

## RELATIONSHIP BETWEEN AFFECTIVE LEARNING, INSTRUCTOR ATTRACTIVENESS AND INSTRUCTOR EVALUATION IN VIDEOCONFERENCE-BASED DISTANCE EDUCATION COURSES

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### ABSTRACT

This paper is intended to reveal the results of a study in which the relationship between learners' perceptions of affective learning, instructors' attractiveness and instructor evaluations in a videoconference based distance education course was investigated. An online survey instrument was used to collect quantitative data. A series of Pearson product-moment correlation coefficient was computed to assess the relationships between these variables. The results have shown that there were positive correlations between task attractiveness, social attractiveness, affective learning and instructor evaluations in videoconference-based open and distance courses. Overall, almost all of these correlations were moderate level except the ones between the instructor evaluations and task attractiveness as well as the instructor evaluations and the social attractiveness. Positive, strong relationships were observed between these variables. Increases in task and social attractiveness were correlated with increase in the instructor evaluations.

### INTRODUCTION

Advancements in the information and communication technologies have let the use of synchronous communication tools more frequently, especially in open and distance learning (ODL). Videoconference systems is one these tools. Although videoconference has been used in education and business purposes for more than three decades, its diffusion in ODL environments has been dramatically increased in 2000s. Despite this increase, one can easily infer that the literature does not include enough number of studies focusing on affects of the instructors' communication behaviors on students learning in videoconference based ODL. These types of studies, for sure, help designers and the practitioners improve the quality of their services.

In the field of educational psychology, learning is categorized into three domains: Cognitive, Affective, and Psychomotor. According to Roberts (1990, p. 19) "The role of affective modes of knowing in learning processes remains an elusive, fragmented area of study. Not only does research cross many disciplinary boundaries, but language about affect changes from one individual to the next". However, Krathwohl, Bloom and Masia (1964) have provided a well-received definition and a classification of learning objectives regarding affective learning. Their definition indicates that affective learning is about feelings, values, appreciation, enthusiasms, motivations, and attitudes of the learners toward the content, the instructor and the setting. They also classified the learning affective learning objectives into five groups (receiving, responding, valuing, organization, and characterization) based on the principle of internalization. "Internalization refers to the process whereby a person's affect toward an object passes from a general awareness level to a point where the affect is 'internalized' and consistently guides or controls the person's behavior" (cited by Seels & Glasgow, 1990, p. 28). Kearney, Plax and Wendt-Wasco (1985) indicated that students with a positive attitude toward the course content are more likely to learn the cognitive content advanced. They also stated that students who have internalized higher order affect are more likely to generalize such content to non-academic environments pertinent to their life-long adaptation. Furthermore, same authors as well as others have also found that teachers' communication behaviors are also another factor effective on students' affective learning (Kearney, Plax, & Wendt-Wasco, 1985; Plax, Kearney, McCroskey & Richmond, 1986). In open and distance learning, the research studies have also shown similar results (Bozkaya & Erdem-Aydin, 2007; So, 2010). For instance, Hurd (2007) investigated the distance language learners affects and their achievement and suggested that the affective dimensions of language learning may be particularly significant for distance learners, in that they need to manage their own feelings in order to compensate for the physical absence of a teacher and peers. However, most research on affective learner variables still concentrates on classroom-based learners, and there is very little on those learning in other contexts, such as ODL.

Instructor attractiveness is also considered as another construct regarding instructor's communication behaviors. According to the social psychologist, attractiveness or interpersonal attractiveness refers to the tendency of someone to have appreciation and positive feelings towards someone else (Berscheid & Hatfield-Walster, 1969). It is regarded as a determinant factor on the development and continuation of relations in social environments where interaction takes place (Unal-Colak & Kobak, 2011). Based on interpersonal attractiveness, McCroskey and McCain (1974) developed a framework and measures to determine the interpersonal attractiveness in various settings. Their framework suggested three dimensions of interpersonal attraction: a person's desire to work with

another person (task attractiveness), to socialize with another person (social attractiveness), and attraction to another person based on physical appearance (physical attractiveness). Studies on this variable have emphasized that individuals rated as highly attractive are more persuasive and credible than less attractive individuals (McCroskey, Hamilton, & Weiner, 1974); furthermore, interpersonal attraction has been linked both to the amount of communication people engage in and to the quality of their exchanges (McCroskey et al., 1974). One of the setting interpersonal attractiveness was investigated has been the field of educational communications. In a number of studies, instructor attractiveness was investigated according to the three dimensions mentioned above. The results of these studies in the field of educational communications have revealed that student perceptions of instructor attractiveness have been positively associated with instructor immediacy and with perceptions of attitude and background similarity (Edwards & Edwards, 2001; Rocca & McCroskey, 1999). Similarly, a positive correlation between instructor attractiveness and students' motivation to communicate in class and motivation to learning has been observed in several other studies, such as Myers & Huebner, (2011), and Unal-Colak and Kobak (2011). Although, the literature does not provide satisfactory information about the instructor attractiveness in videoconference based ODL, in the light of these studies, one may infer that interpersonal attractiveness is a critical factor in videoconference based ODL too.

As it has been briefly summarized above, there is a shortage of studies in the ODL literature about affective learning and interpersonal attractiveness of the instructors in videoconference based learning. This study intended to examine the relationship between the learners' perceptions regarding affective learning, instructors' attractiveness and their evaluations of the instructors. Since computer mediated communications have become one of the main interpersonal communication and instructional means, as educators we need to examine carefully the impact of its various aspects on learning in different settings.

#### **PURPOSE AND RESEARCH QUESTIONS**

The primary purpose of this study was to examine the relationship between the learners' perceptions of affective learning, instructors' attractiveness and instructor evaluations in videoconference based distance education courses in Turkey. Within the framework of this purpose, the answers of the following research questions were sought:

1. What were the perceptions of the learners on the instructors' task and social attractiveness?
2. What were the perceptions of the learners on affective learning in their videoconference-based courses?
3. How successful did the learners find their instructors in their videoconference -based courses?
4. Is there a relationship between the learners' perceptions of task attractiveness, social attractiveness, affective learning and their evaluations of the instructors?

#### **METHODOLOGY**

This study was conducted in Anadolu University of Turkey. Anadolu University is considered one of the mega universities of the world due to large number of distance students. Currently it has 1.6 million students enrolled to its distance programs. In majority of its programs text-based instructions are supported by videoconference, TV broadcasts, online synchronous and asynchronous learning opportunities. The university does not only provide education opportunity to the learners in Turkey but also in many other countries. However, since the primary language of the programs is Turkish, only Turkish-speaking learners can join these programs. Azerbaijan is one of the countries where locals can get an education in Turkish. In 2009, Anadolu University has collaborated with a semi-public institution, entitled as Eurasia Innovation Institute, to offer distance higher education to Turkish speaking people in Azerbaijan. Currently, the University provides 2 bachelors' and 3 associate degree programs to around 2000 learners in Azerbaijan. Similar to its programs in Turkey, the instructional strategy is self-paced individualized learning. In other words, the learners have to study the specially prepared textbooks by themselves and take centralized exam administered face-to-face, four times in an academic year in two major cities of Azerbaijan. The learners may choose to attend videoconference-based course sessions while studying individually. These courses are offered every week at least one to three hours for each course by the professors of Anadolu University. These courses not only help learners interact with the instructors but also serve as a means for the learners meet with their peers and socialize (Anadolu University, 2012).

The study was conducted as a part of a series of studies in which effectiveness, efficiency and appeal of the videoconference-based ODL lectures have been examined. Around 1200 students from Azerbaijan were asked to take a part in this study. However only 56 learners in 3 different courses from different levels and programs provided complete data for the analyses. The demographics regarding the participants are provided in Table 1.

Table 1: Demographics about the participants

Characteristics		N	%
Gender	Female	29	51.8
	Male	27	48.2
Age	19-21	31	55.4
	22-28	25	44.6

McCroskey’s (1994) Affective Learning Scale was used to collect data regarding the distance learners’ perceptions of affect toward the content and videoconference-based classes. This self-report, bipolar, 8-item scale was used in many studies and its reliability has been very good. The reliabilities for the affect for content measure have ranged from .85 to well above .90 while the reliabilities for the videoconference-based classes have been measured around .90. In this study, the reliability has computed as .88. The same scale originally includes two more sections (8 more items) concerning instructor evaluation. These items were also used to collect data about the learners’ assessments of the course instructors. In order to collect data on the learners’ perceptions of interpersonal attractiveness toward the course instructor, Interpersonal Attractiveness Scale was employed. This scale was first introduced by McCroskey and McCain (1974) and later, in 2006, McCroskey, McCroskey and Richmond have revised the scale. In this study, this second generation of the scale consisted of 38 items and 7-points ranging from ‘strongly disagree’ to ‘strongly agree’ was used. The average reliability of this scale in various studies was identified as .94. In this study, however, it was found a bit lower but still quite high .89.

These two scales were first translated to Turkish and then presented to a panel of experts in the fields of English language, communications, and ODL as well as a group (four) of learners to be reviewed. After collecting the experts and the learners’ comments, the instrument was finalized and transferred to an online format. The same students were also asked to examine the online form. Later, the online instrument was introduced to students during the videoconference sessions of the three courses. The course instructors asked the learners complete the forms in two weeks but data collection was continue around one and a half month (April-May 2012).

**FINDINGS**

Table 1 shows descriptive statistics about the learners’ perceptions of the task and social attractiveness as well as on affective learning and instructor evaluations in the videoconference-based courses. According to the analysis, the majority of the learners indicated higher perceptions regarding all the variables. They especially have shown a higher degree of agreement on items related to the affective learning and the instructor evaluations. One can infer this finding that the majority of learners have a positive affect on learning in the videoconference-based course sessions and similarly have positive perceptions about the instructors on these courses. On the other hand, they scored the least about the task attractiveness although it’s still higher than expected level. It may means that the learners found the tasks that they encountered during the videoconference sessions not too attractive. A similar result was observed at the social attractiveness of the courses. It may be related to the structured implementation of the videoconference sessions or to the length of sessions (1 hour) that may not be enough to establish satisfactory social interactions.

Table 1: Descriptive Statistics about the Learners’ Perceptions

Variable	N	Mean	Standard Deviation
Social Attractiveness	56	3.3341	.78626
Task Attractiveness	56	3.2823	.64694
Affective Learning	56	4.0000	.53407
Affect toward Content	56	4.0357	.86133
Affect toward Class	56	3.9643	.50549
Instructor Evaluation	56	3.9531	.44311
Instructor	56	4.0491	.47773
Taking Another Course	56	3.8571	.60464

On the other hand, as can be observed in Table 2, there are moderate level positive correlations between in social attractiveness, task attractiveness, affective learning and instructor evaluations. Also, strong relationships were also seen within the sub-dimensions of the affective learning and instructor evaluation. It was interesting to

notice that the relationship between the instructor evaluations and perceived task (.601) and social attractiveness (.712) of the videoconference-based courses were relatively strong while, the relationships between the affective learning and the attractiveness variables were relatively moderate level. Especially the strengths of the relationships between affect toward class and the attractiveness variables were quite low although statistically the relationships were significant. This may be related to the number of participants. In other words, it would be possible to observe different results when this study conducted in a different setting and/or with a larger number of participants.

Table 2: Correlation Analysis about the Learners' Perceptions

Variable	N	Social	Task	Affect. Learn.	Content	Class	Inst. Eva.	Instr.	Other Cour.
Social Attractiveness	56		.773**	.431**	.434**	.354**	.601**	.597**	.475**
Task Attractiveness	56	.773**		.497**	.519**	.391**	.712**	.719**	.552**
Affective Learning	56	.431**	.497**		.898**	.919**	.694**	.730**	.513**
Content	56	.434**	.519**	.898**		.651**	.638**	.716**	.435**
Class	56	.354**	.391**	.919**	.651**		.623**	.615**	.495**
Instructor Evaluation	56	.601**	.712**	.694**	.638**	.623**		.856**	.903**
Instructor	56	.597**	.719**	.730**	.716**	.615**	.856**		.550**
Another Course	56	.475**	.552**	.513**	.435**	.495**	.903**	.550**	

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

Although it was not intended, a series of independent-samples t-test was conducted to examine the affects of gender on the learners' perceptions of task and social attractiveness as well as affective learning and instructor evaluations were also analyzed. As it was summarized in Table 3, there was no significant difference in the scores for almost all the variables except the instructor evaluations. There was a significant difference in the scores of the female learners (M=3.84, SD=0.285) and the males (M=4.07, SD=0.546) about the instructors evaluations;  $t(54)=-2.03$ ,  $p = 0.048$ . In other words, the male learners expressed more satisfaction with the instructors then the females and the difference between these two groups is statistically significant. The male learners scored higher then the females in all the sub dimensions of the instructor evaluation scale as well as the affect toward class sub dimension of the affective learning scale. Meanwhile, the females scored higher in task and social attractiveness scales. However, these differences were not found as significant statistically. Moreover, it was interesting to notice that both gender groups scored almost the same for affective learning measure.

Table 3: t-Test Analysis about the Learners' Perceptions

Variable	Gender	N	M	SD	df	t	p
Social Attractiveness	F	29	3.35	.802	54	.11	.912
	M	27	3.32	.784			
Task Attractiveness	F	29	3.30	.654	54	.27	.790
	M	27	3.26	.651			
Affective Learning	F	29	3.99	.445	54	-.06	.951
	M	27	4.00	.625			
Content	F	29	4.07	.855		.29	.768
	M	27	4.00	.883			
Class	F	29	3.92	.251		-.64	.526
	M	27	4.01	.685			
Instructor Evaluation	F	29	3.84	.285		-	.048*
	M	27	4.07	.546		2.03	

Instructor	M	27	4.07	.546		
	F	29	3.97	.278	-	.227
Another Course	M	27	4.13	.622	1.22	
	F	29	3.71	.487	-	.053
	M	27	4.02	.683	1.98	

\* $p < .05$

## CONCLUSIONS

The primary purpose of this study was to examine the relationship between the learners' perceptions of affective learning, instructors' attractiveness and instructor evaluations in videoconference-based distance education courses in Turkey. According to analyses, the learners have scored higher than point average for all the variables. This may mean that in general the learners have positive attitudes towards their instructors, the content and the strategy implemented in the videoconference-based course sessions. They also found their instructors attractive regarding the tasks they carry out and socially. However, the learners scored a bit lower in the task and social attractiveness measures. This may be related to either the unattractiveness of the tasks the learners encountered during the videoconference sessions or time limitations for establishing better interactions or the cultural factors.

Furthermore, the study has shown that there are positive relationships between the learners' perceptions of task and social attractiveness of the instructor as well as their perceptions of affective learning and evaluations of their instructors. In other words, those ODL learners who have positive attitudes toward task and social attractiveness of their instructors perceives more affect toward the content and the strategy of the courses as well as more satisfied with the instructors. Based on the findings, it is possible to claim that instructors' task and social attractiveness can be used as predictors of the learners' affect toward content and the strategy of the videoconference-based courses, and their evaluations of the instructors.

Additionally, the study uncovered that gender might be a factor on the learners' evaluation of their instructors. However, since the number of the participants (56) was limited to conduct more generalizable results, it might be possible to find different results in similar studies conducted with more participants and/or in different settings.

The results of this study suggest that the instructors and the designers of the videoconference-based ODL courses should take task and social attractiveness in to considerations while implementing and designing these courses. For instance, the instructors may start the sessions with several icebreaker activities that might help them create a social class climate in their courses. Addressing the learners with their names during the lecture for some provocative, or attention getting prompts, questions, and so forth might help for creation of the same climate.

In terms of further research, there is a rich literature on educational communications in face-to-face learning environments, even by the Turkish researchers (e.g. Pekel, Demir, & Yildiz, 2006; Sahin, 2006), but very limited in open and distance learning environments. Investigation of the research in educational communication and replication of these studies by the researchers in ODL field might be quite beneficial for the field. For instance, shyness, communication apprehension, communication skills, homophily, innovativeness, intercultural communication, test anxiety and similar measures can be investigated in ODL settings to improve the effectiveness, efficiency and appeal of the ODL services.

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