

# Workplace and challenges in the communication process

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## Abstract

The paper considers the barriers in communications, and specially, the influence of workplace on business communication process. Communications' barriers are analyzed through an analysis of 24 question poll results. General hypothesis that personal characteristics of workpeople, their workplace, and their status impact the way of their communication with colleagues and managers was discussed through four individual hypotheses. In the paper, based on the statistically verified individual hypotheses, it is concluded that the obtained results confirm that individual characteristics of business people, their workplace and their status in the organization impact the quality and effectiveness of communications they establish.

**Key words:** communication process, barriers in communication, statistical significance, Scheffé's method

## Introduction

There are a variety of definitions of the term communication, and one of them is that communication is a process by which information is exchanged between individuals through a common system of symbols, signs, or behavior. (Webster, 2011) Communication is also "any act by which one person gives to or receives from another person information about that person's needs, desires, perceptions, knowledge, or affective states. Communication may be intentional or unintentional, may involve conventional or unconventional signals, may take linguistic or nonlinguistic forms, and may occur through spoken or other modes." (ASHA, 1992)

Many experts believe that communication is a key process that underlies all aspects of organizational operations. (LS, 2002) (Meesala, 2007)

(Binneman, 2010) (Artley & Stroh, 2011). Well-known management theorist Chester Barnard, wrote: "The structure, extent and scope of the organization almost entirely is determined by its communication techniques" (Barnard, 1938). Huczynski and Buchanan, the organizational specialists, brought their well-known and successful brand of critical thinking, social science underpinning, and visual appraisal to bear in this comprehensive introduction to organizational behavior, and, perhaps the best way to define communications is to consider their remark: "Our communication depends, to a large extent, on how we perceive those around us, their motives and their intentions, and how we perceive or interpret the communication we receive from them." (Huczynski & Buchanan, 2007)

The communication process begins when one party (individual, group or entire organization) has an idea which it wants to transfer to another. Sender's task is to transform an idea into such a form that can be sent to the recipient and that the recipient will understand. (Cekerevac & Ristic, 2006) This is called the **encoding process** - translating ideas into a form, such as written or spoken language, which the recipient can recognize (beside speech, coding covers letters and gestures, intonation, body language, facial expressions and any other resources that can be used to express something). A person encodes information when choosing words to talk with someone personally, or to write a letter. The encoding may be affected by:

- the situation in which a person is (whether he is angry, hungry);
- person's previous relationship with someone with whom he communicates (hostile, friendly); as well as
- person's understanding of what is the best way to send a message (conciliatory, authoritative).

Having been encoded, the message is ready to be transmitted using a **medium** (word, image, activity such as gestures, mimic, intonation), over one or several **communication channels**, to reach the desired receiver, and using pathways through which information travels.

Once a message is received, the **process of decoding** begins - converting the message back to the sender's original form. This can involve many different sub-processes, such as comprehending spoken or written words, interpreting facial expressions and similar. To the extent that the receiver has accurately decoded a sender's message, the ideas understood will be those the sender intended to transmit.

Once a message has been finally decoded, the process of communication can continue if the receiver sends a new message to the sender. This phase of the process is **feedback** – knowledge of the impact of messages on receivers. Receiving feedback allows the sender to determine whether their messages have been correctly understood. Concurrently, the feedback may convince the receiver that their opinion matters to the sender. Once received, feedback can trigger another idea from the sender, and thus initiate another cycle of information transmission. Feedback is crucial for the regular communication flow.

The **noise**, factors that distort the clarity of messages, may occur in any phase of communication process. For example, poorly encoded messages (unclearly written) or poorly decoded (incomprehensible), or the presence of static along the communication channels (receiver's attention is diverted from the main message), may result in less effective communication. (Ristić, Mihailović, Čekerevac, Vatovec Krmac, & Salketić, 2012)

In the process of communication can participate (Rampur, 2011):

1. Open communicators - people who are receptive, and express their emotions and feelings in a free manner.
2. Reserved communicators - communicators that do not like to let other people know about their personal life.
3. Indirect communicators - individuals whose talk is very slow and intentional.
4. Direct communicators - individuals who talk more clamorously and rapidly than indirect communicators.

### **Communication Barriers**

Barriers, the potential obstacles to effective communication, arise on several levels, from individual to organizational. (Williams, 2011) The factors affecting the smooth flow of messages are numerous, as:

1. words,
2. people,
3. organizational structure.

A person's choice of **words**, manner in which words are used and meaning attributed to them can cause numerous problems. Essentially it is a semantic issue arising out of the meaning of the words used. The one and the same word can mean different things to different people. For example, the word "effectiveness" can mean something good and noble to a manager, while the word "effectiveness" may mean a loss of numerous members, or more work for the same salary to the Union leader.

**People**, the greatest value of an organization, at the same time can be represents of a great risk to effective communication. Age, character, race, sex, education, origin and many other differences influence the things someone says or hears. (Evans, Hearn, Uhlemann, & Ivey, 2011) There is, also, one other barrier called **filtering** (person hears what they want to hear). Filtering is a result of person's individual needs and interests directing their listening. (Krizan, Merrier, Logan, & Williams., 2008) Insecure employees, more than the secure ones, misrepresent their messages directed to their senior management. Employees striving to achieve success misrepresent their upward messages more often than the employees already deeming themselves as successful. Therefore, the apprehension and anxiety of subordinates affect the accuracy of the upward communication. Additionally, people striving for success and climbing the ladder of hierarchy distort their messages in order to tell bosses what they want to hear. (Ristić, Mihailović, Čekerevac, Vatovec Krmac, & Salketić, 2012)

The last category of barriers to effective communication arises out of the very **organizational structure**. In the situations when the organizational structure itself and relations among the people are not clearly defined, it is unclear who is superior and who subordinate, or who is in charge of specific activities. These situations lack the ac-

tual explanations on the stipulated communication channels. They can result in misunderstanding of the goals, or in lack of information about the people necessary to cooperate with in the event of specific problems. Other issues may arise, and all of them are consequence of a vague organizational structure. (Ristić, Mihailović, Čekerevac, Vatovec Krmac, & Salketić, 2012)

Any communication can be improved by better choice of symbols, emphatic listening, repeating, ensuring a feedback, and a clearly defined organizational structure.

### Research Hypotheses

The research has been carried out based on the general and individual hypotheses.

General hypothesis:

Personal characteristics of workpeople, their workplace and their status impact the way of their communication with colleagues and managers.

Individual hypotheses:

1. Work experience of respondents does not have a great impact on the manner of communication of business people when "looking into the eyes of his interlocutor" is taken as a criterion.
2. Belonging to different sectors is not important in terms of concentrating on the details in communication.
3. Respondents having different chances with regard to promotion are different among themselves in terms of their tendency to plan a communication.
4. People who are actively seeking other jobs more often use different forms of communication than those who do it passively.

### Processing of Poll Results and Analysis of Results Obtained

For the collection, classification and analysis of statistical data statistical methods were used. Analysis of the results obtained by the poll will be presented using the variance analysis.

$$S^2 = \frac{1}{N} \sum_{i=1}^N (X_i - \bar{x})^2$$

Variance is defined as the arithmetic mean of the square of X values deviation from their arith-

metic mean. Positive value of the variance root represents the standard deviation.

In statistics, a result is called statistically significant if it is unlikely to have occurred by chance. In here presented research statistical significance is expressed in units of "σ" (sigma), the standard deviation of a normal distribution. A statistical significance of "nσ" can be converted into a value of α via use of the function Φ which is the cumulative distribution function of the standard normal distribution  $\alpha = 1 - \Phi(n)$ .

The term significance level is used to refer to a pre-chosen probability, and it is usually denoted by the symbol α (alpha).

$$\text{Significance Level} = P(\text{type I error}) = \alpha$$

Popular levels of significance are 10% (0.1), 5% (0.05), 1% (0.01), 0.5% (0.005), and 0.1% (0.001). The significance level

The p-value, calculated probability, is defined as the estimated probability of rejecting the null hypothesis of the study question when that hypothesis is true. The "p-value" is calculated after a given study. The probability value (p-value) of a statistical hypothesis test is the probability of getting a value of the test statistic as extreme as or more extreme than that observed by chance alone, if the null hypothesis  $H_0$  is true. It is the probability of wrongly rejecting the null hypothesis if it is in fact true. (Easton & McColl, 1997) If test of significance gives a p-value lower than the α-level, the null hypothesis is thus rejected. Such results are informally referred to as "statistically significant". (Anon., 2011)

The cumulative distribution function of a random variable X can be defined in terms of its probability density function f as  $F(x) = P(X \leq x) = \sum_{X \leq x} P(x)$

A random variable X has density f.

The respondents were asked to fill the poll consisted of 24 questions, shown in Table 2. This Table also shows a part of results obtained by the analysis of statistical significance for the following four groups, namely:

1. The statistical significance of difference between respondents with different work experience;

2. The statistical significance of difference between respondents of different sector belonging;
3. The statistical significance of differences with regard to promotion; and
4. The statistical significance of differences with respect to possible change of employer.

Table 2. Statistical significance of differences

	The statistical significance of difference between respondents with different work experience			The statistical significance of difference between respondents of different sector belonging			The statistical significance of differences with regard to promotion			The statistical significance of differences with respect to change of employer		
	F	"σ" (Sigma)	df	F	"σ" (Sigma)	df	F	"σ" (Sigma)	df	F	"σ" (Sigma)	df
Communication is an integral part of my job	2.283	0.061	4	0.727	0.484	2	0.679	0.565	3	3.793	0.024	2
I use different forms of communication	5.486	0	4	2.361	0.096	2	1.748	0.157	3	11.926	0	2
I plan my messages	4.966	0.001	4	0.468	0.627	2	6.74	0	3	2.412	0.091	2
Spontaneous communication is better than the official one	1.949	0.103	4	0.144	0.866	2	1.829	0.142	3	1.992	0.138	2
I find it hard to express my feelings	1.516	0.198	4	4.318	0.014	2	1.778	0.152	3	2.017	0.135	2
I react on the first ball	1.627	0.167	4	0.234	0.791	2	2.241	0.084	3	1.195	0.304	2
Priority of communication lies in the choice of group	0.423	0.792	4	2.856	0.059	2	2.942	0.033	3	0.085	0.918	2
It is all right to interrupt my interlocutor if I have something to add	0.671	0.613	4	1.824	0.163	2	0.405	0.75	3	0.55	0.578	2
Sad news should be delivered immediately	2.327	0.057	4	6.741	0.001	2	2.512	0.059	3	4.257	0.015	2
Language which a listener comprehends	0.57	0.685	4	0.649	0.524	2	2.246	0.083	3	0.141	0.868	2
When I do not understand something, I ask	0.275	0.894	4	0.728	0.484	2	0.527	0.664	3	6.73	0.001	2
Different point of view	4.79	0.001	4	0.159	0.853	2	1.73	0.161	3	0.673	0.511	2
The same communication style	1.806	0.128	4	6.85	0.001	2	2.592	0.053	3	1.453	0.236	2
I find it hard to express my feelings	0.767	0.547	4	1.445	0.237	2	0.529	0.663	3	1.544	0.215	2
Even when I what someone wants to say I wait for them to say and then answer	1.687	0.153	4	2.024	0.134	2	1.046	0.373	3	3.096	0.047	2
When I give instructions, I ask for a feedback	1.945	0.103	4	1.487	0.228	2	1.451	0.228	3	13.28	0	2
Individuals with a problem in communication	5.121	0.001	4	2.422	0.091	2	0.447	0.72	3	2.237	0.109	2
I address the responsible person	3.34	0.011	4	4.057	0.018	2	0.477	0.698	3	5.442	0.005	2
I take written communication seriously	2.468	0.045	4	3.036	0.05	2	0.806	0.492	3	3.947	0.02	2
I focus my concentration on details	3.153	0.015	4	6.385	0.002	2	1.848	0.139	3	3.935	0.021	2
I use humor in communication	0.579	0.678	4	2.811	0.062	2	0.592	0.621	3	7.115	0.001	2
I also pay attention to non-verbal speech	3.089	0.016	4	1.557	0.212	2	1.097	0.351	3	2.029	0.133	2
I pay attention that non-verbal signals are consistent with the verbal ones	2.643	0.034	4	2.747	0.066	2	1.51	0.212	3	1.603	0.203	2
I look straight in the eye	8.741	0	4	3.773	0.024	2	2.897	0.036	3	0.336	0.715	2

Dependent variable	Work experience		AS1-AS2 (I-J)	"σ" (sigma)	Sector		AS1-AS2 (I-J)	"σ" (sigma)	Possibility of promotion		AS1-AS2 (I-J)	"σ" (sigma)	Changes		AS1-AS2 (I-J)	"σ" (sigma)	
	(I)	(J)			(I)	(J)			(I)	(J)			(I)	(J)			
Communication is an integral part of my job	<3	<10	0	1	public	private	0.18	0.491	NC	SC	0	0.999	TF	IF	-0.42	0.063	
		>20	0.36	0.413						CP	-0.17						0.799
	<10	<20	0.11	0.985	private	in a transition	0	0.885	SC	CP	-0.18	0.662	IF	SF	-0.16	0.670	
		>20	0.38	0.277						CP	-0.18						0.662
	I use different forms of communication	<3	<10	0.27	0.403	public	private	-0.11	0.816	NC	SC	-0.18	0.519	TF	IF	0.27	0.092
			>20	-0.67	0.194						SC	-0.26					
<10		<20	0	1	private	in a transition	-0.29	0.314	SC	CP	-0.26	1	SF	SF	-0.44	0.142	
		>20	0.64	0.087						CP	0						1
I plan my messages		<3	<10	0.68	0.039	public	in a transition	0	0.98	NC	CP	0.25	0.629	TF	IF	0.22	0.621
			>20	0.11	0.993						SC	0.59					
	<10	<20	0	1	private	in a transition	0.14	0.709	SC	CP	0.5	0.096	SF	SF	0.43	0.134	
		>20	0.11	0.993						CP	0.5						0.096
	Spontaneous communication is better than the official one	<3	<10	0	0.996	public	private	0	0.999	SC	CP	0	0.964	IF	SF	0.22	0.344
			>20	-0.14	0.978						SC	0					
<10		<20	0	1	private	in a transition	0	0.867	NC	CP	0	0.964	TF	IF	-0.34	0.222	
		>20	-0.39	0.396						SC	0						0.977
<10		<20	0	0.993	private	in a transition	0	0.982	SC	CP	0.15	0.872	SF	SF	-0.37	0.148	
		>20	-0.35	0.437						CP	0.15						0.872
<20	>20	-0.26	0.54	private	in a transition	0	0.953	SC	CP	0.22	0.599	IF	SF	0	0.966		

Dependent variable	Work experience		AS1-AS2 (I-J)	"σ" (sigma)	Sector		AS1-AS2 (I-J)	"σ" (sigma)	Possibility of promotion		AS1-AS2 (I-J)	"σ" (sigma)	Changes		AS1-AS2 (I-J)	"σ" (sigma)
	(I)	(J)			(I)	(J)			(I)	(J)			(I)	(J)		
I find it hard to express my feelings	<3	<10	0	0.997	public	private	0.5	0.017	NC	SC	0.33	0.234	TF	IF	0	0.9
		<20	0.41	0.497												
		>20	0.33	0.657												
	<10	<20	0.31	0.687	in a transition	in a transition	0.22	0.395	CP	CP	0.38	0.275	SF	SF	0.33	0.275
		>20	0.24	0.841												
		>20	0	0.993												
I react on the first ball	<3	<10	0.33	0.855	public	private	0	0.978	NC	SC	0.4	0.176	TF	IF	-0.37	0.31
		<20	0.57	0.297												
		>20	0.39	0.639												
	<10	<20	0.23	0.914	in a transition	in a transition	0.13	0.791	CP	CP	0.42	0.302	SF	SF	-0.25	0.578
		>20	0	1												
		>20	-0.18	0.912												
Priority of communication lies in the choice of group	<3	<10	0	0.995	public	private	-0.28	0.082	NC	SC	-0.23	0.226	TF	IF	0	0.967
		<20	0	0.986												
		>20	0	1												
	<10	<20	-0.18	0.847	in a transition	in a transition	0	0.985	CP	CP	-0.39	0.045	SF	SF	0	1
		>20	-0.11	0.963												
		>20	0	0.987												
It is all right to interrupt my interlocutor if I have something to add	<3	<10	-0.21	0.942	public	private	0.16	0.626	NC	SC	0	0.999	TF	IF	-0.13	0.808
		<20	0	1												
		>20	-0.16	0.96												
	<10	<20	0.22	0.871	in a transition	in a transition	0.28	0.183	CP	CP	-0.1	0.959	SF	SF	-0.2	0.590
		>20	0	0.999												
		>20	-0.17	0.866												

Dependent variable	Work experience		AS1-AS2 (I-J)	"σ" (sigma)	Sector		AS1-AS2 (I-J)	"σ" (sigma)	Possibility of promotion		AS1-AS2 (I-J)	"σ" (sigma)	Changes		AS1-AS2 (I-J)	"σ" (sigma)
	(I)	(J)			(I)	(J)			(I)	(J)			(I)	(J)		
Sad news should be delivered immediately	<3	<10	0	1	public	private	0.58	0.013	NC	SC	0.41	0.156	TF	IF	0.29	0.474
		<20	0.63	0.186												
	<10	>20	0.39	0.61	in a transition	in a transition	0.52	0.016	CP	CP	0.49	0.176	SF	SF	0.61	0.032
		<20	0.57	0.214												
Language which a listener comprehends	<3	>20	0.33	0.688	public	in a transition	0	0.966	NC	SC	0	0.984	TF	IF	0.32	0.136
		<20	-0.23	0.789												
	<10	<10	0	0.995	private	private	0.1	0.702	SC	SC	0.18	0.42	IF	IF	0	0.96
		<20	0	0.986												
When I do not understand something, I ask	<10	>20	0	0.994	public	in a transition	0	0.88	NC	CP	0.32	0.116	TF	SF	0	0.879
		<20	0.17	0.844												
	<20	>20	0.15	0.876	private	in a transition	-0.16	0.529	SC	CP	0.14	0.689	IF	SF	0	0.953
		<10	0	1												
Different point of view	<3	<10	0	0.999	public	private	-0.15	0.507	NC	SC	0	0.992	TF	IF	0.43	0.023
		<20	0	0.998												
	<10	>20	0	1	private	in a transition	0	0.825	SC	CP	0	0.955	SF	SF	0.55	0.001
		<20	0	0.998												
Different point of view	<3	>20	0	0.987	public	in a transition	0	0.876	NC	SC	-0.12	0.829	TF	IF	0.13	0.488
		<20	0.55	0.321												
	<10	<10	0.16	0.971	private	private	0	0.969	SC	SC	-0.35	0.209	IF	IF	0	0.938
		<20	0.44	0.366												
Different point of view	<10	>20	-0.38	0.491	private	in a transition	0	0.857	NC	CP	-0.13	0.936	TF	SF	0.21	0.617
		<20	-0.1	0.991												
	<20	>20	0.28	0.537	private	in a transition	0	0.975	SC	CP	0.22	0.665	IF	SF	0.13	0.672
	<10	0	0.975													

Dependent variable	Work experience		AS1-AS2 (I-J)	"σ" (sigma)	Sector		AS1-AS2 (I-J)	"σ" (sigma)	Possibility of promotion		AS1-AS2 (I-J)	"σ" (sigma)	Changes		AS1-AS2 (I-J)	"σ" (sigma)	
	(I)	(J)			(I)	(J)			(I)	(J)			(I)	(J)			
The same communication style	<3	<10	0.23	0.938	public	private	-0.53	0.013	NC	SC	0	1	TF	IF	-0.35	0.276	
		>20	0.26	0.872													
	<10	>20	0.49	0.292	private	in a transition	-0.48	0.014	SC	CP	-0.42	0.22	SF	SF	-0.19	0.687	
		>20	0	1													0.808
	I find it hard to express my feelings	<20	>20	0.24	0.728	public	in a transition	0	0.971	SC	CP	-0.43	0.12	IF	SF	0.17	0.533
			<10	0	1												
<3		<20	0.37	0.721	private	private	0.34	0.243	NC	SC	0	0.965	TF	IF	-0.36	0.334	
		>20	0.29	0.853													
<10		<20	0.31	0.803	private	in a transition	0	0.967	SC	CP	-0.11	0.969	SF	SF	-0.13	0.868	
		>20	0.22	0.919													
<20	>20	0	0.994	public	in a transition	-0.29	0.458	SC	CP	0	1	IF	SF	0.24	0.364		
	<10	-0.32	0.751														
Even when I what someone wants to say I wait for them to say and then answer	<3	<20	-0.22	0.884	private	private	0	0	NC	SC	0	0.936	TF	IF	0.47	0.051	
		>20	0	1													
	<10	<20	0	0.992	public	in a transition	-0.25	0.967	SC	CP	0.3	0.409	SF	SF	0.3	0.269	
		>20	0.35	0.426													
	<20	>20	0.26	0.542	private	in a transition	-0.34	0.178	SC	CP	0.21	0.62	IF	SF	-0.17	0.44	
		<10	-0.12	0.996													
When I give instructions, I ask for a feedback	<3	<20	-0.37	0.658	public	private	0.13	0.778	NC	SC	-0.29	0.382	TF	IF	0	0.998	
		>20	0	0.997													
	<10	<20	-0.25	0.861	private	in a transition	-0.22	0.422	SC	CP	-0.16	0.893	SF	SF	0.68	0.005	
		>20	0.21	0.907													
	<20	>20	0.46	0.113	private	in a transition	-0.35	0.254	SC	CP	0.13	0.909	IF	SF	0.69	0	
		<10	-0.35	0.254													

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	(I)	(J)			(I)	(J)			(I)	(J)			(I)	(J)		
Individuals with a problem in communication	<3	<10	0.67	0.105	public	private	0	1	NC	SC	-0.12	0.898	TF	IF	-0.41	0.139
		<20	0.91	0.001												
		>20	0.48	0.228												
	<10	<20	0.24	0.832	in a transition	in a transition	0.33	0.11	CP	CP	-0.14	0.912	SF	SF	-0.22	0.564
		>20	-0.19	0.914												
		>20	-0.43	0.099												
I address the responsible person	<3	<10	0	0.995	public	private	0.32	0.034	NC	SC	0	0.855	TF	IF	0	0.98
		<20	0.16	0.899												
		>20	0.23	0.657												
	<10	<20	0.24	0.595	in a transition	in a transition	0.2	0.201	CP	CP	0	0.939	SF	SF	0.33	0.077
		>20	0.31	0.271												
		>20	0	0.982												
I take written communication seriously	<3	<10	-0.43	0.095	public	private	0.26	0.05	NC	SC	0	0.992	TF	IF	-0.2	0.291
		<20	-0.17	0.815												
		>20	-0.27	0.347												
	<10	<20	0.26	0.368	in a transition	in a transition	0	0.861	CP	CP	0.11	0.852	SF	SF	-0.34	0.027
		>20	0.16	0.778												
		>20	-0.1	0.885												
I focus my concentration on details	<3	<10	-0.57	0.036	public	private	-0.27	0.094	NC	SC	-0.19	0.398	TF	IF	-0.19	0.458
		<20	-0.29	0.506												
		>20	-0.2	0.771												
	<10	<20	0.29	0.432	in a transition	in a transition	0.24	0.109	CP	CP	-0.28	0.26	SF	SF	0	0.806
		>20	0.37	0.128												
		>20	0	0.964												
<20	>20	0	0	0.964	private	in a transition	<b>0.51</b>	0.002	SC	0	0.927	IF	SF	0.28	0.021	

Dependent variable	Work experience		AS1-AS2 (I-J)	"σ" (sigma)	Sector		AS1-AS2 (I-J)	"σ" (sigma)	Possibility of promotion		AS1-AS2 (I-J)	"σ" (sigma)	Changes		AS1-AS2 (I-J)	"σ" (sigma)
	(I)	(J)			(I)	(J)			(I)	(J)			(I)	(J)		
I use humor in communication	<3	<10	0.12	0.985	public	private	-0.31	0.062	NC	SC	0	0.946	TF	IF	-0.58	0.001
		<20	0.22	0.801												
		>20	0.22	0.774												
	<10	<20	0.1	0.981	in a transition	in a transition	0	0.733	CP	CP	0.19	0.643	SF	SF	-0.52	0.004
		>20	0.1	0.977												
		>20	0	1												
I also pay attention to non-verbal speech	<3	<10	-0.62	0.13	public	private	0.29	0.213	NC	SC	-0.24	0.458	TF	IF	-0.38	0.153
		<20	0	1												
		>20	-0.14	0.969												
	<10	<20	0.64	0.025	in a transition	in a transition	0	0.868	CP	CP	0	0.998	SF	SF	-0.22	0.519
		>20	0.48	0.144												
		>20	-0.17	0.856												
I pay attention that non-verbal signals are consistent with the verbal ones	<3	<10	-0.51	0.169	public	private	0.29	0.122	NC	SC	0.22	0.395	TF	IF	0.23	0.378
		<20	-0.22	0.826												
		>20	-0.12	0.973												
	<10	<20	0.29	0.538	in a transition	in a transition	0.21	0.259	CP	CP	0.31	0.271	SF	SF	0.29	0.203
		>20	0.39	0.187												
		>20	0	0.963												
I look straight in the eye	<3	<10	-0.85	0	public	private	0	0.827	NC	SC	-0.22	0.202	TF	IF	0	0.957
		<20	-0.35	0.174												
		>20	-0.26	0.442												
	<10	<20	0.5	0.006	in a transition	in a transition	0.25	0.057	CP	CP	-0.33	0.076	SF	SF	0	0.965
		>20	0.59	0												
		>20	0	0.919												
<20	>20	0	0	private	in a transition	0.32	0.052	SC	CP	-0.11	0.806	IF	SF	0	0.715	

Table 4. The statistical significance of items interconnection

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	ASI-AS2 (I-I) “σ”	0.38 0	0.17 0.01	0.04 0.47	0.13 0.02	0.07 0.22	0.26 0	-0.12 0.04	0.01 0.94	0.03 0.56	0.08 0.2	-0.01 0.92	0.05 0.42	0.03 0.58	-0.01 0.91	0.01 0.92	-0.02 0.79	0.08 0.19	0.158 0.01	-0.01 0.82	0.11 0.06	0.04 0.47	0.176 0	
2	ASI-AS2 (I-I) “σ”		0.27 0	0.05 0.44	0.1 0.1	0.25 0.04	0.12 0.04	0.02 0.79	0.01 0.96	0.09 0.14	0.24 0	0.08 0.36	0.05 0.64	0.03 0.55	-0.04 0.64	-0.18 0	-0.01 0.91	0.07 0.27	0.16 0.01	0.03 0.6	0.07 0.22	0.01 0.07	0.16 0.59	0.16
3	ASI-AS2 (I-I) “σ”			0.06 0.31	0.13 0.03	0.14 0.02	0.22 0	-0.04 0.45	0.15 0.01	0.06 0.3	0.21 0	0.07 0.41	0.05 0.11	-0.1 0.27	-0.07 0.89	0.03 0.63	0.07 0.21	0.08 0.19	0.07 0.27	0.01 0.91	0.11 0.11	0.07 0.23	0.18 0	
4	ASI-AS2 (I-I) “σ”				-0.01 0.91	0.14 0.02	0.03 0.6	0.09 0.14	-0.04 0.53	0.05 0.43	0.05 0.14	0.05 0.93	0.05 0.43	-0.03 0.58	-0.03 0.89	0.01 0.07	0.22 0	-0.11 0.06	0.07 0.27	0.07 0.21	0.22 0	0.08 0.2	0.02 0.72	0.06
5	ASI-AS2 (I-I) “σ”					0.12 0.05	0.02 0.72	0 0.96	0.13 0.01	-0.01 0.3	-0.04 0.05	-0.01 0.05	0.63 0.09	0.09 0.09	-0.03 0.01	0.07 0.07	-0.08 0.07	-0.09 0.09	-0.09 0.07	-0.17 0.22	-0.09 0.08	-0.17 0.02	-0.14 0.02	0.31
6	ASI-AS2 (I-I) “σ”						-0.03 0.59	0.07 0.26	0.26 0	0 0.96	0.05 0.45	-0.02 0.31	-0.03 0.72	-0.01 0.63	-0.05 0.92	-0.03 0.43	0.05 0.68	0.05 0.88	-0.03 0.01	0.21 0	-0.15 0.01	-0.07 0.24	-0.07 0.24	
7	ASI-AS2 (I-I) “σ”								-0.28 0	0.05 0.57	0.03 0.01	0.15 0.38	-0.12 0.04	0.2 0	0.03 0.66	0.083 0.17	0.05 0.39	0.04 0.49	0.24 0	-0.1 0.12	0.06 0.34	-0.01 0.9	0.23 0	
8	ASI-AS2 (I-I) “σ”									0.02 0.75	-0.01 0.87	-0.06 0.3	0.14 0.48	0.14 0.02	0.09 0.12	0.01 0.83	-0.08 0.2	-0.07 0.23	-0.16 0.01	0.04 0.53	-0.01 0.89	0.12 0.05	-0.13 0.03	
9	ASI-AS2 (I-I) “σ”									0.11 0.07	-0.01 0.86	-0.07 0.25	0.08 0.18	0.08 0.2	0.12 0.04	0.14 0.02	0.21 0	0.01 0.83	0.03 0.62	0.21 0.4	0.05 0.62	0.03 0.92	-0.01 0.65	
10	ASI-AS2 (I-I) “σ”									0.24 0	0.08 0.17	0.21 0	-0.09 0.12	0.16 0.01	0.07 0.22	-0.05 0.43	0.37 0	0.28 0	0.01 0.86	-0.04 0.52	0.2 0	0.31 0	0.14 0.02	
11	ASI-AS2 (I-I) “σ”										0.14 0.02	0.16 0.01	-0.19 0	0.01 0.94	0.12 0.05	-0.09 0.13	0.07 0.23	0.03 0.68	0.13 0.04	-0.12 0.05	0.12 0.04	0.23 0.04	0.24 0	
12	ASI-AS2 (I-I) “σ”											0.01 0.94	-0.01 0.92	0.12 0.05	-0.03 0.01	-0.03 0.59	0.05 0.37	0.17 0.01	0.21 0	0.09 0.14	0.19 0	0.05 0.45	0.11 0.06	
13	ASI-AS2 (I-I) “σ”												-0.2 0	0.13 0.03	-0.03 0.62	0.08 0.18	0.12 0.04	0.16 0.01	0.08 0.2	0.13 0.03	0.16 0.04	0.16 0.01	0.18 0	
14	ASI-AS2 (I-I) “σ”													0.89 0.07	0.02 0.07	0.01 0.16	-0.05 0.16	-0.04 0.15	-0.04 0.16	0.02 0.01	-0.03 0.04	0.02 0.01	-0.15 0.01	
15	ASI-AS2 (I-I) “σ”														0.11 0.07	-0.15 0.01	0.15 0.11	0.15 0.06	0.16 0.2	-0.1 0.19	0.12 0.3	0.16 0.24	0.28 0.11	
16	ASI-AS2 (I-I) “σ”															0 0	0.06 0.32	0 0	0 0	0 0	0 0	0 0	0.06 0.31	
17	ASI-AS2 (I-I) “σ”																0.13 0.04	0.08 0.17	0.06 0.29	0.05 0.417	0.14 0.017	0.05 0.43	-0.09 0.14	
18	ASI-AS2 (I-I) “σ”																	0.18 0	0.08 0.16	-0.02 0.757	0.23 0.04	0.21 0	0.26 0	
19	ASI-AS2 (I-I) “σ”																		0.34 0	0.04 0.49	0.37 0	0.21 0	0.25 0	
20	ASI-AS2 (I-I) “σ”																			0.03 0.56	0.3 0	0.29 0	0.31 0	
21	ASI-AS2 (I-I) “σ”																				0.13 0.03	-0.08 0.03	0.01 0.91	
22	ASI-AS2 (I-I) “σ”																					0.48 0	0.37 0	
23	ASI-AS2 (I-I) “σ”																						0.32 0	
24	ASI-AS2 (I-I) “σ”																							

Three hundred and twenty respondents were interviewed, but by the procedures of technical and logical controls in the sample remained 281 respondents, a modest number that does not guarantee stronger correlation.

The results processed showed that the work experience of respondents does not seriously affect the communication of business people. Based on the results obtained (Table 2 and 3), it can be noticed that a statistically significant difference between the respondents with the work experience up to 3 years and others with up to 10 years, as well as the groups with up to 20 and over 20 years of work experience, exists in terms of their straight in eyes looking. Business people with over 10 year work experience look in eyes more frequently than the younger, with less work experience. Also, the respondents with up to three years of work experience more frequently look their interlocutors in eyes. So, it could be said that workpeople with 3 to 10 years of work experience show the least inclination to communication that involves looking into the eyes of his interlocutor. This analysis needs to be refined, because obtained results could be influenced by the fact that this group of respondents was relatively small in comparison to other groups.

The further analytical efforts in the review and processing of the results included the sectoral affiliation of respondents belonging to this pattern. The possible difference between people working in the private and public sectors, as well as those whose organizations are in the midst of transition, were particularly interesting, but here the analysis did not give "sensational" results. There is almost no difference between subjects that work in private sector comparing to those working in the public sector. Statistically significant difference was observed only regarding the tendency of concentrating on the details of communications. This tendency is somewhat stronger for those respondents whose organizations are in the midst of transition. These respondents pay more attention to details than other business people working in the private or public sector.

The logical assumption is that the chances of advancement and their assessment are the generator of motivation and work style, and therefore these data were included in the analysis. There was no expected difference between the answers, and they

were distributed as the normal distribution curve. Small difference was observed (statistically significant difference 0.01) in the tendency of planning of communications. Respondents who have more chances to advance more frequently plan their communications than those who do not have opportunities or those who estimate that their chances for advancement are minimal. This was expected as a tendency in the communication's behavior.

The further analysis of data included tendencies toward a potential fluctuation and impacts of those important trends on business communications. It could be observed statistically significant differences (level 0.01) in those who exhibit symptoms of potential fluctuations, compared to those who have no such symptoms, in terms of using different means of communication and the search for additional information. Respondents who actively seek to change the organization use information resources more than their colleagues who were more satisfied with their current job and organization. The same is in respect to seeking for further clarifications in the communication. These data show a lot about the work which those categories of respondents perform. In a situation of insufficient understanding, the additional questions are frequently asked by those who are happy with their current job and those who passively looking for a new employer.

More feedback is asked by those employees who are satisfied with their workplace compared to those who want to change it.

In this group of data it was found, somewhat unexpected fact, that respondents who are actively searching for new jobs use humor more than others in their communications. The humor is so typical for the category of those with potential fluctuations (statistically significant difference at the level of 0.01).

Other indicators are generally not crossed the threshold of statistical significance of differences on levels 0.005 or 0.001, and those are not taken into account in the analysis and discussion of results. It should be noted that some of the indicators of mutual variation of the dependent and independent variables have shown the connections that point to the empirical generalizations that could, in the case of more numerous samples, certainly exceed statistically significant threshold at a lower

level, or both. These potential correlates are not included in this analysis, but they might be a subject of some of the further analyses.

Further analysis of the data (Table 4) leads to a variable in which respondents have considered that informal communication in their organizations is better than formal, official. This idea, by its distribution, shows of positive correlation with the perception that in organization exist problems of the communication nature, as well as with the use of humor in communication. It is likely that this sub-sample of respondents, who rely on informal communication, shows a tendency towards humor and often comes into contact with people who communicate poorly.

On the other hand, the use of elements of humor in the communication process shows a negative correlation with the fact that some associates have distinct difficulties in communication, as well as with positive correlation with the assessment that they use the same style in their communicating outside the organization.

Statistically significant differences at the 0.01 level of significance exist between the executives and managers in terms of perception of the existence of communication difficulties with other people. (Ristić, Mihailović, Čekerevac, Vatovec Krnac, & Salketić, 2012) Executives believe that their colleagues and co-workers in the organization show such difficulties more often, while managers perceive these difficulties in lesser scope.

## Conclusion

Processing and analysis of data was performed by comparing the statistical significance of independent (9) and dependent variables (38). From numerous data it is visible, and statistically significant, positive correlation between the finding that an integral part of the job, on which respondents work, make their communication with colleagues and associates and use of different communication means. A similar positive relationship is noticeable in cases of mutual variation of this variable and the variables: pre-planning of messages, a priority of communication skills as factor in the occupational choice, and so-called skills of active listening (for instance, looking at the interlocutor's eyes while he speaks).

Using of different forms of communication is associated with a positive correlative relationship with a pre-planning of messages, reactions at the right time, as well as with additional explanations seeking. It should mean that business people that, in their jobs, more frequently than others use phone, fax, Internet, etc., more often pre-plan their messages and seek additional explanations when they find that messages they receive from others are not clear enough. The same variable shows a negative correlation with the assessment that the organization has people with distinct problems in communication. This could mean that people who communicate using different technologies, it make mostly with those who have no problems in communications.

Planning of business messages that business people, covered by the observed pattern, send shows as a positive correlate with the assessment of communication skills as a priority in choosing a profession. At the same time, it also correlates with the requirements for additional explanations and efforts to actively listen to the interlocutor. This could be explained by a tendency that people who plan their own messages, ask more precision and systematization of their interlocutors and seek to listen actively their interlocutors. It is basically a common syndrome.

Although correlations are not "strong", the information obtained by comprehensive statistical processing has confirmed the expectations in terms of correlations. Scarcity of obtained correlations in terms of the proof of their statistical significance depends not only on the sample scope, but also on the sparse answers in the corpus of dependent variables.

Despite the scarcity of results, except in the case of the hypothesis that respondents having different chances with regard to promotion are different among themselves in terms of their tendency to plan a communication, the individual hypotheses have been confirmed by the results of research. Individual characteristics of business people and other factors discussed have proved to be significant correlations (positive or negative) in the manner of their communication in terms of the quality and effectiveness of communication established.

Based on the statistically verified hypotheses of the specific general level, it may be concluded

that the obtained results confirm the general hypothesis: "Personal characteristics of workpeople, their workplace and their status impact the way of their communication with colleagues and managers." Thereby the objective of entire research was successfully fulfilled.

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