Student opens the discussion asking question to the professor. In

this kind of the discussion beneath the constructive remarks there are also no focused students repetitively asking the same questions regarding information they can find posted online.

• **Discussions student** – **student** are those being opened and commented by the students.

Closed discussions are related to teaching materials, and can be a professor-student and student-student. Figure 1 summarizes the discussions that are used among the course Information and Communication Technologies at Zagreb School of Economics and Management. [7, 8] Attendees in both types of online discussions are active participants. Modern LMS (Learning Management System) is able to register passive participants, those participants which are not taking the active role in the discussion. [9]



Figure 1 Discussion types

Research shows that there is a substantial difference whether the professor leads a discussion or student. According to Kremer & McGuinness [10] there is a probability that the imbalance between small professional expertise among the participants of the discussion (teachers and students) can contribute to open debate. However, at the same time they say that the discussions opened by students create a special atmosphere in which students can freely ask questions and oppose others opinions. Following results of this research show that closed discussions were followed by students even after the discussion has ended; they followed the discussion among a long period of time.

According to Dixon & Kuhlhorst [11] the presence of dominant participants in the discussion leads to more quality discussion. Although Aleksic-Maslac et al. have proved no significant correlation between the moderator within the discussion and its dominant members [7]. Considering the content quality measurement of online discussions there are various methods of analysing contents [12]. Although the use of discussion in the elearning for the purpose of education is the formal communication; students are much more relaxed and they more often use informal communication. In this paper we will analyze to what extent among discussions is Netspeak used within the course ICT in the academic year 2009/10.

2 Netspeak

Generating online content by users and making all kinds of social networks has led to making it a "new generation" (Web 2.0). A phenomenon such as YouTube and MySpace is a hint in which direction is Internet about to move, or how it would have an impact on everyday life. Precisely because of that it is necessary to implement better control to the process of some new language forms creation that is taking the primacy of communication, even to the extent when users stop to distinguish the difference between formal and informal communication, especially when using these new nonstandard language forms. There are several types of new language forms, but certainly the most interesting use of the entire new language is popularly called "Netspeak".[13]

2.1 Communication Process

Language is historically subject to changes. At the present time the principle of alteration postulated one hundred years ago by Ferdinand de Saussure, father of modern linguistics, is easily observed in new mass media such as those generated by computer science (chat, msn, forums, etc.) and the mobile phones (sms). Although this principle guarantees the continuity of languages, it is not taken into account when debating, when voices arise in favor and against the new codes of communication arise. [14]

Every communication process's task is to analyze the source, coder, transmitter, channel, receiver, decoder and recipient as shown in Figure 2. [15] The communication process is set so that the source of products the information (I), which is encoded to pure message (M). The transmitter materializes the message in the signal (S). Signal is good if it has same shape as the message, if it is aligned with the channel, which also has a very specific material properties and if it is receiver and decoder, who processed the opposite transmitter encoding and can accept it. The signal in the channel is affected by the noise (N), which interferes with communication flow. Noise or interference should be considered and any discrepancy between the parts of the communication chain. Mismatch between the encoder and so decoder product semantic noise. The receiver can inform the source of the feedback notification (F) which closes the communication process.



Figure 2 Communication process

2.2. Netspeak Elements

Medium or message (M) includes a selection of characters. It is a simultaneous multiple circuit of used channels in which they implemented a system of signs. Use of characters is one of those elements by which a human is clearly different from other living beings; the characteristically activity is human *differentia specifica*.[16]

Every character is phenomenon for itself. Appearance is not determined by its characteristics, but about what is "behind". One of these kinds of characters use is part of the Netspeak, and is called emoticons.

2.2.1. Emoticons

Emoticon is not just a colon and parentheses, it is the sign of a good or bad mood, and sometimes takes other meanings depending on the context in which it is used. Symbols are signs in which the relationship between signifiers are already learned. This relationship is not natural, but conventional (agreed). [15]

Written language, like any language idiom, has two main functions: communication one and symbolic one. These two functions are also incorporated into its writing. Communication function examines the role of language in benefit communication, and symbolic to be a sign to the community. Each speech is based on implicit norms which are lead by both, speaker and listener; but when this is required by the social needs of communication, there can be created explicit norm in the form of a standard language.

2.2.2. Abbreviation and Acronyms

Acronyms are types of formed abbreviations composed of the initial letters of each member of the expression. Abbreviations are mixed; there are regular and occasional ones. There are common abbreviations that are short parts of words or sets of words, and read as if the words are spelled correctly. Other abbreviations are formed by merging the initial letter or letters of multimember group called names and is usually read as written. [17]

2.2.3. Omission of diacritical marks

Diacritical marks are not only omitted but are recorded by the rules of written English language. This is why new students' generations are omitting it from written Croatian language. New technologies development is based on English language and it is also creating some new standards now called Netspeak. It is a common issue for all the minor world languages. All are subjected to overwhelming English and tends to be extinguished on a daily basis.

The dynamic of language changing is always the same: first we detect the change in the speech and then the change slowly enters the written language as a norm. The changes are primary identified on the lexical and then on the morphological level.

2.2.4. Salutation and complementary closing

Very poor use of the salutation at the beginning and complimentary closing at the end of post (although at the end of posts, we will identify greater use) directly leads to the increased conversational type of a text message.

Discussions, even though in writing form, are undertaking the spoken language rules. Conversational style is also known as everyday style (mostly verbal) communication. In a written style this conversational style appears in the records, letters and notes, and is also known as unprepared, unofficial, casual and simple.

2.2.5. Prolongation of the graphemes

Written Croatian language counts 30 sounds each represented by a single grapheme (except three sounds being represented by double graphemes-*dž*, *lj* and *nj*). There's no such a thing as the orthography phenomenon called *geminate* (a double consonant such as *mm* in a word *communication*).

As a strategy to compensate the auditive channel within the discussions the study shows the use of prolonged (doubled) graphemes within the word. For example, the word *jako* (meaning *very*) is used with the prolongation of a vowel a – jaaaako (meaning very, very much).

The prolongation is used in order to add prosodic elements to the written words. Prosody gives rhythm and melody to a word. It comprehends acoustic parameters such as accent, intonation and melody.

2.2.6. Use of uppercase where lower case is required

In written Croatian language there is a standard use of uppercase in three particular situations. First is with the proper names, the second as a first letter in a sentence and finally in order to express politeness [17]. Though, there are some orthography exceptions. Uppercase within the whole word, sentence or text can be used for esthetic, advertising or propaganda reasons.

So does Netspeak starts to undertake the writing in uppercase where lower case is required in order to emphasize the specific word and to add the prosodic elements to the written word. For example, a word *jako* (very) can be written in uppercase JAKO to emphasize it and to substitute some prosodic elements.

2.2.7. Use of tenses considered to be obsolete

We expected the appearance of tenses considered being obsolete within the discussions. For example *aorist*, for its feature which link it to the universal factor of brevity, but we haven't found it.

According to grammars of Croatian language (for example Barić et al. 1995, Katičić 1986, Silić 1997) the

following tenses are founded in Croatian: the *present* tense denoting the present, the *perfect*, the *aorist*, the *imperfective*, and the *pluperfect* denoting various aspects of the past and two future tenses called *Future I* and *Future II*. As far as the past tenses are concerned, the most frequent and the most dominant tense in contemporary Croatian is the Croatian *perfect Vidjela* sam te. (PERFECT – to see) Shortened form, Aorist form would be Vidjeh te. (AORIST – to see). [18]

3 Research on Netspeak elements within closed discussions

Table 1 shows the comparison of the various elements among professor-student and student-student discussions.

	Professor – Student Discussion (%)	Student – Student Discussion (%)
Written Croatian Language use	73	54
Diacritical Marks	64	62
Acronyms and Abbreviations	69	66
Emoticons	39	69
Prolonged graphemes	52	46,6
Uppercase graphemes	44	43,3
Both prolonged and uppercase graphemes	4	10,1
Greeting at the beginning of post	13	7
Greeting at the end of post	55	48

Table 1 Comparison of the various elements among P-S and S-S discussions.

3.1. Written Croatian Language

The study described in the paper "Impact of Information and Communication Technology to the language changes and the creation of new language form -Netspeak" [13] shows that even 90.4% of students in course ICT stated that in the formal communication they are applying written Croatian language. However, the analysis of the discussions of the same group of students gives quite different results (Figure 3).



Figure 3 The use of Written Croatian Language

In professor-student discussions 73% of students used the written Croatian language, including Netspeak elements such as omission of the diacritical marks, use of emoticons etc. Although it is obvious that provided materials are educational content, online forum is among perceived less formal form students as of communication. The student-student discussions difference is more pronounced - only 54% of students used the written Croatian language. An interesting thing to notice is the equivalency of the result and the student perception of using the Croatian language in the informal discussion.

Words in English are represented within the discussions in very high level. This is because it's about the Information and Communication Technology course. We all know that specific area is more related and connected, and we can say dependant on original English words. There are yet no appropriate translations of specific words of the information technology sphere. Figure 4 shows the English words abundance within the discussions.



Figure 4 English words abundance within the closed discussions

At least one word in English is used in 74% of closed discussion professor-student either in 62% of closed discussion student-student. Slightly higher percentage of words in English in professor-student discussion can be explained by the length of those posts. They are pretty much longer; usually we are talking about more than 500 characters. Dominant member's posts are even longer, about more than 2000 characters. [4]

3.2. Diacritical marks

Figure 5 shows the perception and the distribution rate of the use of diacritical marks within the closed discussion. 76,7% of the students state the use of diacritical marks within the formal discussion, and 60,2% of the students state the use of diacritical marks within the informal discussion. The analysis of the discussions shows similar results: 64% of the students make use of diacritical marks within the professor-student discussion, and 62% of the students make use of diacritical marks within the students make use of diacritical marks within the professor-student discussion, and 62% of the student discussion. However, some posts are made of combination of texts with and texts without diacritical marks. Such posts are categorized as posts in which there is no written Croatian language applied.



Figure 5 Distribution of diacritical marks within the closed discussion

3.3. Abbreviation and Acronyms

As an unexpected fact, rise higher percentage of students stating the use of abbreviations and acronyms in formal discussion rather then in informal one (Figure 6). The analysis of the discussions shows similar results. There is also a small difference between using abbreviations and acronyms within the closed discussions: 69% within the closed discussions professor-student, and 66% within closed discussions student-student. This can be explained by the length of posts. The posts between professor and students are considerably longer. Statistically, in longer posts there would be reasonable to expect a larger number of abbreviations and acronyms.



Figure 6 Distribution of the abbreviations and acronyms use within closed discussions

3.4. Emoticons

Figure 7 shows the distribution of the use of emoticons. Only 26,8% of the students state the use of emoticons within the formal discussion while 65,8% of the students state the use of emoticons within the informal discussions. The same large difference, of near 30%, can be noticed among the results of the analyzed discussions. 39% of the students use emoticons within the professor-student discussions and even 69% of the students use emoticons within the student-student discussions which are less formal.



Figure 7 Distribution of the emoticons use within the closed discussion

3.5. Graphemes

The analysis shows that 52% of the students prolong the graphemes within the professor-student discussions. Within the student-student discussions the situation is quite the same, 46, 6% of the students use the prolonged graphemes. 44% of the students write all graphemes in the word in capitals within the professor-student discussions. Very similar results we have obtained within student-student discussion where 43,3% of the students write all graphemes in a word in capitals. Further analysis shows the combining of prolongation and the use of uppercase within the posts. Only 4% of the students combine those two elements within the professor-student discussions. A little larger abundance of prolonged graphemes and uppercase of all graphemes in the word we find within student-student discussions, 10.1%.



Figure 8 The use of graphemes within the closed discussion

3.6. Greeting at the beginning and at the end of post

The results show that only 7% of the students write appropriate openings and salutations at the beginning of the posts within the student-student discussion. The situation is slightly better within the professor-student discussions with 13% of the students writing appropriate openings and salutation at the beginning of the posts. Concerning the salutation at the end of the posts, the analysis shows that 48% of the students within the student-student discussions use the salutation and 55% of the students use it within the professor-student discussions. Nevertheless, the most used closures represents emoticons, prolonged graphemes and the use of uppercase where lower case is required.



Figure 9 Greeting at the beginning and at the end of the post

4 Results on Statistical Research

As discussions within the ICT course represent an additional, optional element and serves to motivate more students, in the following research we will analyze the answers of only a sample of students who participated in the professor-student discussion and student-student discussion (N = 91 students - 25% of students who enter the course).

For our research we proposed following hypotheses:

- Results will show statistically significant correlation between using written Croatian language and using Netspeak (i.e. Omission of the Diacritical Marks, increase use of the Acronyms and the Abbreviations, prolongation of the graphemes, use of uppercase where lower case is required, the use of the Emoticons) in formal communication among Professor – Student and Student – Student discussions.
- 2. Analysis will show statistically significant differences between using written Croatian language and Netspeak elements among formal Professor-Student and informal Student-Student discussion.
- 3. Analysis will show weather there are statistically significant correlations among students in using Netspeak, Discussion Quality, Dominant Members and Discussion Moderators

4.1. Correlation and differences between written Croatian language and Netspeak in formal and informal discussion

We conducted this research to see whether there is significant difference among students using written Croatian language and students using Netspeak in formal and informal discussions. To test the first hypothesis, we used Pearson correlation coefficient and correlated students' results (N=91) for using written Croatian language, increasingly using acronyms and abbreviations, emoticons and omission of the diacritical marks as parts of Netspeak. Results showed that main hypothetical assumptions are proven and that there are significant correlations between using written Croatian language and using Netspeak. We can assume that students, who are better language oriented, are using more often written Croatian language, both in formal and informal communication and will not use Netspeak in formal communication at all. In following table marks P-S stands for Professor-Student discussion and mark S-S stands for Student-Student discussion.

Correlations									
		Written Croatian Language: P-S	Diacritical Marks: P-S	Acronyms and Abbreviations: P-S	Emoticons: P-S	Written Croatian Language: S-S	Diacritical Marks: S-S	Acronyms and Abbreviation s: S-S	Emoticons: S-S
Written Croatian	Pearson Correlation	1	,129	-,114	-,220	,563	,228	,151	-,210
Language: P-S	Sig. (2-tailed)		,221	,281	,037	,000	,077	,247	,105
	Ν	91	91	91	91	61	61	61	61
Diacritical Marks: P-	Pearson Correlation	,129	1	-,113	,007	,132	,736	-,233	-,306*
S	Sig. (2-tailed)	,221		,284	,946	,309	,000	,071	,016
	Ν	91	91	91	91	61	61	61	61
Acronyms and	Pearson Correlation	-,114	-,113	1	,079	-,015	,069	,106	,026
Abbreviations: P-S	Sig. (2-tailed)	,281	,284		,458	,911	,598	,416	,842
	Ν	91	91	91	91	61	61	61	61
Emoticons: P-S	Pearson Correlation	-,220	,007	,079	1	-,083	-,077	,118	,406
	Sig. (2-tailed)	,037	,946	,458		,525	,555	,363	,001
-	N	91	91	91	91	61	61	61	61
Written Croatian	Pearson Correlation	,563	,132	-,015	-,083	1	,318	-,031	-,308
Language: S-S	Sig. (2-tailed)	,000	,309	,911	,525		,006	,792	,008
	N	61	61	61	61	74	74	74	74
Diacritical Marks: S-	Pearson Correlation	,228	,736	,069	-,077	,318	1	-,203	-,308
3	Sig. (2-tailed)	,077	,000	,598	,555	,006		,083	,007
A	N De anno a Completion	61	61	61	61	/4	74	/4	/4
Acronyms and Abbreviations: S.S.	Pearson Correlation	,151	-,233	,106	,118	-,031	-,203	1	,305
Abbicviations. 0-0	Sig. (2-tailed)	,247	,071	,416	,303	,792	,083	74	,008
Emotioona: S.S.	N Dearson Correlation	210	206	01	406	200**	200**	205	/4
Linducons. 5-5		-,210	-,306	,020	,400	-,308	-,308	,305	1
	Sig. (2-tailed)	,105	,016	,842	,001	,008	,007	,008	
	N	61	61	61	61	74	74	74	74

Correlations

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 2 Correlations

The Pearson correlation coefficient measures the linear association between two scale variables. Some correlations reported in the table are negative, although not significantly different from 0 because their p-value is greater than 0.10. This suggests that using acronyms and abbreviations in professor-student discussion and emoticons in both discussion types don't have appreciable effect on using net speak rather than written Croatian language.

		Mean	Ν	Std. Deviation	Std. Error Mean
Pair 1	Written Croatian Language: P-S	,759	61	,3739	,0479
	Written Croatian Language: S-S	,570	61	,4149	,0531
Pair 2	Diacritical Marks: P-S	,666	61	,4090	,0524
	Diacritical Marks: S-S	,587	61	,4588	,0587
Pair 3	Acronyms and Abbreviations: P-S	,670	61	,3934	,0504
	Acronyms and Abbreviations: S-S	,651	61	,3365	,0431
Pair 4	Emoticons: P-S	,434	61	,4155	,0532
	Emoticons: S-S	,689	61	,3891	,0498

Table 3 Paired Samples Statistics

The Descriptive table displays the mean, sample size, standard deviation, and standard error for both groups. Across all 61 subjects, using written Croatian language dropped between 0.18 and 0.19 points on average while using discussions. The subjects are clearly using diacritical marks among discussions but with no difference more than 0.1 point. Acronyms and abbreviations are similarly used in professor-student and student-student discussion. Emoticons are more used in student-student discussion, difference around 0.2 points between pair samples. The standard deviations for professor-student and student-student discussions reveal that subjects were more variable with respect to diacritical marks and emoticons than to using written Croatian language and acronyms and abbreviations.

The Pearson correlation between the baseline and using written Croatian language and diacritical marks, but also emoticons use among student-student and professor-student discussion measurements is 0.563; 0.736 and 0.406, almost a perfect correlation. At 0.106, the correlation between the baseline and using acronyms and abbreviations levels is not statistically significant. Levels were higher overall, but the change was inconsistent across subjects. Several lowered their levels, but several others either did not change or increased their levels.

		Ν	Correlation	Sig.
Pair 1	Written Croatian Language: P-S	61	,563	,000
	Written Croatian Language: S-S			
Pair 2	Diacritical Marks: P-S	61	,736	,000
	Diacritical Marks: S-S			
Pair 3	Acronyms and Abbreviations: P-S	61	,106	,416
	Acronyms and Abbreviations: S-S			
Pair 4	Emoticons: P-S	61	,406	,001
	Emoticons: S-S			

Table 4 Paired Samples Correlation

The Mean column in the paired-samples t test table displays the average difference between written Croatian language, diacritical marks, acronyms and abbreviations and emoticons use among professor-student and studentstudent discussions. The Std. Deviation column displays the standard deviation of the average difference score. The Std. Error Mean column provides an index of the variability one can expect in repeated random samples of 16 patients similar to the ones in this study.

			Paire	ed Differ	ences				
			Std	Std. Difference				Sig (2	
		Mean	Deviation	Mean	Lower	Upper	t	df	tailed)
Pair 1	Written Croatian Language: P-S Written Croatian Language: S-S	,1885	,3706	,0475	,0936	,2834	3,973	60	,000
Pair 2	Diacritical Marks: P-S Diacritical Marks: S-S	,0787	,3189	,0408	-,0030	,1604	1,927	60	,059
Pair 3	Acronyms and Abbreviations: P- S Acronyms and Abbreviations: S- S	,0197	,4898	,0627	-,1058	,1451	,314	60	,755
Pair 4	Emoticons: P-S Emoticons: S-S	-,2541	,4392	,0562	-,3666	-,1416	-4,519	60	,000

Table 5 Paired Samples Test

The 95% Confidence Interval of the Difference provides an estimate of the boundaries between which the true mean difference lies in 95% of all possible random samples of 16 patients similar to the ones participating in this study. The t statistic is obtained by dividing the mean difference by its standard error. The Sig. (2-tailed) column displays the probability of obtaining a t statistic whose absolute value is equal to or greater than the obtained t statistic. Since the significance value for change in using written Croatian language is less than 0.05, we can conclude that the average loss of 0.787 points per using diacritical marks is not due to chance variation, and can be attributed to the Netspeak growth. However, the significance value greater than 0.10 for change in Acronyms and Abbreviations level shows the Netspeak expansion did not significantly reduce their use.

4.2. Correlation among students in using Netspeak, Discussion Quality, Dominant Members and Discussion Moderators

In further research we wanted to see whether there are some connections among students between using Netspeak, Discussion Quality, Dominant Members and Discussion Moderators. To test this hypothesis, we used Pearson correlation coefficient and correlated students' results (N=105). Results showed that main hypothetical assumptions is not proven because there is no significant correlation between Netspeak and other elements, but still that there is significant correlation (at the 0,01 lever) between using Dominate Members, Moderators and Discussion Quality.

We can assume that students, the best ones, are those who are more often starting the best discussions, or those students who are moderators and dominant members. Those students are better language oriented, and they are less using Netspeak.

		Netspeak	Discussion Quality	Dominant Members	Moderators
Netspeak	Pearson Correlation	1	,033	,085	-,014
	Sig. (2-tailed)		,742	,389	,889
	N	105	105	105	105
Discussion	Pearson Correlation	,033	1	,802	,514
Quality	Sig. (2-tailed)	,742		,000	,000
	N	105	105	105	105
Dominant	Pearson Correlation	,085	,802**	1	,420
Members	Sig. (2-tailed)	,389	,000		,000
	N	105	105	105	105
Moderators	Pearson Correlation	-,014	,514	,420	1
	Sig. (2-tailed)	,889	,000	,000	
	N	105	105	105	105

**. Correlation is significant at the 0.01 level (2-tailed).

Table 6 Paired Correlations

The Pearson correlation coefficient measures the linear association between two scale variables. Some correlations reported in the table are negative (!), although not significantly different from 0 because their p-value is greater than 0.10. This suggests that moderators in discussion don't have appreciable effect on using net speak among discussions.

The Pearson correlation between Netspeak and Discussion Quality, Dominant Members and Moderators is 0.033; 0.085 and -0.014. At 0.802, the correlation between the Dominant Members and Discussion Quality

is statistically significant. Also, at 0.514 the correlation between Moderators and Discussion Quality is statistically significant. And, at 0.420 levels the statistically significant correlation is between Dominant Members and Moderators.

Levels of correlation between other variables than Netspeak were higher overall.

		Mean	Ν	Std. Deviation	Std. Error Mean
Pair 1	Netspeak	3,32	105	1,052	,103
	Discussion Quality	5,044	105	5,8320	,5691
Pair 2	Netspeak	3,32	105	1,052	,103
	Dominant Members	,09	105	,281	,027
Pair 3	Netspeak	3,32	105	1,052	,103
	Moderators	,16	105	,370	,036

Table 7 Paired Samples Statistics

The Descriptive table displays the mean, sample size, standard deviation, and standard error for both groups. Across all 105 subjects, using Netspeak dropped between 0.18 and 0.19 points on average while comparing to discussion quality.

		Ν	Correlation	Sig.
Pair 1	Netspeak & Discussion Quality	105	,033	,742
Pair 2	Netspeak & Dominant Members	105	,085	,389
Pair 3	Netspeak & Moderators	105	-,014	,889

 Table 8 Paired Samples Correlations

5 Conclusion

During this time of global technology development, digitalization and virtualization literacy takes on new aspects, new style. In addition to the existing functional styles of the written Croatian language, such as scientific, administrative and business, journalistic, and conversational style seems to be dangerously approaching the introduction of a new Internet style that may result from the latter, but goes beyond it by establishing their own new rules.

This new Internet style, popularly called Netspeak, also known as chat speak, Internet language and Internet short-hand is more and more taking the most important role in information communication imposing the knowledge of its principles as crucial. Generating itself from a spoken language, developing rapidly and becoming a common tool of communication, slowly but confidently erase the boundaries between formal and informal communication leading its way towards a global language. It represents the communication over electronic networks in which communicators behave as that they are speaking in real time. It is also a process of shortening words, replacing letters with different letters or symbols to make the typing process shorter ignoring the rule of grammar and spelling completely.

There are at least five ways in which communication technology influences and changes the Croatian language: the first is the introduction of anglism and originally English words such as *mail* and *site;* the second is spreading those words through the language; the third is the introduction of emoticons; the fourth is disrespecting of the rules of grammar and spelling and finally as the fifth way the use of obsolete tense – aorist. New channels of communicating our message, dramatically changes the way we communicate our message to the world.

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