Measuring communication style: construction, factor structure and psychometric properties of the scale

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Abstract: The aim of this study is to present the construction of a communication style scale based on the description of the main behaviours displayed during social interacion.The study is based on an existing lexical approach model that discovered seven key communication dimensions (De Vries, Bakker-Piepper, Siberg, Van Gameren, & Vlug, 2009). These dimensions were translated into Romanian and verified through a pilot study in which psychology students (N=75) were given two papers containing (1) definitions of these seven dimensions and (2) adjectives and verbs translated into the Romanian language. The students were asked to match the adjectives and verbs with the seven communication style definitions. The results were submitted to a frequency analysis: the words with a frequency of appearance above seven were selected and introduced in items. These items were verified in two stages (1): Study 2 in which psychology students (N=98) completed the self-report questionnaire and (2) Study 3 in which psychology students (N=113) completed the revised form of the questionnaire. Exploratory Factor Analysis and Internal Consistence Analysis revealed for study 2, six dimensions with an internal consistence greater than .70 and for study 3, five dimensions with an internal consistence greater than .70.

***Key words*:** communications styles, adjectives, verbs, communication styles dimensions

Introduction

There are many ways in which interpersonal communication can be defined. Some scholars have defined interpersonal communication based on the situation and number of participants involved (e.g. Miller, 1978). This definition refers to the interaction between two individuals which are in proximity and are able to provide immediate feedback and utilize multiple senses.

Trenholm and Jensen (2008) defined interpersonal communication as a dyadic communication in which two individuals share roles such as: (1) sender and (2) receiver and who remain connected through the mutual activity of creating meaning.

„Interpersonal communication is a distinct form of human communication that... is defined not just by the number of people who communicate, but also by the quality of the communication. Interpersonal communication occurs not when you simply interact with someone, but when you treat the other as a unique human being " (Bebee, Beebe, & Redmond, 2002, p.6).

„Interpersonal communication refers to the exchange of messages, verbal and nonverbal, between people, regardless of the relationship they share...Thus, interpersonal communication includes the exchange of messages in all sorts of

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relationships, ranging from functional to causal to intimate" (Guerrero, Andersen, & Afifi, 2007, p.11).

For Canary, Code and Manusov (2003) interpersonal communication is used in order to reach personal goals through social interaction.

These definitions all represent interpersonal communication as involving some form of mutual activity, interaction, or exchange, but they also differ significantly. For Bebee et al. (2002), intepersonal communication occurs in close relationships, for Guerrero et al. (2007) interpersonal communication is any exchange of messages between people, for Canary et al. is a way for reaching personal goals. Communication literature disposes a multitude of studies presenting communication styles models (DeBakey's Adaptive Matrice, 2007; Mitchel's and Winick's Colour Model, 2006; De Vries et al. (2009) but this article will present just three of them from which De Vries et al.'s (2009) model will represent the basic model for our scale construction.

Existing Communication Styles Scales

Scholars interested in studying communication styles may face some difficulties when they have to choose an instrument able to measure communication style from a personality point of view and that is because literature disposes little on scales which can reduce the communication style of a person to his/her basis personality traits (De Vries et al. 2009).

Literature presents a great deal of general communication scales (Burgoon & Hale, 1987; Gudykunst et al., 1996; Norton, 1983) but none of them refers to communication style from the point of view of personality traits of the speaker. There are also communication scales referring to: (1) contextual communication scale such as those used to measure married or dating couples communication styles (Christensen, 1988; Noller&White, 1990); (2) parent-child interactions (Hawes, 1996; Ritchie & Fitzpatrick, 1990);(3) doctor-patient counseling (Kettunen, Poskiparta, & Liimatainen, 2000; Yedidia, Gillespie, & Kachur, 2003); (4) sales talk scales (Castleberry & Shepherd, 1993; Notarantonio & Cohen, 1990); (5) police interogation scales (Myklebust & Alison, 2000); (6) job interviews scales (Bolino & Turnley, 1999); (7) „*Functional assessment of communication skills for Adults"* scale (*FACS;,* Frattali, Thompson, Holland, Wohl, & Ferketic, 1995); (7) a general communication scale which reduces a person's communication style to his/her basis personality traits (De Vries et al., 2009).

Communication Styles Models

The current state of communication styles research is comparable to that in personality research before the advent of the so-called Big Five personality factors (Digman, 1990; Goldberg, 1990) or Five Factor Model (McRae & Costa, 1987),

which transformed research by creating consensus about the nature and number of personality dimensions (De Vries et al., 2009).

Researchers in communication styles realized the lack of an integrative communication model. To date, literature presents various communication models (Mitchel & Winick, 2006; DeBakey, 2007) but none of them managed to reduce a person's communication style to his/her basis personality traits.

Mitchel and Winick (2006) proposed a communication styles model based on three specific dimensions: (1) the way one proposes the discussion theme; (2) the time needed for decision making; (3) the final decision path. From the intersection of these three dimensions four resulted in different communication styles, metaphoricly named by the author as: *red style, green style, yellow style* and *blue style communication.*

Red communication style describes the person who: directly approaches others, first discusses the outcomes, gives concise solutions, makes immediatly decisions, and who needs visible outcomes and benefits.

Green communication style describes the person who: directly approaches others but prefer group discussions; he/she gives particular importance to discussions of the new ideas promoted in a group; a person known as a good listener, who only makes decisions if the theme of discussion is interesting.

Yellow communication style describes the person who: prefers written communication, discusses the outcomes, the type of person who is looking forward for the new questions about the theme's topic, emphasizes the need for time when reviewing information and who analyses all the details before making a decision.

Blue communication style describes a person for whom it is important to first know the others to ensure the interpersonal communication efficiency, who emphasizes on (1) the importance of interpersonal relations, (2) personalized communications benefits, and (3) interpersonal commitment, long-term benefits and future team work. This person makes decisions with caution, he/she needs to first gain trust in others.

DeBakey's (2007) Adaptative Matrice Model identifies four communication styles resulted from the intersection of the dimensions assertiveness and expressiveness: *analitic communication style, emphatic communication style, socializer communication style and authoritative communication style.*

The Need of an Integrative Communication Styles Model

„Communication scholars have lamented about the lack of integration in communication style studies" (McCroskey, Daly, Martin, & Beatty, 1998). Daly and Bippus (1998), for instance, questioned whether „communication scholars [might] discover an integrative framework for the panoply of variables currently studied" (p.4), and Beatty (1998) stated that „studies designed to reduce the overall number of measures to the basic communicator traits should be given high priority"

(p.312, apud. De Vries et al. 2009, p.179). De Vries et al. (2009) through their study heed the call of these communication scholars by using a similar approach to the one that led to the Big Five personality dimensions in personality research. Using the lexical approach the authors were interested in identifying the content and the dimensionality of communication styles. They started the research by using the following operational definition : *communication style is the characteristic way a person sends verbal ,paraverbal, and nonverbal signals in social interactions denoting (a) who he/she is or wants to (appear to) be, (b) how they tend to relate to people with whom they interact, and (c) in what way their messages should usually be interpreted.*

It can be noticed that this definition focuses explicitly on interpersonal communication behavior; it excludes intrapersonal communication behaviors such as: (1) purely cognitive interpretations of people's utterances and (2) internal affective states as a reaction to these utterances (De Vries et al., 2009).

The definition provided earlier excludes the dimensions style contained by the Gudykunst's (1996) scale such as: (1) Inferring Meaning and (2) Use of Feelings, dimensions which contains items reflecting on the one hand, cognitive interpretations and on the other hand, affective interpretations.

De Vries et al. (2009) wanted to discover the structure and key dimensions of communication styles using a lexical study approach, exploring the words people use when they have to describe another person's communication style. Under this aim, the authors structured the present study in three phases: (1) a lexical phase in which authors examined the words existing in a dictionary as well as words that can describe a person's communication style. In this phase, De Vries et al. (2009) limited their study to "an analysis of adjectives and verbs that describes rather than evaluates communication behaviors" (p.182); (2) in the second phase, both verbs and adjectives were scored by a panel of raters on the extent to which these words conveyed clear images of communication styles; (3) self-ratings were obtained on all of the communication style adjectives and verbs selected in the previous phases.

The results of these three phases consisted in seven key dimensions of communication style which formed the acronym PRESENT, for Preciseness, Reflectiveness Expressiveness, Supportiveness, Emotionality, Niceness and Tolerance (PRESENT Communication Style Model, De Vries et al. 2009).

This model is the basic model for the construction of the present communication style assessment scale and that is because (1) it focuses only on the interpersonal communication behaviors excluding cognitive interpretations of the feelings experimented during social interaction and (2) studies an individual's communication style from a personality framework (i.e. one can say something about someone else's personality characteristics on the basis of his/her communication style).

De Vries, De Ridder and Van den Hoof (2006) showed the importance of communication styles in groups, where shared information and knowledge are vital for the final mission of the group. The author realized (1) how important shared information is within organizations and (2) how important the implication of all the members in this process is (O' Dell & Grayson, 1998; Osterloh & Frey, 2000). Also, they presented a communication model which explains how agreeable and expressive communication styles can predict sharing information behaviors within team work.

This study led to another one made in collaboration with De Vries et al. 2009 in which the authors were interested in investigating the structure and key dimensions of communication styles so that one can know, not only his own communication style, but also another's communication style in order to increase collaboration through an efficient communication style.

Aim of this article

The aim of the present article was to present the construction of a communication style assessment scale based on a theoretical model which exists in literature (PRESENT Model, De Vries et al., 2009). We used this model because it eliminates intrapersonal communication behaviors such as cognitive interpretation within the affective states experienced during a social interaction.

The research question was if this model is suitable for the Romanian population.

The model was translated into Romanian. All the adjectives and verbs were translated into the Romanian language with the addition of an English-Romanian dictionary. After the word translation, the most representative (i.e. most used words in the Romanian language) adjectives and verbs were integrated into items. The first version of the questionnaire was pre-tested. An Exploratory Factor Analysis revealed seven dimensions of communication styles. For each dimension, internal consistence coefficients were calculated. The results showed six dimensions with a cronbach's alpha greater than .70.

Studies
Study 1- Preliminary Study: Pre-testing the model on the Romanian population

Method
Procedure and Sample

Seventy-five psychology students were given two different tasks on two different papers: (1) they received the definitions of the seven style communication and (2) they received a list of verbs and adjectives. Their task was to match the seven definitions with the verbs and adjectives that best describes these definitions.

Statistics

After a frequency analysis we retained only the verbs and adjectives with a frecquency of appearance greater than seven. This value was obtained by taking the total of the lowest appearance frequency value with its highest value and dividing it by two.

Results

All the verbs and adjectives with a frequency of appearance of seven or higher, for a specific dimension, were selected and integrated into items. These items were the items of a first version of the communication styles questionnaire. This questionnaire had 108 items grouped in seven dimensions.

This form was sent via e-mail to 150 psychology students. From this number, only 98 returned the completed questionnaires.

Study 2: Verification of psychometric properties of the first version of the questionnaire

Method

Procedure and Sample

Ninety-eight psychology students from Alexandru Ioan Cuza University Iași, whose ages range from 18 to 30 years (M=24.23 SD=10.21), completed the first version of the questionnaire (108 items). They were told to complete the questionnaire by marking the answer which best describes their communicating style.

Statistics (Exploratory Factor Analysis and Cronbach's Alpha)

After the data collection we proceeded to data analysis using SPSS 17. There were employed two statistical analysis such as: Cronbach's Alpha Coefficient and Exploratory Factor Analysis.
First, we proceeded to an Exploratory Factor Analysis to verify the factor structure. To see if there are seven dimensions as we assumed based on the theory (PRESENT Model, De Vries et al. 2009) we used Exploratory Factors Analysis - this analysis revealed six main factors and a secondary factor who corresponded, based on the content (e.g. the items loaded in the factor) to expressiveness dimension. Secondly, for these dimensions the alpha cronbach's coefficients were calcultated.
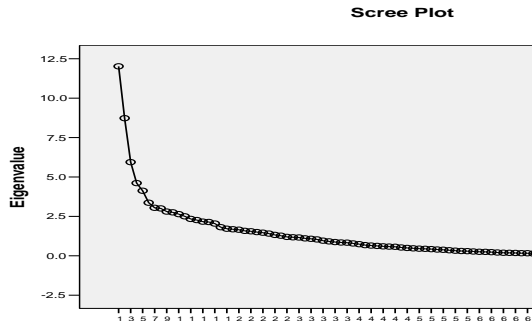
Results
Exploratory Factor Analysis

The factors were rotated with a rotation convergence of 25 rotations, rotation method: Varimax with Kaiser Normalization

The results showed six main factors with loadings greater than 1. Items loading for each factor were greater than .30. These factors explained 35.5% of total variance.
Graph 1. Cattel's Criterium

Scree Plot

Graph 1. As one can see in this graph, there are six factors with an Eigenvalue greater than 1.

We proceeded to a content analysis to see if the content of these factors corresponded to those extracted from the theory (PRESENT Model, Vlug et al. 2009). Items thought to load a specific factor, based on the theory, were discovered to be the same after the Exploratory Factor Analysis. Only one factor hadn't been discovered (i.e. expressiveness factor). For each of these six factors the alpha cronbach's coefficients were calculated. Only two factors had a cronbach's alpha coefficient greater than .70 (i.e. emotionality with .725 and aggressiveness with .724).

Reliability (Cronbach's Alpha Coefficients)
Tabel 1. Cronbach's Alpha coefficients for each dimension

Dimension	Alpha Cronbach	Number of Items
Expressiveness	**.133**	17
Niceness	**.560**	11
Emotionality	**.725**	18
Aggressiveness	**.724**	13
Supportiveness	**.524**	13
Preciseness	**.544**	13
Reflectiveness	**.345**	13

For the expressiveness dimension, there are 17 items but the cronbach's alpha coefficient is only .133. This dimension will be revised and tested in study 3: (1) some items will be eliminated and (2) some items will be modified. Also those items which in the correlation matrix were correlated lower than .40 will be eliminated in study 3.

Cronbach's Alpha Coefficient for niceness is .506 and if the item „*I'm warning even the smallest mistake!*" is eliminated, the cronbach's alpha value increases up to .616.

For aggressiveness cronbach's alpha value is .724 and if the item „*I'm shouting at the persons who doesn`t say something concrete*" is eliminated, the alpha cronbach's value increases up to .730.

Cronbach's Alpha for emotionality dimension is .725 and if the item ‚*When I'm upset I'm speaking without thinking`* is eliminated, the cronbach's alpha coefficient increases up to .730.

Cronbach's Alpha for preciseness is .544 and if the item „*Usually my speeches are schematic*" is eliminated, the value increases up to.566.

For the supportiveness dimension, the cronbach's alpha coefficient is .534 and if the item „*Often I'm encouraging others through my words*" is eliminated, the cronbach's alpha value increases up to .549.

For reflectiveness, the cronbach's alpha is .345 and if the item „ *I happened to look ridiculous as a result of my speech*" is eliminated, the value reaches .40.

Discussion

Based on these results: (1) only two factors with the apha cronbach coefficients greater than .70 and (2) only six factors revealed from seven as they were thought based on the theory (PRESENT Model, De Vries et al. 2009) , we thought that a new testing of a revised form of the questionnaire would be necessary.

We revised the questionnaire: (1) some items were deleted, (2) a portion were modified and (3) others loaded other factors. The revised form of the questionnaire has only 61 items grouped on seven factors.

Study 3: Verification of psychometric properties of the revised questionnaire

Method
Procedure and sample

In this study, psychology students (N= 113; 87- female and 26 male persons) from Alexandru Ioan Cuza University Iaşi completed the revised questionnaire (61 items). Their age ranked from 21 to 40 years (M=30.53; SD=11.21). They were asked to complete the questionnaire marking the answer which best describes their usual style of communication.

Statistics (Exploratory Factor Analysis and Cronbach's Alpha)

After the data collection we proceeded to data analysis using SPSS 17. Also, two statistical analysis such as: Cronbach's Alpha Coefficient and Exploratory Factor Analysis were employed. First, we proceeded to an Exploratory Factor Analysis to

verify the factor structure and to see if there were seven dimensions as we assumed based on the theory. Secondly, for these dimensions cronbach's alpha coefficients were calculated.

Results

Exploratory Factor Analysis

This time the factors were rotated with a rotation convergence of 125 rotations, rotation method: Varimax with Kaiser Normalization. The Exploratory Factor Analysis revealed five main factors and a secondary factor with an Eigenvalue greater than 1. This model explains 35.11% of the total variance. All items loaded the six factors with a correlation greater than .40.

Graph 2. Cattel's Criterium
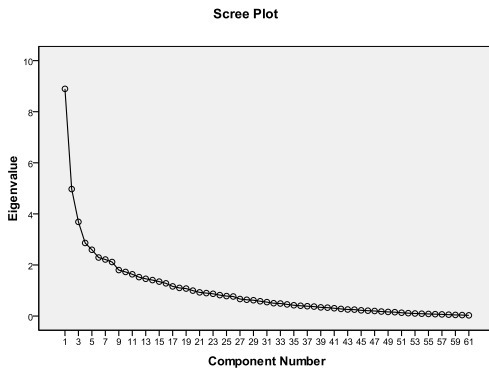
Graph 1. As one can see in this graph, there are five factors with an Eigenvalue greater than 1

Also we made a content analysis to verify the potential correspondence between the factors extracted from the theory (PRESENT Model, De Vries et al. 2009) and those revealed by the Exploratory Factor Analysis. Again, there were absent correspondence between expressiveness, factor extracted from the theory, and the one revealed by the Exploratory Factor Analysis. For the others we calculated cronbach's alpha coefficients.

Reliability
Tabel 2. Cronbach's Alpha Coefficients for each dimension

Dimension	Alpha Cronbach	Număr Itemi
Expressiveness	**.155**	8
Niceness	**.711**	8
Emotionality	**.566**	10
Aggressiveness	**.751**	11
Preciseness	**.626**	6
Supportiveness	**.755**	10
Reflectiveness	**.506**	8

There are three factors with cronbach's alpha coefficients greater than .70, namely: niceness with **.711**, threateningness with **.751** and supportiveness with **.755**.

One factor (i.e. preciseness) with cronbach's alpha with .626 and if the item „*I express my ideas in an concise manner*" is eliminated, the value increases up to .**740**.

For an emotionality factor, cronbach's alpha coefficient is .566 but if the item „*No matter the situation I calmly express my ideas*" is eliminated, the value increases reaching .**694**. This value is acceptable.

For reflectiveness cronbach's alpha is .506 but if the item „*I often reflect a lot on my recently exposed ideas*" is eliminated, the value increases up to .**538**. This value is lower than .7 but it is considered as a good one.

The expressiveness dimension, once again, has the lowest cronbach's alpha coefficient (.155). Even though major changes were made for this factor we couldn't obtain a good cronbach's alpha coefficient. Some changes should be employed beginning with its definition. We have to revise the theoretic model and pre-test the entire dimension.

Table 3. *Factor Loadings for Exploratory Factor Analysis with the Varimax Rotation of Communication Dimensions*

Factor	Number of Item	Item wording	Factor loadings
Expressiveness	1.	Generally I successfully manage to argue my ideas.	.522
	2.	I rarely stutter.	.199
	3.	No matter the situation, I always have something to say.	.391
	4.	I'm a direct person.	.146
	5.	I only speak if the situation calls for this.	.219
	6.	I prefer to keep my opinions to myself.	.426
	7.	I express myself through jokes.	.275
	8.	I tend to be quiet even if something bothers me.	.219
Niceness			
	54.	I like to give others useful information.	.506
	55.	By what I'm saying I make a good impression.	.575
	56.	Others listen with pleasure to what I'm saying.	.476
	57.	Usually I welcome others with positive words.	.611
	58.	Usually I don't interrupt others by speaking.	.482
	59.	When I'm asked I give practical advice.	.500
	60.	I listen and give explanations whenever is necessary.	.603
Preciseness			
	48.	Usually my speeches are well understood.	.490
	49.	In a conversation I present my ideas in a schematic way.	.595
	50.	In discussions I give clear examples.	.472
	51.	Most of the time I know exactly what I have to say.	.354
	52.	I clearly express my point of view.	.488
	53.	My ideas are generally well organized.	.468
Supportiveness			
	38.	Often, through what I'm saying I help others.	.600
	39.	Through my questions I support others' points of view.	.511
	40.	I take into consideration an opinion even if I don't entirely agree with it	.500
	41.	Usually I find it hard to tolerate other people's ideas.	.544
	42.	The only one who is right in a conversation is me.	.591
	43.	In general, I appreciate the ideas of others.	.585
	44.	I warn even the smallest mistake.	.380
	45.	I find it difficult to accept the ideas of others.	.555
	46.	By what I'm saying I'm always prepared to argue with others.	.563

Table 3. *Factor Loadings for Exploratory Factor Analysis with Varimax Rotation of Communication Dimensions (continued)*

Factor	Number of item	Item wording	Factor loadings
Emotionality	28.	I get easily angred when I'm contradicted.	.432
	29.	In discussions I tend to vent my anger upon others.	.360
	30.	When I'm upset I say everything that comes to my mind.	.373
	31.	I become easily irritated when someone's speech is rambling.	.534
	32.	I get easily discouraged if people don't agree with what I'm saying.	.438
	33.	I get nervous when I have to talk to strangers.	.531
	34.	When I'm in a contradictory debate I get easily alarmed.	.432
	35.	I tend to exaggerate things.	.264
	36.	No matter what the situation is, I calmly expose my ideas.	.423
	37.	Through my speeches I'm able to transmit my dissatisfaction.	.590
	17.	I usually remind others their mistakes.	.517
	18.	In discussions I give orders to others.	.435
	19.	I shout at the person who doesn't say something concrete.	.369
Aggressiveness	20.	In contradictory discussions I do my best to have the last word.	.296
	21.	I usually intimidate others by what I'm saying.	.395
	22.	I rush into drawing conclusions.	.390
	23.	I often offend others when something goes wrong.	.608
	24.	When something goes wrong I have the tendency to blame others.	.532
	25.	I bring all kinds of arguments only to contradict others.	.429
	26.	I tend to say everything it comes to my mind without feeling sorry.	.413
	27.	I often speak over others.	.678
	9.	Generally I think twice before I make my opinion public.	.412
	10.	Generally my ideas capture the deepest details of the situation from the question.	.424 .523
	11.	When I talk I give great importance to the details.	.531
	12.	I deeply analyze the message I transmit to others.	.574
	13.	I rarely give my opinion without considering all the details of the situation.	.381
Reflectiveness	14.	Often I find myself still reflecting on the idea I've just presented.	.138
	15.	I often reflect a great deal on my recently exposed ideas.	
	16.	Generally I say what comes to my mind.	.520

*The original items are in romanian. These items can be found in the appendix.
*Only for scientific use.

Factors Significance

1. *Aggressiveness*- refers to a person who usually rases her/his voice when they speak, who is verbally aggressive, who often interrupts others and who doesn't let others speek. This style may be described through: frequent interruptions, harsh words addressed to others, verbal attacks and also offensive words.

2. *Niceness* refers to a person who usually is available to give information to others, who enjoy making others feel comfortable with the interaction

situation and who is always in a good mood for talking. This person can be characterized as: willing to give useful information, who listens very carefully to what others have to say, who comforts others with pleasant words, and who avoids conflict situations.

3. *Emotionality* refers to a person who usually transmits a wide range of emotions when he/she communicates, who is easily alarmed, who rushes into drawing hasty conclusions based on their emotions, who can not hold a conversation because of their emotions. This type of person is seen as an emotional person.

4. *Reflectiveness* refers to a person who usually thinks twice before she speaks, they take into consideration all the details before coming up with an opinion about a particular subject, that person is analytical and their opinions may be characterized by profoundness.

5. *Preciseness* refers to a person who knows exactly what to obtain from a situation, who marks all the important information, who has good skills in asking questions so that he/she gets the information they need and that person sustains their opinions in any situation.

6. *Supportiveness* refers to a person who accepts others ideas whether or not they agree with them, who doesn't interrupts others when they speak, who supports the view of others and who takes into consideration the ideas of others when they need to make a decision.

7. *Expressiveness* refers to a person who is very demonstrative, who can hide their facial expressions and emotions when they speak, that person who says everything they think in a specific moment, who is fluent and who uses a number of metaphoric words to express their opinions.

Discussion

The revised questionnaire is formed from 51 items structured on six dimensions: aggressiveness with 11 items (i.e. from item 9 inclusive to item 19 inclusive), emotionality with nine items (i.e. from item 20 inclusive to item 28 inclusive), preciseness with five items (i.e. from item 38 inclusive to item 42 inclusive), niceness with nine items (i.e. from item 43 inclusive to item 51 inclusive), tolerance with nine items (from item 29 inclusive to item 37 inclusive), and reflectiveness with eight items (i.e. from item 1 to item 8, with item 8 inversed). These items are measured on a five-point Likert scale in which: 1-never, 2-rare, 3-neither rare, nor often, 4-often, 5-usually and their original form (i.e. Romanian form) is presented in the appendix.

A factor represents, in fact, a dimension which in its turn represents a communication style. One person can have one or more than one communication styles depending on the score obtained for each dimension.

A score for a specific dimension can be obtained through summing all the answers given on the five point likert scale and dividing it by the number of items existing in the dimension.

A score greater than 4, for a specific dimension, means that the person has a dominant communication style (i.e. if a person has a score of 4 or of 5 on the niceness dimension, we can say that their dominant communication style is niceness).

Also one person can have one or two communication styles preferred: a dominant one (with a score greater than 4) and a secondary one (i.e. scores betwen 3 and 4). For example, a person obtains 5 on the reflectiveness dimension and 3 on supportiveness. This person can be characterized as having a dominant reflectiveness communication style and a secondary one (i.e. supportiveness style). This person is used to think twice before they let their ideas to be known (characteristic for a reflectiveness style) and also take into considerations the ideas with which they do not entirely agree with (characteristic for a supportiveness style). Those who obtain a score between 1 and 2 for a specific dimension, their communication style (dominant or preferred) is not characterized through that communication style (e.g. if a person obtains a score of 2 on threateningness scale this person can't be characterised as having neither a predominant threateningness style nor a secondary threteningness style).

This instrument is able to evaluate a person's communication style through a personality framework (i.e. you can describe a person's personality traits on the basis of their communication style) This instrument is supported by a theoretical Dutch model (PRESENT Model, De Vries et al. 2009) who did empirical testing through the Exploratory Factor Analysis on the Romanian population. Our results are convergent with those obtained by De Vries et al. (2009) but just for five out of seven dimensions. Just five dimensions had Cronbach's alpha greater than .70.

The results revealed five from seven dimensions with Cronbach's Alpha greater than .70. These dimensions are: aggressiveness (.751), preciseness (.740), niceness (.711), supportiveness (.755) and emotionality (.694).

After systematic changes, the reflectiveness dimension reached the highest level of cronbach's alpha coefficient of .536. This value may be considered to be an acceptable one taking into consideration the fact that initially the responses were given on a dichotomic scale. It is known that when a response is given on a dichotomic scale its cronbach's alpha value is at its lowest compared to the situation when a response is given on a five-point Likert scale. Taking into consideration this aspect a value of .536 is considered to be an acceptable one.

Even if there were two stages on which the instrument (the initial one and also the revised one) was tested, the expressiveness dimension didn't have a cronbach's

alpha coefficient greater than .155. This low value may be explained through the process of translation of the PRESENT Model (De Vries et al., 2009) and through the process of defining its operational definition. This dimension needs to be revised entirely.

Limits and Future Research

Limits

The limits of the present study are in the way items were constructed. We said that we integrated verbs and adjectives in items but in the majority of the cases we transformed the items so that the meaning remained the same without introducing the word (adjective or verb). This procedure probably affected exploratory factor analysis results.

A second limit refers to the conditions of application of exploratory factor analysis: these statistics are applied when there are a minimum of 150 participants who responded to the questionnaire. As noticed in both studies, there were only 98 respectively, and 113 completed questionnaires.

A third limit refers to the way responses were given: in this case the responses were given on a dichotomic scale: yes or no responses for the first version. A suitable analysis for this case is te Exploratory Factor Analysis on groups of items so that the responses could be considered on a five-point Likert scale.

Future research

As a future research we intend to test this instrument with the one obtained by Gudykunst et al. (1996) in order to verify its convergent validity.

Also we will test this instrument in different contexts (1) a test- retest validity to see if over time a person's communication style remains the same. Testing students communication style at the beginning of the university year and testing their communication style at the end of the university year.

A third context refers to working contexts: to see if this instrument can predict job performance through knowledge sharing. Can some communication styles better predict job performance? In other words, which communication styles are most related with job performance?

This instrument presents a high importance in working contexts such as : (1) recruiting and selection contexts, (2) evaluating job performance where communication appears to be an important criteria of evaluation and (3) any working group in working or academic context.

Acknowledgement

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Appendix - Original Communication Scale
Chestionar SIC

Gândindu-vă la modul obisnuit in care dumneavoastră comunicati zilnic, vă rugăm să citiţi lista de comportamente şi atitudini de mai jos şi să precizaţi în ce măsură acestea sunt adevărate sau false pentrru dumneavoastră.

Vă rugăm să încercuiţi sau să marcaţi cu un „X" răspunsul care se potriveşte cel mai bine cu felul dumneavoastră de a fi sau cu modul în care transmiteti o informatie, de obicei.

1- Niciodata; 2-rar; 3-nici rar, nici des; 4-des; 5- foarte des

Nu există răspunsuri bune sau rele, ci doar opinii, puncte de vedere diferite!

1. În general, zicala "Gândeşte de 2 ori şi spune o dată", mi se potriveşte.	1...2....3....4.....5
2. De obicei, ideile mele surprind cele mai profunde detalii ale situaţiei din discuţie.	1...2....3....4.....5
3. Atunci când vorbesc acord mare importanţă detaliilor.	1...2...3....4.....5
4. Analizez foarte bine mesajul pe care trebuie să îl transmit celorlalţi	1...2...3....4.....5
5. Când discut, îmi place să desfac firul în patru.	1...2...3....4.....5
6. Rar îmi dau cu părerea fără a ţine cont de toate aspectele problemei.	1...2...3....4.....5
7. Deseori mă surprind încă reflectând la ideea pe care tocmai am prezentat-o.	1...2...3....4.....5
8. În general, spun tot ce îmi trece prin cap.	1...2...3....4.....5
9. Obişnuiesc să "scot ochii" celorlalţi.	1...2...3....4.....5
10. În discuţii mă impun dând ordine celorlalţi.	1...2...3....4.....5
11. De regulă, ridic tonul la persoanele care divaghează de la subiect.	1...2...3....4.....5
12. În discuţii contradictorii fac tot posibilul să am ultimul cuvânt.	1...2...3....4.....5
13. De regulă intimidez pe cei din jur prin replicile pe care le dau.	1...2...3....4.....5
14. Deseori mă pripesc să trag concluzii în discuţiile pe care le port.	1...2...3....4.....5
15. Deseori jignesc persoanele atunci când nu îmi convine ceva.	1...2...3....4.....5
16. Mi se întamplă "să-i înţep" pe cei din jur când ceva nu îmi convine.	1...2...3....4.....5
17. Aduc tot felul de argumente doar pentru a contrazice pe cineva.	1...2...3....4.....5
18. Am tendinţa de a spune totul în faţă fără să am remuşcări.	1...2...3....4.....5
19. Intervin des atunci când cineva vorbeşte	1...2...3....4.....5
20. Mă supăr uşor atunci când sunt contrazis(ă).	1...2...3....4.....5
21. În discuţii am tendinţa de a-mi descărca nervii pe cei din jur.	1...2...3....4.....5
22. Când sunt supărat(ă) spun tot ce îmi trece prin cap.	1...2...3....4.....5
23. Devin uşor iritat(ă) când discuţia divaghează.	1...2...3....4.....5
24. Mă descurajez uşor dacă nu sunt susţinut(ă) în ceea ce spun.	1...2...3....4.....5
25. Devin agitat(ă) când trebuie să intru în discuţii cu persoane necunoscute.	1...2...3....4.....5
26. Într-o discuţie contradictorie mă alarmez uşor.	1...2...3....4.....5
27. Mi se întâmplă să fac "din 'ţânţar-armăsar".	1...2...3....4.....5

28. În conversaţiile pe care le port transmit o stare de nemulţumire.	1...2...3....4....5
29. Adeseori, prin ceea ce spun, sprijin pe cei din jur.	1...2...3....4....5
30. Prin întrebările mele susţin părerile celorlalte persoane.	1...2...3....4....5
31. Iau în considerare o opinie deşi nu sunt în totalitate de acord cu ea.	1...2...3....4....5
32. De regulă, îmi este greu să tolerez ideile celorlalţi.	1...2...3....4....5
33. Singurul care are dreptate într-o conversaţie, sunt eu.	1...2...3....4....5
34. În general, apreciez ideile celor din jur.	1...2...3....4....5
35. De cele mai multe ori, atenţionez şi cea mai mică greşeală.	1...2...3....4....5
36. Adopt greu ideile celor din jur.	1...2...3....4....5
37. Prin ceea ce spun sunt mereu pus pe ceartă.	1...2...3....4....5
38. Nu îmi place "să bat câmpii fără rost".	1...2...3....4....5
39. Atunci când vorbesc, mă fac bine înţeles.	1...2...3....4....5
40. Într-o discuţie dau exemple convingătoare.	1...2...3....4....5
41. De cele mai multe ori, ştiu exact ce vreau să spun.	1...2...3....4....5
42. De regulă, îmi expun clar punctul de vedere.	1...2...3....4....5
43. În general, ideile mele sunt bine organizate.	1...2...3....4....5
44. Îmi place să ofer informaţii utile celorlalţi	1...2...3....4....5
45. Prin ceea ce zic, reuşesc să mă fac plăcut celor din jur.	1...2...3....4....5
46. Ceilalţi ascultă cu plăcere ceea ce spun.	1...2...3....4....5
47. Obişnuiesc să întâmpin persoanele cu vorbe bune.	1...2...3....4....5
48. De regulă, nu intru în vorbă peste ceilalţi	1...2...3....4....5
49. Când sunt solicitat(ă) ofer sfaturi practice.	1...2...3....4....5
50. Ascult şi dau explicaţii ori de cate ori este nevoie.	1...2...3....4....5
51. Îmi place să înveselesc pe cei din jur.	1...2...3....4....5