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Prediction of public and private university students' communication apprehension with lecturers

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Abstract

The aim of the present study is to examine whether communication apprehension with lecturers among public and private university students may be predicted with respect to general communication apprehension and certain variables. The study was conducted 1091 (585 female, 506 male) first and fourth year students from a public (n=679) and a private university (n=412). Results showed that total and subscales of CALS predicted mostly by PRCA-24 total scores. Variables related with university life; type of university, being student from faculty of education, faculty of medicine, having high GPA, preferred seat in the classroom were also other predictors of CALS.
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Keywords: Communication apprehension; lecturer; university students; academic achievement; regression analysis.

2. Introduction

Communication apprehension is a communication-related type of social anxiety fuelled by the anticipation that one's communication behavior will make a negative impression on others in a variety of social contexts (Leary & Kowalski, 1995). It has also been defined as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons" (McCroskey, 1980). Such anxiety may appear in a work environment, in the presence of public or in the classroom when interacting with teachers (McCroskey, 1980). Communication apprehension with teachers is defined as a specific type of anxiety experienced by students when they communicate with their teachers (Daly & McCroskey, 1984, cited in: Abrams, 1997).

In fact, communication apprehension is an individual's emotional reaction to the process of communication or to the other party. Students who experience such anxiety feel tense and uncomfortable in the classroom and have little enthusiasm to communicate with their peers or teachers. Due to this anxiety, they may hesitate to talk, forget what they intended to say, or make incessant mistakes as they talk. At the same time, students with communication apprehension report a difficulty in concentrating in the current social context as well as anxious reactions of sweating and trembling during speech (Tiona & Sylvia, 2004). The tension, nervousness and embarrassment that these students experience usually increase when they are forced to communicate in their classes, and their

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discomfort becomes even more heightened if others notice this situation (Mccroskey, Beatty, Kearney & Plax, 1985). This results in a decrease of the quality and quantity of students' communication behaviors (Allen & Bourhis, 1996). While previous studies (Rubin & Jordan, 1997; Roach, 1999; Gardner et al., 2005) have pointed to a negative relationship between communication apprehension and communication competencies, Horwitz (1991) found that students with communication apprehension spoke less fluent in the classroom than in other situations.

Communication apprehension leads to a weakening of interpersonal relationships and academic performance (Ayers et al., 1993; Ayers & Crosby, 1995). Studies have also revealed that students with a high level of communication apprehension have higher levels of anxiety and difficulty in retaining academic knowledge (Boot & Butterfield, 1988); and a negative relationship exists between communication apprehension and cognitive performance, mathematics and English achievement (Bourhis & Allen, 1992). In addition, students with a high level of communication apprehension were observed to refrain from participating in class discussions and remain silent in the classroom, while those with a lower level of communication apprehension sat in front row seats, participated in classroom discussions and preferred challenging topics for discussion (Tiona & Sylvia, 2004).

Studying communication apprehension- a prominent topic of research in the West – in Eastern cultures is particularly important because the tension while communicating with an authority is an expected outcome in the collectivist cultures of the East. For instance, communication apprehension and classroom communication apprehension is widespread in China due to the obedient role of the student and the authoritarian role of the teacher (Biggs & Watkins, 2001; Hu & Grove, 1999; Salili, 2001). In intercultural studies, the communication apprehension scores of Chinese (Zhang, Butler & Pryor, 1996; Hsu, 2004; Zhang, 2005) and Japanese (Burt, Butler & Boehringer, 2005) students were significantly higher than those of American students.

Turkish culture has similarities with Japanese and Chinese culture in terms of its collectivist social background. It is true that with the influence of various political, economic and cultural factors, with the prominent changes in the social structure of the country, and the developments in the education system, the traditional-authoritarian approach used in Turkish educational institutions has given way to a democratic-modern approach. In addition, Turkey increasingly promotes an approach that values students' classroom relations and interactions in line with their developmental characteristics (Şentürk 2007). In the Turkish culture which still reserves the trails of collectivism, tension in some degree is an expected outcome of communication with an authoritative figure. Thus, considering the influence of a culture of authority, communication apprehension of the students' with lecturers in the universities has been a neglected issue. It is particularly important for the construction of preventive studies to study communication apprehension with lecturers. Since the university students may fail to make use of the developmental experiences offered by university life due to communication apprehension when they will find themselves engaged in professional activities and having to act like an adult in multiple communication contexts soon.

The aim of the present study is to examine whether communication apprehension with lecturers among public and private university students may be predicted with respect to general communication apprehension and certain variables relating to university life (i.e., being a first or fourth-year student, academic achievement, preferred seat in the classroom, not being a.member of students club, number of students in the class, faculty, and being a public or private university student).

2. Method

2.1. Participants

The study was conducted on a total of 1,091 (585 female, 506 male) first and fourth year students from a public (n=679) and a private university (n=412). Data were collected from the same department/faculty in both universities.

2.2. Measures

2.2.1. The personal report of communication apprehension (PRCA-24)

PRCA-24 is a 5-interval Likert-type self report measure. It has been developed with the intention of measuring communication apprehension that comprises statements involving feelings related communication with others with four situational factors (group discussion, meetings, interpersonal, public speaking). The PRCA-24 is the most widely used scale for assessing CA and has been extensively validated (McCroskey, 1982). McCroskey (1984)

reported an internal reliability of .94. In order to assess CA in Turkey, the English version of the PRCA-24 was translated into Turkish by a bilingual Turkish lecturer. In this research it was found PRCA-24 total scores' Conbach-Alpha .80. Accordingly the results of exploratory factor analysis with Turkish college students no evidence of original factor structure was found. Therefore, only PRCA-24 total scores were used as independent variables and PRCA-24's subscale scores were not taken into evaluation.

2.2.2. The Communication apprehension with the lecturers scale (CALS)

CALS is a five point Likert type self report measure. The CALS was designed with the purpose of measuring communication apprehension of university level students with their lecturers. As a result of exploratory factor analysis carried out with two samples during construct validity studies, a three factor scale of 19 items, which explains 54.2% of the total variance, was obtained. CALS is composed of three factors (dimensions) which have been determined to be significant. The first of these factors explains 21.9% of the total variance for the scale, the second 20.9%, and the third 11.4%. After factor rotation, the following names "inclined personal traits", "perceived threat concerning lecturer behavior", and "the tendency to stay away from the lecturer" were found to be appropriate for the subscale with seven items in the first factor, with eight items in the second, and with four items in the third subscale, respectively. The scale, a five-point Likert, was given the following response categories: Never=1, Rarely=2, Sometimes=3, Frequently=4, Always=5. Thus the maximum point one could get from the scale was 95 and the lowest was 19. As the points increased, so did the students' communication apprehension with the lecturer. The Cronbach-Alfa coefficient computed for internal consistency reliability studies of CALS has been found to be .82, the value for the first subscale .86, the second subscale .87 and the third subscale .68. Test-retest reliability of CALS is .90 (Eren-Gümüş & Kolburan-Geçer, 2008).

This research data was confirmed CALS original factor structure, in addition more powerful evidence was found. The explained total variance 60%; the first factor explains 20 % of the total variance, the second 27 %, and the third 13 %. The Cronbach-Alfa was found to be .90 for CALS, the value for the first subscale .89, the second subscale .91 and the third subscale .68.

In order to collect data about independents variables that are definite as dummy variable, Personal Information Form was used.

2.3. Procedures

First of all, in order to collect data, the permission was taken from the university administrations. The PRCA-24 and CALS which were traslated into Turkish and personal information form were given to the students and the data was collected simultaneously from the students of both universities' same faculties and departments. Data was analyzed by using SPSS.

2.4. Data analysis

Multiple linear regression (hierarchical) analysis was used to analyze the data. To begin with, the Kolmogorov-Simirnov test was used to assess the normality of the distribution of scores, as a result of which they were first turned into *z* and then *t* scores as the *p* value appeared below .05 and the scores deviated significantly from normal distribution. The independent variables not included by the Personal Report of Communication Apprehension-24 (PRCA-24) (gender, academic achievement, preferred seat in the classroom, student club membership, number of students in class, year of study, faculty, and studying at public or private university) were defined as dummy variables in categories. Then, gender (females, males), university (public, private), faculty (education, law, medicine, administrative sciences, engineering, communication, and architecture), year of study (1st and 4th year), number of students in class (first group 21-40, second group 41-60, third group 61-80, fourth group 81-100, fifth group 101-200), academic achievement (with respect to GPA, first group 45-55, second group 56-65, third group 66-75, fourth group 76-85, fifth group 86-100), preferred seat in the classroom (front rows, middle rows, back rows), and club membership (yes, no) were tested to see if they were significant predictors of the Communication Apprehension with the Lecturers Scale (CALS) total scores and subscale scores.

3. Results

Data obtained were initially analyzed by using standard multiple regression analysis, and those with a smaller *t* values than 0,05 were identified as predictors of dependent variables. These variables were analyzed from highest to smallest β values. In the first step, hierarchical regression analysis was performed on PRCA-24 scores with the highest β value, and in the second step, it was performed on the group variables of gender and university life.

Table 1. Hierarchical regression analysis results for the predictors of CALS total scores

Variables	Step 1			Step 2		
	β	T	p	β	t	p
PRCA-24 Total score	.330	11.680	.000	.420	15.254	.000
Public uni.				.306	10.979	.000
Educ.fac.				.191	7.211	.000
Med.fac.				.164	6.078	.000
GPA(86-100)				-.085	-3,217	.001
Not being a.memb. stud.club				.060	2.241	.025
R		.334			.513	
R²		.111			.263	
F		136.434			64.550	
p		.000			.000	

Table 1 shows that CALS total scores and PRCA-24 total scores had a significant and positive relationship in the first step, with R=,334. In the second step, a positive and significant relationship was obtained with the group variables which were significant predictors (studying at a public university, studying at faculty of education, studying at faculty of medicine, and student club membership), and a negative and significant relationship was obtained with the variable having highest academic achievement (GPA) ($p<,05$), and the R value was elevated to ,513. An examination of R² values showed that PRCA-24 total scores accounted for 11% of the variance, and that the total variance explained increased to 26% in the second step when group variables were included in the analyses.

Table 2. Hierarchical regression analysis results for the predictors of CALS's first subscale- Inclined Personal Traits- scores

Variables	Step 1			Step 2		
	β	t	p	β	t	p
PRCA-24 Total score	.386	13.811	.000	.463	16.847	.000
Public uni.				.293	10.696	.000
Educ.fac.				.165	6.229	.000
Med.fac.				.116	4.376	.000
Preferred seats (mid row)				.083	3.217	.001
GPA (86-100)				-.069	-2.634	.009
Freshmen				.062	2.356	.019
R		.386			.530	
R²		.149			.281	
F		190.740			60.413	
p		.000			.000	

Table 2 presents a significant and positive relationship between "inclined personal traits" subscale scores and PRCA-24 total scores in the first step, and R=.386 was obtained. In the second step, a positive and significant relationship was obtained with the group variables which were significant predictors (studying at a public university, studying at faculty of education, studying at faculty of medicine, being a first-year student, and preferring to sit in the middle rows), and a negative and significant relationship was obtained with the variable having highest achievement (GPA) ($p<.05$), and the R value was elevated to .513. An examination of R² values showed that PRCA-24 total scores accounted for 15% of the variance, and that the total variance explained increased to 28% in the second step when group variables were included in the analyses.

Table 3. Hierarchical regression analysis results for the predictors of CALS's second subscale- Perceived Threat concerning Lecturer Behavior- scores

Variables	Step 1			Step 2		
	β	t	p	β	t	p
PRCA-24 Total score	.235	7.967	.000	.303	10.523	.000
Private üni.				-.241	-8.247	.000
Educ.fac.				.162	5.638	.000
Med.fac.				.145	5.032	.000
Male				-.120	-4.298	.000
Preferred seats (mid row)				.106	3.851	.000
GPA (86-100)				-.088	-3.190	.001
Architect fac.				-.077	-2.626	.009
Num. of stu. class(101-200)				.064	2.193	.029
R		.235			.450	
R²		.055			.202	
F		63.478			30.465	
p		.000			.000	

Table 3 shows that there was a significant and positive relationship between the "perceived threat concerning lecturer behavior" subscale scores and PRCA-24 total scores in the first step, with R=.235. In the second step, a positive and significant relationship was obtained with the group variables which were significant predictors (studying at faculty of education, studying at faculty of medicine, preferring to sit in the middle rows, and being in the most crowded classroom), and a negative and significant relationship was obtained with the variables of studying at a private university, being male, having highest achievement (GPA), and studying at faculty of architecture (p<.05), and the R value was elevated to .450. An examination of R² values showed that PRCA-24 total scores accounted for 6% of the variance, and that the total variance explained increased to 20% in the second step when group variables were included in the analyses.

Table 4. Hierarchical regression analysis results for the predictors of CALS's third subscale - Tendency to Stay away from the Lecturer – scores

Variables	Step 1			Step 2		
	β	t	p	β	t	p
PRCA-24 Total score	.260	8.868	.000	.314	10.735	.000
Private uni.				-.214	7.266	.000
Med.fac.				.128	4.499	.000
Educ.fac.				.119	4.174	.000
Preferred seats (front row)				-.097	-3.392	.001
Male				.092	3.192	.001
Not being a.memb. stud.club				.084	2.971	.003
R		.260			.414	
R²		.067			.171	
F		78.636			31.881	
p		.000			.000	

As shown in Table 4, a significant and positive relationship existed between the "tendency to stay away from the lecturer" subscale scores and PRCA-24 total scores in the first step, with R=.260. In the second step, a positive relationship was obtained with the group variables which were significant predictors (studying at faculty of education, studying at faculty of medicine, being male, and not becoming a member at student clubs), and a negative and significant relationship was obtained with the variables of studying at a private university and preferring front row seats (p<.05), and the R value was elevated to .414. An examination of R² values showed that PRCA-24 total scores accounted for 7% of the variance, and that the total variance explained increased to 17% in the second step when group variables were included in the analyses.

4. Discussions

The results of this study have shown that PRCA-24 total scores are the most important predictor of CALS total and sub dimension scores. The significant and positive relationship observed between students' CALS total scores, subscale scores and PRCA-24 total scores confirms the expectation that it is a natural predictor of communication apprehension with lecturers, which is a specific type of general communication apprehension. However, correlation values were not as high as expected. This finding may have been due to the limitations of PRCA-24 within the Turkish culture, as well as the different constructs measured by both scales and the fact that communication apprehension with lecturers is only a specific type of general communication apprehension with different predictors. The results suggest that private university students have lower levels of communication apprehension with lecturers; students at faculties of education and medicine have higher levels of apprehension; and these are important predictors of CALS scores. At private universities, the communication between lecturers and students is normally monitored and duties such as providing new opportunities of communication and encouraging the students for communication are attached to the lecturers. Owing to this, it may be claimed that private university students, who have a high socioeconomic status and pay rather high fees for their education, expect to experience less tension when communicating with their lecturers and are more willing to establish such communication. However, it is worth noting that students of education and medicine faculties from both public and private universities had higher levels of communication apprehension with lecturers. This finding may have been attributed to the fact that lecturers of these faculties are more authoritarian, as well as to the socio-psychological background of students of these faculties. However, it is obvious that this interpretation needs to be supported by research.

The negative relationship between having high academic achievement and communication apprehension with lecturers (CALS total score and first and second subscales) is directly corroborated by Bourhis and Allen's (1988) findings, and indirectly by Boot and Butterfield (1988), Ayers et al. (1993), and Ayers and Crosby (1995).

Another significant predictor of CALS subscale scores is the preferred seat in the classroom. The positive relationship between first and second subscale scores and a preference for middle row seats may be explained by the assumption that front row seats are mostly preferred by students willing to communicate with the lecturer while back row seats are preferred by those who are less interested in the lesson. Since lecturers tend to keep contact with the students at the back, in order to them join the lecture, students with communication apprehension prefer middle row seats so as not to be forced to communicate with the lecturer. On the other hand, the low "tendency to stay away from the lecturer" scores obtained by students in the front row seats also constitute a meaningful and consistent result which is in line with Tiona and Sylvia's (2004) results.

The negative correlation between not being a member of a student club, CALS total scores and the "tendency to stay away from the lecturer" subscale may show that students with communication apprehension refrain from club membership which involves voluntary communication with both students and lecturers.

A positive relationship was noted between "perceived threat concerning lecturer behavior" subscale scores and studying at a crowded classroom. This finding may be attributed to the tendency of lecturers to act more authoritarian when faced with crowded classrooms and difficulties in managing the classroom properly. According to the results, males have decreased "perceived threat concerning lecturer behavior" and increased "tendency to stay away from the lecturer".

5. Conclusion and Recommendation

The results of the study examining whether communication apprehension with lecturers among public and private university students may be predicted with respect to general communication apprehension and certain variables, indicated that total and subscales scores of CALS were predicted mostly by PRCA-24 total scores. Variables related with university life; type of university, being student from faculty of education, faculty of medicine, having high GPA, preferred seat in the classroom were also other predictors of CALS.

The important limitation of this study is not being able to test whether the subscale's of PRCA-24 is a predictor of CALS's scores. For accumulation of knowledge and preventive studies, it is important to study university students' communication apprehension and its specific type – communication apprehension with lecturers – on different samples and in multiple dimensions.

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