

THE RELATIONSHIP BETWEEN TEACHER IMMEDIACY BEHAVIORS AND LEARNERS' PERCEPTIONS OF SOCIAL PRESENCE AND SATISFACTION IN OPEN AND DISTANCE EDUCATION: THE CASE OF ANADOLU UNIVERSITY OPEN EDUCATION FACULTY

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ABSTRACT

A significant number of studies in the literature stress the important role of teacher immediacy behaviors on learners' perceptions of social presence and satisfaction in open and distance learning environments. Yet, those studies were conducted in different open and distance education institutions than the current example of which unique characteristics and applications are commonly recognized in the field. Unlike others, the current study examined the effects of both verbal and nonverbal instructor immediacy behaviors on learners' perceptions of social presence and satisfaction in face-to-face academic tutoring services provided in open and distance learning environments. Results indicated a moderate and positive relationship between the control variable and outcome variables

1. INTRODUCTION

Open and Distance Education (ODE), in general, is defined as an educational model in which the learner is in a remote location from the instructor's and in which the interaction between them is achieved through communication environments and technologies. Comparable to other institutions, the system at Anadolu University (AU) Open Education Faculty (OEF) utilizes various information and communication technologies (ICT) to provide academic services. Unique needs of different learner groups require a well organized integration of a range of ICTs. These environments may play both a "fundamental" and a "supportive" role in different services. Although Anadolu University's traditional ODE programs employ latest information technologies, textbooks still remain the core of the ODE system as the primary learning material.

In addition to textbooks, many other support services are offered to learners including TV programs, e-exam, digital versions of TV programs, e-book, synchronized virtual classroom, tutorial services through video conference, and face-to-face academic tutoring services. With the exception of face-to-face academic tutoring, all fundamental and support services are carried out with an approach that places the individual needs of learners at the center. Intrinsically motivated, learners study the content and the materials on their own pace.

One of the most significant factors affecting learner motivation is teacher-learner interaction (Picciano, 2001). Academic tutoring service of Anadolu University OEF is a face-to-face initiative that promotes greater teacher-learner interaction. Courses covered in the academic tutoring service provide the only opportunity for a face-to-face communication. Distance learners evaluate and utilize this service for better understanding the content in a physical environment where they feel responsible, interact with other learners, and assure their level of achievement.

The feeling of responsibility for one's own learning is reported to ensure active participation and to decrease the feeling of isolation felt by the distance learner (Saba & Shaerer, 1994). Learners must interact with teachers and others as a social entity, "real person", to avoid the feeling of isolation. The concept of social presence was introduced and defined by Short and colleagues (1976) as the "the salience of the other in a mediated communication and the consequent salience of their interpersonal interactions" (p.65). There are growing numbers of studies that focus on improving social presence in distance education because distance learning environments lack many communicative advantages contemporary face-to-face environments carry. Research has reported that teacher immediacy behaviors have an important role on shaping learners' perceptions of social presence (Christophel, 1990; Gorham, 1988; Hackman & Walker, 1990).

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Derived from Mehrabian's (1969) work, immediacy is conceptualized as those nonverbal behaviors that reduce physical and/or psychological distance in interpersonal communication. Similarly, Thweatt and McCroskey (1996) defined immediacy as communicative behaviors that reduce perceived distance by individuals. Therefore, teacher immediacy can be portrayed as verbal and nonverbal behaviors that reduce physical and psychological distance between teachers and learners. Immediacy perceived by the learner in a learning environment can be viewed as an indicator of reduced feeling of isolation. Immediacy is categorized and investigated under two sub-factors as verbal and nonverbal.

Nonverbal immediacy is recognized more as a psychological trait because it involves behaviors like eye contact, body posture, gestures, physical proximity, touching, and smiling. Mehrabian's (1971) research suggested that such nonverbal cues increase the sensory stimulation of interlocutors which in turn lead to more intense, more affective, more immediate interactions. He suggested that nonverbal behaviors such as facing toward someone, standing close to someone, and touching form the immediacy among individuals. In the same vein, nodding to approve, smiling, and intentionally using gestures and stressing some words, as well, are acknowledged as nonverbal immediacy behaviors (Andersen, Andersen & Jensen, 1979; Newliep, 1997).

Studies on the teacher immediacy included behaviors such as talking about experiences that have occurred outside class, communicating with learners before and after classes, using humor to attract attention, encouraging learners to actively participate and ask questions, addressing learners by name, praising learners' work or comments, and providing feedback on learners' work. Her results suggest that these types of behavior also contributed significantly to students' affective learning. Depending on the words selected, verbal immediacy serves to improve psychological feeling of closeness among individuals. For example, instead of word like "you" and "me", using the word "us" enhances feelings of closeness and association (Gorham, 1988). Learners in such a teacher's class are expected to possess positive attitudes toward learning and display more interaction with others. Increased interaction among learners, in return, positively affect their perceptions of social presence, acknowledging others as real individuals (Hackman & Walker, 1990).

In addition, teachers' verbal and nonverbal immediacy behaviors have significant effects on learners' feeling of satisfaction regarding the teacher and the environment (Andersen 1979). Research (Andersen 1979; Biner, 1993; Gunawardena & Zittle, 1997) indicated a positive relationship between social presence and learners' level of satisfaction. Neill (1991) also stated that verbal and nonverbal immediacy behaviors reduce the psychological distance and improve learners' performance. According to Knapp (1980), higher levels of social presence and learner performance result in elevated learner motivation.

The current study, conducted in OEF at Anadolu University, investigated the effects of verbal and nonverbal teacher immediacy behaviors on learners' perceptions of social presence and their level of satisfaction regarding the teacher and the learning environment in Academic Tutoring services offered for distance "Introduction to Economics" class. Satisfaction reflects the students' overall attitude toward the components of a distance education course. Biner, Dean, and Mellinger (1994) identified seven distinct dimensions of course satisfaction: Teacher/content, technology, classroom management, personnel, timely delivery of materials to students, support services, and interaction with the teacher out of the classroom. However, within the scope of this study, only environment and teacher dimensions are included for analyses.

2. METHOD

2.1. Framework of the Research

This piece of research is an experimental study. The population of the study consisted of learners enrolled to the "Introduction to Economics" class who are also receiving face-to-face Academic Tutoring service in OEF at Anadolu University. From that population, the sample included 213 learners attending Academic Tutoring service in Eskisehir, Turkey. Academic Tutoring Services was first launched in 16 cities with 390 faculty members in 1999 (Serter ve Çekerol, 2002). By the year 2007, face-to-face tutoring services are offered in 73 centers with 861 faculty members on local cooperating universities' campuses at evenings and weekends. The service starts at the first week of January and continues through the end of May and includes 10 most challenging courses over a variety of fields.

Two scales were used to assess perceptions of Academic Tutoring instructors regarding verbal and nonverbal communication behaviors. A 5-point Likert type scale developed by Richmond and colleagues (2003) was employed to assess nonverbal immediacy behaviors. This scale included 19 items that covered behaviors such as gestures, eye contact, and body language. The reliability coefficient for the scale was found to be .70.

To assess verbal immediacy behaviors, a 5-point Likert type scale developed by Hackman and Walker (1990) was utilized. Items in this scale reflected behaviors such as providing feedback, attracting students' attention, and addressing learners by their name. The reliability coefficient for the scale was found to be .90.

To assess the effects of learners' attendance to Academic Tutoring service on their social presence, a scale with 19 items was developed by the researchers. The scale reliability was found to be .93. Of those 19 items, 13 were designed to assess the effects of the learning environment and 6 were designed to assess the effects of teacher interaction.

Another 5-point Likert type scale with 25 items was used to assess learners' satisfaction regarding the instructor and the environment in Academic Tutoring. First part of the scale included statements regarding instructors' encouragement of learners to cooperate, communicating with learners outside the classroom, using visuals, providing support outside the classroom, and designing the content. The second part used to investigate learners' purposes to attend, whether the environment was helpful to learners, and whether being in the same space with the instructor influenced their perceptions of social presence. The reliability coefficient for the scale was found to be .91.

500 copies of each scale was printed out and administered to learners who were enrolled to "Introduction to Economics" class. Administration of scales were completed one week before the semester ended on May 16th, 26 under the supervision of the researchers. After eliminating forms that were incomplete or missing many items, the sample of the study consisted of 213 learners.

The primary aim of the current study was to examine the effects of verbal and nonverbal teacher immediacy behaviors on learners' perceptions of social presence and their level of satisfaction regarding the teacher and the learning environment in Academic Tutoring services offered as a supporting aspect in a distance education class, "Introduction to Economics", in OEF at Anadolu University. Hypotheses of the study are listed below:

- There is a relationship between verbal and nonverbal teacher immediacy behaviors and learners' perceptions of social presence.
- There is a relationship between verbal and nonverbal teacher immediacy behaviors and learners' level of satisfaction regarding the learning environment.
- There is a relationship between verbal and nonverbal teacher immediacy behaviors and learners' level of satisfaction regarding the instructor.

Based on the hypotheses above, objectives of the study are defined as below:

1. In what direction and to what extent verbal and nonverbal teacher immediacy behaviors affect learners' perceptions of social presence?
2. In what direction and to what extent verbal and nonverbal teacher immediacy behaviors affect learners' level of satisfaction regarding the learning environment?
3. In what direction and to what extent verbal and nonverbal teacher immediacy behaviors affect learners' level of satisfaction regarding the instructor?

2.2. Data Analysis

Various statistical procedures were utilized in the study with the p value of .05 accepted as the level of meaningfulness. In addition to investigating means, correlation coefficients were analyzed to inspect the relationship between the teacher immediacy behaviors and two dependent variables of learners' social presence and level of satisfaction

Statistical procedures were handled by using SPSS 10.0 and the result are presented at the end of the paper

3. RESULTS

This section presents the results depending on the statistical analyses. Scales consisted of a total of 84 items in a five-point Likert type format ranging from 1=Strongly agree to 5=Strongly disagree. Boundaries of each response (from 1 to 5) was calculated by dividing the serial width (4) by the number of responses (5) and found to be 0.8. Depending on this calculation, boundaries for each response are accepted as below:

1	= 1+ 0.8	= 1.8
2	= 1.8 + 0.8	= 2.6
3	= 2.6 + 0.8	= 3.4
4	= 3.4 + 0.8	= 4.2
5	= 4.2 + 0.8	= 5

The value of 3.41 was accepted as accept the threshold and values equal and over that number are acknowledged as positive

Table 1
Means of Verbal, Nonverbal Immediacy Behavior, Social Presence and Satisfaction Scales

Scales	Mean Scores
Verbal Immediacy	2,86
Nonverbal Immediacy	3,50
Social Presence	3,40
Satisfaction	3,37

According to the results, it is recognized that nonverbal immediacy behavior had the highest mean ($M=3.50$) among all variables. Means of learners' social presence ($M=3.40$) and satisfaction level ($M=3.37$) were close to each other. Teacher verbal immediacy behavior received the lowest mean with a value of 2.86. After inspecting the items in the verbal teacher immediacy scale, it is observed that the lowest means were associated with these three items: Teacher addressing learners by their name ($M=1.70$); allowing learners to address the instructor by his/her name ($M=1.79$); and communicating with learners out side the classroom ($M=1.83$). Investigating the level of learner satisfaction, it is observed that these two items received lower ratings from other items: "I attend to Academic Tutoring hours to gather with other distance education learners" ($M=2.39$) and "I attend to Academic Tutoring hours to meet new people" ($M=2.41$). On the other end, learners reported that this service helped them to better perform in exams ($M=4.00$), revealing that learners utilize this service primarily for exams. In the social presence scale, items of "I feel at ease in joining discussions in the class" ($M=3.12$) and "I feel comfortable in expressing my thought to my peers in the class" ($M=3.21$) were rated lowest. However, learners reported that attending the Academic Tutoring service helped them feel like a part of the community ($M=3.60$). In the nonverbal teacher immediacy scale, while the lowest mean was given to the item stating the instructor depended heavily on personal notes or notes on the board ($M=2.5$), highest ratings were given for items stating that the instructor was acting naturally ($M=4.3$), the instructor was joyous and smiling ($M=4.1$), and the instructor achieved eye contact with learners ($M=4.1$),

Table 2
Correlations between Verbal Immediacy Behavior, Nonverbal Immediacy Behavior, Social Presence, and Satisfaction

		Nonverbal	Verbal	Social Presence	Satisfaction
Nonverbal	Pearson Correlation	1.000	.524**	.312**	.400**
	Sig.(2-tailed)		.000	.000	.000
	N	211	211	206	207
Verbal	Pearson Correlation	.524**	1.000	.412**	.476**
	Sig. (2-tailed)	.000		.000	.000
	N	211	211	206	207
Social Presence	Pearson Correlation	.312**	.412**	1.000	.768**
	Sig.(2-tailed)	.000	.000		.000
	N	206	206	207	203
Satisfaction	Pearson Correlation	.400**	.476**	.768**	1.000
	Sig. (2-tailed)	.000	.000	.000	
	N	207	207	203	208

** Correlation is significant at the .001 level (2-tailed).

As it can be seen in Table 2, the highest correlation was observed between social presence and level of satisfaction. Regarding this finding, it can be concluded that when learners feel like a part of a community, they feel more satisfied regarding both the instructor and the environment. In addition, correlations of both social presence and level of satisfaction with verbal immediacy behaviors were higher than those with nonverbal

immediacy behavior. That is, learners perceive verbal messages and behavior more positively than nonverbal messages or behaviors.

Table 3
Correlation between Verbal Immediacy Behavior, Nonverbal Immediacy Behavior, and Satisfaction Subfactors

		Satisfaction with environment	Satisfaction with teacher	Nonverbal	Verbal
Satisfaction environment	with Pearson Correlation	1.000	.738**	.260**	.288**
	Sig.(2-tailed)		.000	.000	.000
	N	208	208	207	207
Satisfaction teacher	with Pearson Correlation	.738**	1.000	.459**	.562**
	Sig. (2-tailed)	.000		.000	.000
	N	208	208	207	207
Nonverbal	Pearson Correlation	.260**	.459**	1.000	.524**
	Sig.(2-tailed)	.000	.000		.000
	N	207	207	212	211
Verbal	Pearson Correlation	.288**	.562**	.524**	1.000
	Sig. (2-tailed)	.000	.000	.000	.
	N	207	207	211	211

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

Investigating the table above, it is observed that level of satisfaction with the environment did not have strong correlations with verbal and nonverbal teacher immediacy behavior. Level of satisfaction with the teacher has moderate correlations with verbal and nonverbal teacher immediacy behavior, although correlations with verbal behaviors were higher than those for nonverbal behaviors.

4. CONCLUSION AND IMPLICATIONS

Academic Tutoring services carried out in OEF at Anadolu University are known as an environment in which the learners see themselves, their teachers and other learners as real individuals. In this study, the effects of this service forming learners' perceptions of social presence are discussed.

The relationship between the teacher's verbal and non-verbal immediacy behaviors and the learners' perceptions of social presence and levels of satisfaction is investigated in this study. The primary aim of the study was to determine the direction of the relationship between the teacher's immediacy behaviors and learners' perceptions of social presence. It was found that there is a moderate and positive correlation between them. Studies in the literature, similarly, report that teachers' verbal and nonverbal immediacy behaviors have a positive influence on the learners' perceptions of social presence (Anderson & Anderson 1982; Gunawerdana & Zittle, 1997). On the other hand, it can be said that creating the feeling of social presence in the learner is a significant determinant of the efficiency of learning. Findings of the study parallel the findings of previous research in the literature. The results indicated that learners see themselves as a part of the community and learn better when they attend Academic Tutoring services. They emphasized that they use this service especially for being successful in the exam and that they will encourage their friends to take advantage of this service.

Regarding the dimensions that create the feeling of social presence in the learner, Williams and Ware (1976) emphasized that encouraging learners to participate in the lesson, providing individual feedback, and communicating with learners outside the classroom may be effective. In this study, learners' perception of social presence has been found close to the critical value of 3.41. This finding indicates that learners cannot benefit from the teacher's verbal immediacy behaviors to the desired extent. A plausible explanation for this can be the abundance of the learners participating in Academic Tutoring services. Therefore, as opposed to what the literature suggests, in this study, learners couldn't evaluate the teacher positively about giving individual feedback, and communicating with learners outside the classroom.

The second and third aims of the study targeted determining the direction of the relationship between teachers' verbal and nonverbal immediacy behaviors and learners' satisfaction levels concerning the environment and the teacher. As a result of the analyses carried out, a moderate relationship has been found between those variables.

When the level of satisfaction concerning the environment is associated with the teacher's verbal (.288) and nonverbal (.260) immediacy behaviors, it is indicated that neither immediacy behavior has a significant influence on determining the satisfaction level of the learners concerning the environment. This finding can be explained by the learners' desire to make use of this environment just for being successful in the exams (M=3.99). Although learners wanted to utilize Academic Tutoring services for each course (M=4.1), they perceive this environment as an opportunity that will help them having a degree. In the ARCS (Attention Relevance Confidence Satisfaction) Model proposed by Keller (1987), learners' desire to have a degree as a result of learning is seen as one of the most significant external factors in determining learners' level of satisfaction concerning learning. Similarly, in this study, it can be said that learners' desire to make use of this service to pass their exams has a significant influence on determining the level of satisfaction concerning the environment.

When learners' level of satisfaction concerning the teacher is associated with the teacher's verbal (.562) and nonverbal (.459) immediacy behaviors, it is observed that verbal immediacy behaviors increase the satisfaction levels of learners. Presenting the content as respecting different points of views (M=3.57), asking questions related to the content (M=3.48), and using the expression 'we' while presenting the content (M=3.41) are evaluated as the most prominent factors which satisfy learners about the teacher's verbal immediacy behaviors.

On the other hand, teacher's nonverbal immediacy behaviors such as having eye contact with learners (M=4.06), acting in a natural way (M=4.27), and using facial expressions while presenting the content (M=3.91) are also appraised to be positive factors in increasing learners' satisfaction levels concerning the teacher. In parallel with the previous research findings in the literature, immediacy behaviors of teachers who address their students with their names, have eye contact, and smile while presenting the content contribute to learners' satisfaction and social presence levels in a positive way. (Christophel, 1990; Gorham, 1988; Neuliep, 1997; Sanders&Wiseman, 1990; Walker Heckman, 1991).

In addition to these findings, it can be seen that there is a high correlation between learners' perceptions of social presence and their satisfaction levels (.768). While this suggests that learners perceive Academic Tutoring services as an environment which enables them to be socially present, it may be inappropriate to reach conclusions merely based on the findings of this study. More detailed studies with the similar objectives should be conducted and their results should be compared with those of this study. Particularly, it is suggested that more qualitative studies investigating the effects of face-to-face environments in distance education on learners' social presence should be conducted to support quantitative findings. Besides, investigating the relationship between the perception of social presence and other components of the OEF (television, internet, videoconferencing, etc) may provide more comprehensive information about future applications.

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