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PERCEIVED IMPORTANCE OF COMMUNICATION SKILLS AND THEIR PREDICTIVE VALUE FOR ACADEMIC PERFORMANCE

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Perceived Importance of Communication Skills and their Predictive Value for Academic Performance

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Abstract

Communication has always been one of the relevant variables influencing the teaching-learning process. The objectives of the current study were (1) to identify those communication skills that students consider to be most important for the teaching activity, (2) to highlight the relationships that exist between students' perceived interpersonal communication competence, the degree to which they are involved in interpersonal interactions with the teachers and their willingness to communicate, as well as to capture all of these variables' predictive value for the students' academic performance. 90 first-year students (mean age 21.89, SD=5.20) have filled out the following questionnaires: Interpersonal Communication Competence Scale, Communication Functions Questionnaire, Interaction Involvement Scale and Willingness to Communicate Scale. The average grade of promotion obtained at the end of the first semester finals was also taken into consideration. Results have indicated that referential and conversational communication skills are considered to be the most significant for the teaching activity and that there are significant links between academic performance and students' degree of involvement in interpersonal interactions with their teachers. The regression model has shown that the teacher's use of regulatory and referential communication skills explains a significant amount of the variance in the academic performance, the students' interaction involvement with their teachers providing a further explanation for the performance achieved by students.

Keywords: teacher-student relationship, communication skills, interpersonal communication, academic performance.

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Introduction

In an educational context, teachers and students share the same objective – learning, and each needs the other in order to achieve this objective. Among the variables impacting the process of instruction, communication remains a very important one. Teacher communicative behaviors (Myers, Martin & Knapp, 2005), his/her immediacy (non-verbal immediacy – behaviors such as smiling, gesturing, eye contact or relaxed body language; verbal immediacy – calling the students by name, using humor and raising questions that encourage students to talk and ask for different viewpoints, praise) (Nasser, 2014) or perceived communicator style, are variables that influence motivation, cognitive and affective learning (Nasser, 2014; Chory & McCroskey, 1999), positive student evaluations, perceived teacher competence, trustworthiness and caring (Nasser, 2014). The degree of development of social and communication skills and the students' perception of these, as well as their ability to continuously develop these along the school years, are associated both with their interpersonal and their academic success (McCroskey, Booth-Butterfield & Payne, 1989). Also, numerous research studies emphasize the importance of a positive teacher-student relationship, and its connection to learning and academic performance (Aylor, 2003; Dobransky & Frymier, 2004; Tobbell & O'Donnell, 2013), or the relationship between the students' willingness to communicate and explore new relational opportunities (Cho, Geri, Davidson & Ingraffea, 2007) and committing to a greater extent to the initiative to interact with teachers – by asking more questions and asking for more information (Nurmi, 2012).

Starting from the results of previous studies, the current research has established two objectives: (1) identifying those communication skills that students consider to be most important in the teaching activity and determining whether they carry a predictive value for academic performance; (2) highlighting the relationships that exist between the students' perceived interpersonal communication competence, their degree of involvement in interpersonal interactions with the teachers and their willingness to communicate, and determining whether these variables carry a predictive value for academic performance.

Teacher-student relationship and academic performance

The teacher-student relationship may be defined as an interpersonal relationship, and its quality and durability depend on both parties involved (Dobransky & Frymier, 2004). In order to speak of interpersonal communication, the persons involved need to communicate with each other as individuals and not as representatives of the roles they fulfill (sociological level) or of the cultural groups they belong to (cultural level). Most frequently, though, teachers and students communicate with each other on the level of the roles they play

(sociological level). Only when they interact with each other on an individual level, communication occurs on a psychological level and the relationship becomes interpersonal (Dobransky & Frymier, 2004). Students who benefit more from interpersonal interaction achieve better results in the process of learning (Dobransky & Frymier, 2004). The quality of the teacher-student relationship is significantly associated with students' social functioning, behavior problems, engagement in learning activities, positive feelings about school and higher academic and behavioral competence and achievement (Roorda, Koomen, Spilt & Oort, 2011; Korthagen, Noordewier & Zwart, 2014). Associations with commitment are stronger than with academic performance, perhaps due to the fact that teacher-student relationships are, partly, a measure of social adaptation – and therefore closer to behavioral results than to academic ones. Commitment, however, acts as a mediator between relationship and performance (Roorda, Koomen, Spilt & Oort, 2011). The formation of interpersonal relationships precedes the development of efficient, successful learning relationships. The learning relationship is the one in which the teacher and the student work together in order to enable learning (Tobbell & O'Donnell, 2013). Not all interpersonal relationships lead to learning relationships, but all learning relationships originate from efficient, successful interpersonal relationships (Tobbell & O'Donnell, 2013). Positive teacher-student relationships are thought to stimulate the learning behavior and provide students with the support for coping with school requirements, while negative relationships (dominated by discordant and coercive interactions) hinder and interfere with the child's efforts to cope with these requirements (Roorda, Koomen, Spilt & Oort, 2011).

Communication and academic performance

Communication competence – the judgment one has about one's own or another's "ability to manage interpersonal relationships in communication settings" (Rubin & Martin, 1994: 33; Arroyo & Harwood, 2011), has consequences on the quality of the relationships (Arroyo & Harwood, 2011). Research has shown that self-perceived communication competence may have a strong influence on individuals' willingness to communicate (the degree to which an individual is inclined to initiate communication with different people in various social settings) (McCroskey, 1992; Cho, Geri, Davidson & Ingraffea, 2007). Moreover, self-perceived communication competence may be more associated with both willingness to communicate and volitional communication behavior than is actual communication skill (McCroskey & Richmond, 1990; Zarrinabadi, 2014). Therefore, the person can be less or more effective in communication, generating negative or positive perceptions of him - or herself in the minds of others involved in the communication (McCroskey & Richmond, 1990). In an educational context, students with a greater willingness to communicate speak more during class, engage more often in projects that imply communication and are much more

comfortable with taking initiative and cultivating communication relationships, whereas students with a lower willingness to communicate tend to be reluctant or less apt to communicate with others (Cho, Geri, Davidson & Ingraffea, 2007). In turn, teachers have positive expectations from students with a higher willingness to communicate and negative ones from those with a lower willingness. The assessment they carry out (through tests, grades) is consistent with these expectations, although no connections have been identified between intellectual skills and communication orientations (McCroskey & Richmond, 1990). These differences can also be noticed in the relationships with peers. Students with a higher willingness to communicate have more friends and seem to be more satisfied with their school experience, as compared to those with a lower willingness to communicate – who are seen in a negative way by their peers (McCroskey & Richmond, 1990). Also, studies show that teachers' attitude, involvement (the quality of teacher-student relationship), immediacy and teaching style influence the learners' participation and their willingness to communicate (Zarrinabadi, 2014). Students who communicate more effectively with their teacher learn more and are more successful in the classroom. Interaction involvement – the extent to which individuals are involved in a conversation and integrate thoughts, feelings and experience with interaction, was associated with increased affect toward the teacher, increased state of motivation to study, and satisfaction with the classroom communication (Frymier, 2005: 200).

Method

Participants

The research, carried out between January and March 2014, included a convenience sample of 90 first-year students (mean age 21.89, SD=5.20), from the West University of Timioara. Due to the faculty's specialty, the distribution according to gender is uneven, as the sample includes 19 men (21.1%) and 71 women (78.8%). Each participant filled out a set of four questionnaires.

Procedures

Participation in the study was voluntary and it addressed the first-year students. They were asked to fill out a set of four questionnaires aimed at communication skills. The instructions required filling these out by referring to the teachers whom the students had worked with along the entire semester. According to the initial methodology (Plax, Kearney, McCroskey & Richmond, 1986), students were asked to fill out the questionnaires after completing the courses and seminars with the respective teachers. This kind of methodology allows for a wide range of teachers to be included as targets of students' perceptions (in our case, 8 teachers

and 8 assistants teaching subjects during the first semester). Also, information was gathered on the general average grade obtained by participants at the end of the winter finals.

Measures

The Romanian versions of all instruments were initially translated from English into Romanian and then back-translated into English, according to APA standards. The internal consistency was calculated for the entire questionnaires, as well as for each scale individually.

The *Interpersonal Communication Competence Scale* (Rubin & Martin, 1994) measures ten dimensions of interpersonal competence: self-disclosure, empathy, social relaxation, assertiveness, interaction management, altercentrism, expressiveness, supportiveness, immediacy and environmental control. The scale can be used to assess global communication skills or to draw up an other-report of interpersonal competence as well; it has a 30 item self-report Likert-type scale (1 – almost never to 5 – almost always). The internal consistency for the entire scale was α=.70.

The *Communication Functions Questionnaire* (CFQ-30 – Burleson & Samter, 1990) assesses the value people place on ten skills relevant to communication with others and features the management of feelings and the management of behavior: comforting, conflict management, conversation, Ego support, expressiveness, referential/informative, listening, narrative, persuasion and regulative skills. The questionnaire has 30 items and the responses are given on a 5-point Likert scale (1 – very unimportant to 5 – very important). Cronbach's alpha coefficient for the entire questionnaire was .93, and for each scale individually it varied between α=.66 and α=.92. The CFQ has been used in interpersonal domains, but also in organizational settings and instructional contexts (Rubin, Rubin, Graham, Perse & Seibold, 2009).

The *Interaction Involvement Scale* (IIS – Cegala, 1981), measures the general tendency to be involved in interpersonal interactions, and consists of three dimensions: perceptiveness, attentiveness and responsiveness. The version used in this study consisted of 18 seven-point Likert-type items (1 – not at all like me to 7 – very much like me), and it was adjusted to the educational context – the participants were asked to evaluate the extent to which they were involved in interactions with a teacher during the most recent class (Frymier, 2005). Because we were interested in an overall involvement with the teacher, the entire score was used to test the hypotheses. The internal consistency for the entire scale was α=.81.

The *Willingness to Communicate Scale* (WTC – McCroskey, 1992) is a direct measure of the respondent's predisposition toward approaching or avoiding the initiation of communication. It is a 20-item (communication situations)

probability-estimate scale, where 8 of the items are fillers and 12 are scored as part of the scale. The respondent has to indicate the percentage of times he/she would choose to communicate in each type of situation. The total WTC score is computed by adding the sub-scores for stranger, acquaintance, and friend, and then divided by three. The internal consistency for the entire scale was α=.72.

Academic performance was operationalized based on the cumulative grade average obtained at the end of the first semester finals. The winter finals consisted of four exams and four oral examinations. Five of the subjects included courses and seminars – thus implying both forms of written and of oral examination (the weight of the seminar grade making up between 30 and 40% of the final mark), and three subjects consisted of oral examinations and group tasks. In the academic environment of universities, performance equates to acquiring a number of 30 credit points after passing all exams. Therefore, obtaining a cumulative grade average above the threshold of five, without accumulating the necessary credit points, does not grant the student the "integralist" status (a student who has acquired all credit points successfully).

Analysis

The data obtained following the application of the questionnaires and registering the winter finals grades were processed using the SPSS 19 program. Descriptive statistics, the Pearson correlation coefficient and regression analysis were used to test the research hypotheses.

Results

The communication skills that students consider to be most important for the teaching activity are the referential and conversational skills (Table 1).

Table 1. *Descriptive statistics with the most important perceived communication skills for teachers*

Communication skills	Mean	SD	Mean	SD	Mean	SD
Referential	13.95	1.52	14.11	1.43	13.36	1.70
Conversational	12.97	1.88	13.19	1.72	12.15	2.24
Conflict management	12.25	2.69	12.84	2.03	10.05	3.64
Ego support	12.14	2.57	12.52	2.29	10.73	3.12
Regulative	11.73	2.89	12.18	2.57	10.05	3.43
Listening	11.62	2.50	11.78	2.44	11.00	2.70
Narrative	11.22	2.54	11.23	2.62	11.15	2.29
Comforting	9.17	3.46	9.69	3.16	7.26	3.95
Expressiveness	8.45	3.13	8.60	3.15	7.89	3.05
Persuasion	7.55	3.32	7.63	3.44	7.26	2.92
	N=90		N=71 women		N=19 men	

Due to the fact that the sample's distribution according to gender was uneven (19 men and 71 women), in a first stage we determined whether there are differences regarding the importance attributed to the presence of these communication skills in teachers according to the gender variable, after which we targeted the entire sample, capturing the common skills situated in the first two positions. Results indicate a greater importance attributed to referential and conversational communication skills. Examining the items mean in order (paired t-test), we can also see that referential skills are more important than conversational skills (t= 4.76, p=.000); conversational skills are more important than conflict management (t=2.47, p=.01); referential skills are more important than regulative skills (t=7.37, p=.000). Significant differences were not determined regarding the first two positions, according to student performance.

Concerning the connections between the performance achieved by students during the winter finals and teachers' communication skills, the statistical data processing has shown the absence of significant associations. Significant associations were not identified even in the case of skills perceived by students as the most important for the teaching activity.

In the academic environment of universities, performance achieved during the finals implies passing all exams of the semester and reporting the final cumulative grade average to a fixed number of credit points that the student must obtain at the end of a semester (the semester is considered closed when a number of 30 credit points is acquired). Under these circumstances, we have tried to determine whether there are any differences between students who have accumulated the necessary number of credit points and those who did not, from the perspective of the studied variables. Of the 90 participants, only 49 accumulated 30 credit points at the end of the winter finals, i.e. passing all eight exams (course and seminar for each subject). Thus, we have obtained two groups: "integralists" – 49 students, and "non-integralists" – 41 students. By analyzing again the studied variables, the results were different. In the case of the "non-integralist" group of students, no significant connections were obtained. Table 2 indicates the connection between academic performance and teachers' communication skills in the case of the "integralist" group of students.

Table 2. *Correlation matrix of variables included in the study (N=49 –"integralist" students)*

Communication skills	Comforting	Conflict management	Conversation	Ego support	Expressiveness	Referential	Listening	Narrative	Persuasion	Regulative
Performance	.15	.26	-.09	.24	.16	**.33***	.16	.04	.03	**.38****

*$p<.05$; **$p<.01$*

By introducing the two communication skills into the regression analysis, we have obtained a significant value for F (5.89, p<.01), the regression model explaining 20.4% of the academic performance (R^2=.204, p<.01). Among the predictors, it seems only regulatory skills (the ability to help someone realize their mistakes and correct them – Aylor, 2003) exercise a significant influence on academic performance (β=.318, p=.02).

Concerning the relationship between the academic performance achieved by students during the winter finals and the other three studied variables, results only indicate a significant positive relationship with their degree of involvement in interpersonal interactions with teachers (Table 3).

Table 3. *Correlation matrix of variables included in the study (N=90)*

Variables	1	2	3	4
1. Academic performance	1.00			
2. Interpersonal communication competence	.12	1.00		
3. Interaction involvement	.31**	.33**	1.00	
4. Willingness to communicate	.01	.44**	.23*	1.00

*p<.05; **p<.01

In order to see whether the students degree of involvement in interpersonal interactions with teachers is a predictor of their academic performance, a linear regression was carried out, which resulted in a significant value for F (9.83, p<.01), meaning that interaction involvement explains 10.2% of the academic performance achieved by students in the winter finals (R^2=.102; β=.319, p<.01, N=90). Once again considering the two groups separately ("non-integralists" and "integralists"), for the "non-integralist" group of students, between the performance achieved at the end of the finals (cumulative grade average for those subjects that the students took an exam for) and the three targeted variables, no significant association was identified. For the group of "integralist" students, the following correlations were highlighted:

Table 4. *Correlation matrix of variables included in the study (N=49 – "integralist" students)*

Variables	1	2	3	4
1. Academic performance	1.00			
2. Interpersonal communication competence	.27	1.00		
3. Interaction involvement	.45**	.39**	1.00	
4. Willingness to communicate	.002	.49**	.22	1.00

*p<.05; **p<.01

In order to see whether the "integralist" students' degree of involvement in interpersonal interactions with their teachers is a predictor of their academic performance, we have carried out a linear regression, which resulted in a significant value for F (12.24, p<.01), meaning that, in this new situation, interaction

involvement explains 20.7% of the academic performance obtained by the "integralist" students in the winter finals (R^2=.207; β=.455, p<.01). Therefore, in the case of "integralist" students, the referential and regulative communication skills of teachers, along with their degree of involvement in interpersonal interactions with the teachers, carry a predictive value for their academic performance. In order to identify how much of the academic performance is explained by these variables, a hierarchical regression was carried out (Table 5 and Table 6).

Table 5. *Descriptive indicators and correlation matrix of variables included in the hierarchical regression model (N=49 – "integralist" students)*

Variables	M	SD	1	2	3
Academic performance ("integralists")	8.85	.73	.33*	.38**	.45**
Predictors					
1. Referential skills	14.10	1.37	-		
2. Regulative skills	11.69	2.93	-	-	
3. Interaction involvement	64.61	10.58	.39**	.18	-

*p<.05; **p<.01

Table 6. *Hierarchical multiple regression results (N=49 – "integralist" students)*

Variables	R^2	ΔR^2	ß
Step 1	.204	.204**	
Referential skills			.250
Regulative skills			.318*
Step 2	.311	.107*	
Referential skills			.120
Regulative skills			.286*
Interaction involvement			.356*

*p<.05; **p<.01

The first regression model explains 20.4% of the academic performance of "integralist" students (R^2=.204, p<.01), and among the predictors, it seems only regulative skills exercise a significant influence on academic performance (β= .318, p=.02). Although exercising regulative and referential communication skills significantly contribute to academic performance (F(2,46)=5,89, p=.005), by controlling these factors' influence, the students' interaction involvement brings further explains academic performance (F(1,45)=6,95, p=.01). Thus, the second regression model explains 31.1% of academic performance (R^2=.311, p=.01), and among the predictors, only regulative skills and students' interaction involvement influence academic performance. Between these two, it seems the degree of involvement in interactions with teachers exercises a greater influence (β=.356, p=.01) as compared to regulative skills (β=.286, p=.03).

Discussion

The objectives of this study were (1) to identify those communication skills that students consider most important for the teaching activity, and determining whether they carry a predictive value for academic performance, as well as (2) to capture the relationships that exist between the students' perceived interpersonal communication competence, their degree of involvement in interpersonal interactions with teachers and their willingness to communicate, and to determine whether these variables carry a predictive value for academic performance. Regarding the first objective of the current research, results indicate that communication skills seen by students as most important in the teaching activity are skills that reflect managing activity and behavior: *referential skills* – the teacher's ability to express information in a clear and concise manner in order to make students understand what it is referring to (Aylor, 2003; Graham, 2009), and *conversational skills* – the ability to initiate and maintain enjoyable conversations (Aylor, 2003). Students appreciate those teachers who are easy to talk to and who have no authoritarian behaviors, perhaps because such teachers invite mutuality into the relationship (Tobbell & O'Donnell, 2013).

The absence of significant associations between academic performance and the teachers' communication skills considered important by students could be determined by the manner of operationalizing academic performance, i.e. the cumulative grade average of passing all exams above five and the accumulation of 30 credit points. Considering that only 49 "integralist" students were taken into consideration, results have highlighted significant positive relationships between academic performance and teachers' referential and regulative communication skills (helping someone recover from a mistake and remedy the problem – Graham, 2009). Moreover, the regression model explains 20.4% of academic performance, and of the two predictors, regulative skills exercise a significant influence on performance. Students tend to appreciate a teacher's efficiency based on the perception of clarity in his/her teaching process, studies indicating positive relationships between teacher clarity, student satisfaction, student motivation and student academic achievements (Wayne & Young, 2003). The teacher's use of these functional communication skills motivates students to perform well academically, to experience greater affect, to be more content with their relationship with the teacher and more motivated to commit to interactions during class (Myers, Martin & Knapp, 2005). In the case of the second objective, results indicate the existence of a significant relationship between academic performance and students' degree of involvement in interpersonal interactions with teachers, the latter explaining 10.2% of the performance achieved by students during the winter finals. Again taking into consideration only the 49 "integralist" students, this time the regression model explains 20.7% of the academic performance obtained by "integralist" students during the winter finals. The teacher's use of

regulative and referential communication skills significantly contributes to academic performance, and student involvement in interpersonal interactions with teachers brings an explanatory addition to the performance achieved by these (the regression model explaining 31.1% of academic performance). These results are in accordance with other research studies which indicate that students who get involved and communicate more efficiently with their teachers learn more and are more successful in their classroom activities (Frymier, 2005).

Implication for further research

The results of this study highlight the importance and impact that communication has in the teacher-student relationship and on students' academic performance. There is, however, a series of limitations that determines us to practice caution when generalizing these results. A first aspect is that of the relatively reduced number of students taking part in this study and the structure of the sample (the uneven proportions: male gender – female gender), given the fact that numerous studies highlight differences according to the gender variable with regard to the variables studied. Therefore, this calls for the investigation on a larger number of participants of the differences that arise according to the gender variable at the level of communication skills and involvement in interpersonal interactions.

A second factor that cannot be neglected is the operationalization of academic performance. The university criteria that require a student to obtain a certain number of credit points in order to pass an exam, the manner of calculating the cumulative grade average and the large number of exams included in what constitutes academic performance, are elements that impact the results obtained. On the other hand, the large number of subjects, their diversity and that of the methods of evaluation employed could be considered elements that bring greater consistency to the results of the study. We consider the subsequent investigation of these aspects useful under the following conditions: a smaller number of subjects, and even individual grades given for each subject, and not a grade average for all subjects.

Another variable impacting this research could be the fact that the participants are in their first university year. During this stage the students' adaptation difficulties are obvious, as a result of going from a pre-university to a university academic environment, of facing requirements different from those in high school, in a "group" of approximately two hundred new colleagues. Because these criteria related to the number of credit points and of subjects per semester are maintained in the later university years as well, an extension of the study to academic years II or III could offer a clearer image on the impact that this start in the university environment has on students.

Conclusions

Students think that a teacher's most important communication skills in his/her teaching activity are mainly focused on behavior management or on communication itself (referential and conversational skills). However, in the relationship with academic performance, along with the referential skills, other skills also intervene, such as those focused on the management of the other person's feelings, i.e. regulative skills – which exercise a significant influence on academic performance. Students' degree of involvement in interpersonal interactions with teachers also contributes considerably to their academic performance. Although results did not highlight significant connections between academic performance, students' perception of their own interpersonal communication competence and their willingness to communicate, significant associations between communication variables were captured. This fact is in accordance with previous studies, which show that the perception of one's own communication competence influences one's willingness to communicate, one's placement in situations where communication is expected, one's initiation of and involvement in interpersonal relationships (Mc-Croskey & Richmond, 1990; Zarrinabadi, 2014). Not knowing how to communicate or the insufficient development of one's communication skills can be one of the reasons why one person is less willing than others to communicate (Mc-Croskey & Richmond, 1990). It seems, though, that participating in trainings for developing these skills is followed by an increase in people's desire to communicate in contexts related to the training (Phillips, 1977). Because results have shown that the degree of involvement in interpersonal relationships with teachers is a premise for achieving academic performance, in the future, organizing such trainings for students could contribute to an increase in the rate of passing exams or to improving academic performances.

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