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ATINER's Conference Paper Series
HEA2012-0271

**Determining the Levels of
Communication Skills of Faculty
of Health Sciences Students**

Türkan Yıldırım

**Ankara University, Faculty of Health Sciences,
Department of Health Services Management
Turkey**

Bayram Göktaş

**Ankara University, Faculty of Health Sciences,
Department of Health Services Management
Turkey**

İ. H. Cankul

**Gulhane Ministry Medical Academy,
Department of Health Services Management
Turkey**

Athens Institute for Education and Research
8 Valaoritou Street, Kolonaki, 10671 Athens, Greece
Tel: + 30 210 3634210 Fax: + 30 210 3634209
Email: info@atiner.gr URL: www.atiner.gr
URL Conference Papers Series: www.atiner.gr/papers.htm

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ISSN 2241-2891

15/11/2012

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President
Athens Institute for Education and Research

This paper should be cited as follows:

Yıldırım, T., Gökteş, B. and Cankul, İ. H. (2012) “**Determining the Levels of Communication Skills of Faculty of Health Sciences Students**” Athens: ATINER'S Conference Paper Series, No: HEA2012-0271.

Determining the Levels of Communication Skills of Faculty of Health Sciences Students

Türkan Yıldırım

**Ankara University, Faculty of Health Sciences,
Department of Health Services Management
Turkey**

Bayram Göktaş

**Ankara University, Faculty of Health Sciences,
Department of Health Services Management
Turkey**

İ. H. Cankul

**Gulhane Ministry Medical Academy,
Department of Health Services Management
Turkey**

The aim of this study is to determine the level of communication skills of Ankara University, Faculty of Health Sciences students. The population of the research consisted of 1,601 students studying at six different departments (Nutrition and Dietetics, Child Development, Midwifery, Nursing, Health Services Management and Social Work) during April 2012. In total 66% (1,062) of the students were reached, but 937 questionnaires were included in the evaluation. In the research, personal information form and the inventory of communication skills were used. Statistical comparisons were performed by using SPSS 15.0. Descriptive statistics were used to identify the personal characteristics of the population and given by using the frequency, percentage, arithmetic mean and \pm standard deviation. Parametric tests (Student's t-test and ANOVA) were used for the normally distributed variables with Post Hoc comparisons using the Fisher's Least Significant Difference test (LCD) ($p < 0.05$). A significance level of 0.05 was chosen. Cronbach's alpha reliability coefficient of the inventory was found to be 0.77. A statistically significant difference was determined between the students in the dimension of mental communication skills and the total inventory according to the gender. The difference was statistically significant between the students in the behavioural dimension of communication skills and total communication skills by the departments in which they were studying. A statistically significant difference was determined in the dimension of emotional communication by the residence of students surveyed. As a result, it was found that the level of communication skills of students were not affected by the age, years of study, family type, and

number of siblings but affected by gender, department, place of residence and number of books read. Arrangement of different activities can be suggested in the level of education in order to develop communication skills of students of health sciences faculty who have important roles in delivering health services.

Key words: Communication skills, students, Ankara University

Contact Information of Corresponding author:

Introduction

People need to effective communication to better understand and get to know each other, have perform better and solve problems easier in an organization (Güney, 2007). Communication occurs whenever one person, in some way or another, transmits a message of some sort and someone else picks it up and interprets it (Web, 2011) and is expressed socialization on the basis of these processes. Thus, communication can be considered as a process between the individuals (interpersonal), as well as a process at the community level (interactive) through them (İnceoğlu, 2010). Communication is happening all the time when people are together. Every social situation entails communication and therefore calls up communication skills (Koprowska, 2005: 6).

There are many definitions of “communication”. Communication is transferred attitude, knowledge, thoughts, feelings and behaviours from the source to the destination. Another description is that communication is to transfer information from one person or group to another person or group. Communication is mainly to transmit of knowledge, ideas or emotions through symbols from one person or one group to another (MEB, 2011). Therefore, communication is an interaction of some kind between at least two people (Web, 2011).

Communication is “all stages concerning two way relationships between people and environment”. It is dynamic, smooth, continuous and variable process. Communication can also be defined as “transfusion or exchange of the emotions, thoughts, ideas and meanings in between sender(s) and receiver(s) (Guo, 2011).

The main objective of people being communicate each other is to resolve some of the basic requirements. The effectiveness of human communication system is also useful for the individuals in understanding information about themselves, correction and therefore for guiding behaviours (Pektekin, 1991).

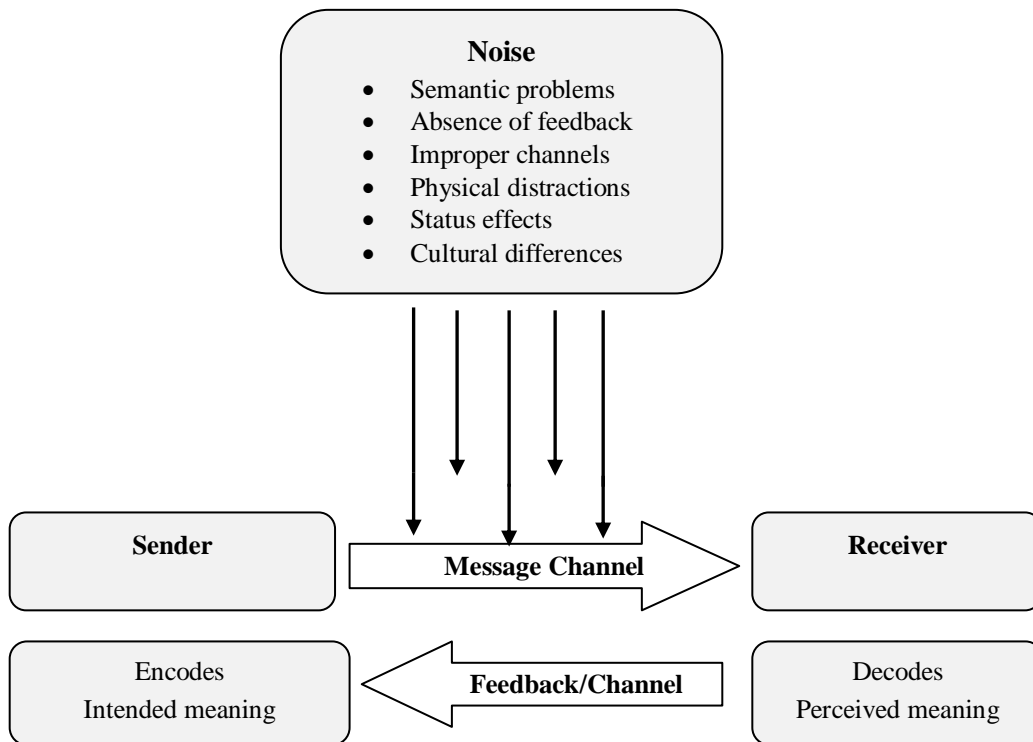
The key elements in the communication process are shown in Figure 1. They include a sender, who is responsible for encoding an intended message into meaningful symbols, both verbal and nonverbal. The message is sent through a communication channel to a receiver, who then decodes or interprets its meaning. This interpretation may or may not match the sender’s original intentions. Feedback, when present, reverses the process and conveys the receiver’s response back to the sender (Lombardi et. al., 2007).

The sender needs to adapt the message in a way that can be received accurately and the receiver needs to share many aspects of the sender’s context (cognitions, culture, language, and symbolism) in order to decode it correctly. For example, if a nurse tells a patient that the doctor is concerned about the patient’s ‘discharge’, the patient needs to understand the context of ‘discharge’ to know whether the nurse means that a physical body discharge is worrying the doctor or that the doctor is reluctant to send the patient home (Web, 2011).

This type of model explains more than a two-way interaction. In this model, the sender is getting feedback on how the message has been received. In the

example above, the patient hearing the doctor's concern about discharge asks the nurse where the discharge is coming from. The nurse then adjusts her message and explains that the doctor is worried that the patient might not cope well at home (Web, 2011).

Figure 1. The Process of Interpersonal Communication



Source: Lombardi et al., 2007.

The factors that affect the sender can be listed as communication skills, attitudes, experience and knowledge of the sender and environmental-social-cultural factors (Güney, 2007).

Communication competence includes more than the ability to produce messages that effectively achieve personal goals. Successful communication needs mastering skills associated with several distinguishable communication processes, including interpreting people and social situations (*social perception*), producing messages (*message production*), and receiving and processing messages generated by others (*message reception*) (Burleson, 2006).

Communication skill includes investigation and integration of possible viewpoints and identifications concerning any issues faced by people. A person who has these skills may be capable of giving a meaning to in many ways rather than a single point of the view in the face of warning, criticism or complaint against him (Özer, 2000). Communication implies much more than the possession or provision of information; it is a behavioural skill (Aina and Ogunbiyi, 2012).

Good communication skills for individuals working in the every kind profession will make the communication process in human relations more robust. But the necessity of knowledge of these skills in professions in where human relationships are extensive is inevitable. One of the working field in which human relations are extensive and good communication skills are needed to maintain the system in a healthy way is the field of health and social care.

Health and social care teams offer particular challenges for a range of historical organizational reasons. Goble suggests that different professions have different priorities for care to fulfil their roles and different traditional ways of exercising power. For instance, while mental health nurses may focus on the patient's quality of life, social services may prioritize an unwell schizophrenic person's rights to liberty (Webb, 2011).

Health and social care professionals need good communication skills to develop positive relationships and share information with people using services. They also need to be able to communicate well with people's families and/or carers and their own colleagues and other professionals (Aina & Ogunbiyi, 2012). Thus, communication is important not only to professional-patient interaction but also within the healthcare team (Dangerfi et al., 2004; Aina & Ogunbiyi, 2012).

The benefits of effective communication include good working relationships and increased patient satisfaction. Effective communication may increase patient understanding of treatment, improve compliance and, in some cases, lead to improved health. It can also make the professional-patient relationship a more equitable one (BMA, 2004; Dangerfi et al., 2004; Aina & Ogunbiyi, 2012).

Therefore, communication is identified as one of the essential skills that students must acquire in order to make progress during their education and training to become qualified health professional. Accordingly, this study aims to determine differences in terms of communication skills among the Faculty of Health Science's students studying at different departments.

Method

Study sample

This study is a descriptive field research to determine the level of communication skills of the Faculty of Health Sciences' students at the University of Ankara.

The target population of the present study was the students (1,601) registered at six different departments (Nutrition and Dietetics, Child Development, Midwifery, Nursing, Health Services Management and Social Work) at the faculty, during April 2012. Since some students were absent at the faculty during the time of study or reluctant to participate in the research, 1,062 students responded the questionnaire. In total 63.3% of the students could be

reached. Of these, 125 students had not completed central parameters. Accordingly, 937 questionnaires were investigated.

The communication skills inventory was used to collect information regarding students' communication skills level. Moreover, demographic and personal information of the students were also collected. Before the distribution of the questionnaire, students were briefed about the communication skills attitude scale, objective of its application and method of filling it. The students were assured that participation would be voluntary and confidential and would not affect their academic success.

The Communication Skills Inventory was first developed by Ersanlı & Balci (1998) and has 45 items measuring communication skills of mental, emotional, and behavioural perspective. The participants were required to indicate the degree to which each statement applied to them by marking "never =1; seldom=2; sometimes=3; usually=4; always=5. Higher scores on this scale indicated higher levels of communication skills.

Each sub-scale can be evaluated separately or the level of individual's communication skills can be looked considering the sum of the scale.

The inventory consists of three dimensions. There are 15 items that measure each dimension. These are mental dimension (1, 3, 6, 12, 15, 17, 18, 20, 24, 28, 30, 33, 37, 43, 45), emotional dimension (5, 9, 11, 26, 27, 29, 31, 34, 35, 36, 38, 39, 40, 42, 44) and behavioral dimension (2, 4, 7, 8, 10, 13, 14, 16, 19, 21, 22, 23, 25, 32, 41).

The lowest and highest score of overall scale can be 45-225 points. The lowest and highest score of each subscale can be 15-75 points. Increasing in scores of subscale means that individuals are better in that sub-scale in terms of communication skills.

Data Analysis

The survey contains the personal details questionnaire including age, gender, departments of students, year of study, number of siblings, place of residence, type of family and number of books read in a year.

Descriptive statistics were used to identify the personal characteristics of the population and given by using the frequency, percentage, arithmetic mean and \pm standard deviation. Parametric tests (Student's t-test and ANOVA) were used for the normally distributed variables with Post Hoc comparisons using the Fisher's Least Significant Difference test (LCD) ($p < 0.05$). A significance level of 0.05 was chosen. Cronbach's alpha reliability coefficient of the inventory was found to be 0.77. The SPSS statistical package (version 15.0) was used in the analysis.

Results

The demographic and personal information and communication skills of the participants are presented in Table 1.

As illustrated in Table 1, The age of 49.2% enrolled students ranged from 17 to 20 years. The majority of students were female ($n=727$, 82.9%) The most participation in the study was provided by the students of the Department of Nursing (24.8%) and the least participation was provided by the students of the Department of Child Development (8.2%). This is because of the fact that the Nursing Department has the most number of students while the Child Development Department has the least number of students in the faculty. With respect to year in the faculty 29.4% of the students were freshmen, 31.6% were sophomores, 25.6% were juniors and 13.5% were se-niors. In terms of number of siblings, 34% of the students had two sisters/brothers and 85.5% grew up in a nuclear family. According to the place of residence, 50.1% of the students stay in a student dormitory. The percentage of reading in the range of 0-5 books in a year was 30%.

Table 1. Demographic and Personal Characteristics of the Participants

Variables	Type	n	%
Age (years) ($n=937$)	17-20	461	49.2
	21-24	457	48.8
	≥ 25	19	2.0
Gender ($n= 937$)	Female	777	82.9
	Male	160	17.1
Department ($n=937$)	Health Services Management	135	14.4
	Social Work	148	15.8
	Nursing	232	24.8
	Midwifery	191	20.4
	Child Development	77	8.2
	Nutrition and Dietetics	154	16.4
Year of Study ($n=937$)	Freshman (1)	275	29.4
	Sophomore (2)	295	31.6
	Junior (3)	239	25.6
	Senior (4)	126	13.5
Place of Residence ($n=933$)	Living with Family	174	18.6
	Living in Student's Hostel	467	50.1
	with Relatives	25	2.7
Number of Siblings ($n=936$)	with Friends	267	28.6
	an only child	91	9.7
	1	318	34.0
	2	264	28.2
Type of Family ($n=933$)	≥ 3	263	28.1
	Nuclear Family	798	85.5
	Extended Family	135	14.5
Number of Books Read in a Year ($n=866$)	0-5	260	30.0
	6-10	256	29.6
	11-15	151	17.4
	16 -20	62	7.2
	≥ 21	137	15.8

There were no statistically significant differences in all dimensions of communication skills based on the participants' age (see Table 2).

Table 2. The Level of Communication Skills of the Participants by Age

Dimensions	Age	n	Mean	Std. Deviation	f	p value
Mental	17-20	461	29.88	5.53	1.703	0.183
	21-24	457	29.60	5.84		
	≥ 25	19	27.52	4.40		
Emotional	17-20	461	35.48	4.97	2.061	0.128
	21-24	457	35.70	5.77		
	≥ 25	19	38.00	3.87		
Behavioral	17-20	461	32.69	5.44	0.758	0.469
	21-24	457	32.36	5.61		
	≥ 25	19	31.47	4.38		
Total Inventory	17-20	461	98.07	12.74	0.137	0.872

In terms of gender, it was found a statistically significant difference in the mental communication skills ($p=0.011$) and the total inventory ($p=0.012$) between the participants. The total inventory mean score was determined higher for male students (100.26 ± 13.57) (Table 3).

Table 3. The Level of Communication Skills of the Participants by Gender

Dimensions	Gender	n	Mean	Std. Deviation	f	p value
Mental	Female	777	29.48	5.61	-2.543	0.011
	Male	160	30.73	5.85		
Emotional	Female	777	35.52	5.36	-1.562	0.119
	Male	160	36.25	5.37		
Behavioral	Female	777	32.35	5.47	-1.926	0.054
	Male	160	33.27	5.61		
Total Inventory	Female	777	97.36	13.22	-2.510	0.012
	Male	160	100.26	13.57		

There was a statistically significant difference in the dimension of behavioural communication skills ($p=0.021$) and the total inventory ($p=0.016$) among the participants based on the departments (Table 4). This difference was found between the departments of midwifery and nursing, midwifery and nutrition and dietetics, child development and nutrition and dietetics according to the results of LSD test. Further, the students of the Midwifery Department had a lower behavioral communication skills score mean (31.57 ± 5.59).

Table 4. The Level of Communication Skills of the Participants by Departments

Dimensions	Departments	n	Mean	Std. Deviation	f	p value
Mental	Health Services Management	135	29.91	5.59	1.325	0.251
	Social Work	148	30.02	5.39		
	Nursing	232	29.91	5.86		
	Midwifery	191	28.98	5.87		
	Child Development	77	28.89	5.25		
	Nutrition and Dietetics	154	30.16	5.61		
Emotional	Health Services Management	135	35.57	4.74	2.047	0.070
	Social Work	148	35.68	5.19		
	Nursing	232	35.97	5.40		
	Midwifery	191	34.67	5.84		
	Child Development	77	35.63	5.25		
	Nutrition and Dietetics	154	36.38	5.35		
Behavioral	Health Services Management	135	32.37	4.86	2.658	0.021
	Social Work	148	32.56	5.44		
	Nursing	232	32.82	5.82		
	Midwifery	191	31.57	5.59		
	Child Development	77	31.89	5.03		
	Nutrition and Dietetics	154	33.58	5.58		
Total Inventory	Health Services Management	135	97.86	11.34	2.812	0.016
	Social Work	148	98.26	12.82		
	Nursing	232	98.72	13.93		
	Midwifery	191	95.23	14.36		
	Child Development	77	96.42	12.25		
	Nutrition and Dietetics	154	100.14	13.24		

The difference in the total inventory was determined between the departments of midwifery and nursing, midwifery and social work, midwifery and nutrition and dietetics, child development and nutrition and dietetics. The students of nutrition and dietetics department had a higher mean score for the total inventory (100.14 ± 13.24).

There were no statistically significant differences between the participants for all dimensions of the level of communication skills by the year of study. However, the communication means score of the participants in sophomore had higher than others (Table 5).

Table 5. The Level of Communication Skills of the Participants by the Year of Study

Dimensions	Study	Year of n	Mean	Std. Deviation	f	p value
Mental	Freshman (1)	275	29.50	5.53	0.399	0.754
	Sophomore (2)	295	29.93	5.55		
	Junior (3)	239	29.52	5.76		
	Senior (4)	126	29.86	6.07		
Emotional	Freshman (1)	275	35.24	4.97	1.036	0.376
	Sophomore (2)	295	35.68	5.25		
	Junior (3)	239	35.79	5.66		
	Senior (4)	126	36.19	5.90		
Behavioral	Freshman (1)	275	32.41	5.48	0.865	0.459
	Sophomore (2)	295	32.91	5.32		
	Junior (3)	239	32.20	5.80		
	Senior (4)	126	32.30	5.41		
Total Inventory	Freshman (1)	275	97.15	12.55	0.618	0.603
	Sophomore (2)	295	98.53	13.11		
	Junior (3)	239	97.53	13.85		
	Senior (4)	126	98.36	14.47		

It was determined a statistically significant difference in the emotional communication skills ($p=0.009$) based on the place of residence of participants. This difference was found between the students who were living with friends, family and in a student's hostel. The total inventory score mean of students was found higher for the students who were living with their friends (see Table 6).

Table 6. The Level of Communication Skills of the Participants by Place of Residence

Dimensions	Place of Residence	n	Mean	Std. Deviation	f	p value
Mental	Living with Family	174	29.57	5.38	0.419	0.739
	Living in Student's Hostel	467	29.58	5.56		
	with Relatives	25	29.48	6.57		
	with Friends	267	30.03	5.95		
Emotional	Living with Family	174	35.31	5.06	3.888	0.009
	Living in Student's Hostel	467	35.20	5.33		
	with Relatives	25	36.40	4.71		
	with Friends	267	36.53	5.61		
Behavioral	Living with Family	174	31.91	5.34	1.853	0.136
	Living in Student's Hostel	467	32.36	5.48		

Total Inventory	with Relatives	25	32.48	4.61	2.484	0.059
	with Friends	267	33.11	5.71		
	Living with Family	174	96.80	12.64		
	Living in Student's	467	97.15	13.35		
	Hostel	25	98.36	12.02		
	with Relatives	267	99.68	13.76		
	with Friends					

We found that there were no statistically significant differences for all dimensions of the level of communication skills of participants according to the number of siblings and type of family (Table 7 and 8). However, mean scores of participants who have more than one sibling or more in the dimensions of emotional and behavioral were found high. This means that as the number of siblings increases the perception of communication skills of participants rises.

Table 7. The Level of Communication Skills of the Participants by Number of Siblings

Dimensions	Number of Siblings	n	Mean	Std. Deviation	f	p value
Mental	an only child	91	28.53	6.22	1.450	0.227
	1	318	29.80	5.47		
	2	264	29.92	5.48		
	≥ 3	263	29.73	5.86		
Emotional	an only child	91	35.13	5.85	1.581	0.192
	1	318	35.37	5.25		
	2	264	35.57	5.17		
	≥ 3	263	36.22	5.52		
Behavioral	an only child	91	31.64	5.77	1.284	0.279
	1	318	32.32	5.17		
	2	264	32.67	5.35		
	≥ 3	263	32.85	5.93		
Total Inventory	an only child	91	95.31	14.10	1.682	0.169
	1	318	97.50	12.71		
	2	264	98.17	12.61		
	≥ 3	263	98.81	14.37		

Table 8. The Level of Communication Skills of the Participants by Type of Family

Dimensions	Type of Family	n	Mean	Std. Deviation	f	p value
Mental	Nuclear Family	798	29.71	5.66	0.212	0.832
	Extended Family	135	29.60	5.79		
Emotional	Nuclear Family	798	35.61	5.32	-0.463	0.644
	Extended Family	135	35.84	5.69		
Behavioral	Nuclear Family	798	32.63	5.46	1.765	0.078
	Extended Family	135	31.72	5.71		
Total Inventory	Nuclear Family	798	97.96	13.16	0.632	0.528
	Extended Family	135	97.17	14.39		

According to the number of books read in a year of the participants it was found a significant difference for the mean score of the emotional communication skills. This difference was determined between the students who were reading 5-15 and 11-15 books in a year and reading 6-10 and 11-15 books (Table 9).

Table 9. The Level of Communication Skills of the Participants by Number of Books Read in a Year

Dimensions	Number of Books Read in a Year	n	Mean	Std. Deviation	f	p value
Mental	0-5	260	30.06	5.95	0.318	0.866
	6-10	256	29.65	5.57		
	11-15	151	29.98	5.16		
	16 -20	62	29.40	5.48		
	≥ 21	137	29.65	5.99		
Emotional	0-5	260	35.13	5.81	2.642	0.033
	6-10	256	35.39	5.37		
	11-15	151	36.59	4.47		
	16 -20	62	36.56	6.17		
	≥ 21	137	36.16	4.94		
Behavioral	0-5	260	32.52	5.85	0.586	0.673
	6-10	256	32.63	5.38		
	11-15	151	32.31	4.84		
	16 -20	62	32.24	5.78		
	≥ 21	137	33.19	5.62		
Total Inventory	0-5	260	97.72	14.53	0.410	0.802
	6-10	256	97.67	13.15		
	11-15	151	98.88	11.15		
	16 -20	62	98.20	14.28		
	≥ 21	137	99.02	13.05		

Discussion and Conclusion

A graduate's ability to communicate effectively can greatly affect his/her career development in the future workplace (Aina and Ogunbiyi, 2012; Bhattacharyya et al., 2010). Communication in the area of health is consistently a central concern for policy makers, economists, and academics (Aina and Ogunbiyi, 2012; Schulz, 2008). Similarly, communication skills remain an important factor in the field of health area.

In this sense, communication skills training programs to be applied can affect positively professionals who are working in the professions with more intense human relationships (Korkut, 2005).

From the results obtained, the students of faculty had a high communication skills mean score and revealed a significantly difference, but did not show a significant difference depending on other variables in the research coverage.

In a study conducted by Bingöl & Demir (2011) to measure communication skills of Health School students, the mean scores of students' communication skills inventory was found substantially as high. A similar finding was obtained in a variety of studies carried out by Korkut (1997) on the students at the faculty of education and Tutuk et al. (2002) on the nursing students.

While there were no statistically significant differences in all dimensions of communication skills based on the participants' age in our research, it was found a statistically significant difference in the mean scores of communication skills of the students by age in a study executed by Saracaloğlu et al. (2009) on determining teacher candidates' communication skills. Communication skills scores changed in a meaningful way in terms of age and class. Communication skills of first grade students were higher than in the fourth grade students.

It was not found a statistically significant difference between the students for all dimensions of the level of communication skills based on the year of study. Bingöl & Demir (2011), Korkut (1997), Tepeköylü et al.(2009) also reached to similar findings in their study. Not found a significant difference among students by the year of study in terms of communication skills emphasizes a need of re-questioning the curriculum of the faculty in terms of communication skills.

Çulha and Dereli (1987) states communication problems as not ability to say the feelings and thoughts clearly, speak comfortable with elders as age and social status, attend a friend group, be friends with opposite sex (Dilekman et al., 2008). The results of the research means that the graduates of faculty of health sciences or the health professional candidates begin to profession with the undeveloped communication problems in four years. This situation causes to important dilemmas for individuals in their working life.

In contrast, in a study conducted by Tutuk et al.(2002) it was indicated that there was a statistically significant difference among the students by the year of study and the overall communication skills score means increased from freshman to junior level.

According to the number of siblings and type of family it was not seen a statistically significant difference between the students for the level of

communication skills. Similar findings were indicated in the study of Bingöl & Demir (2011). In our research it was expected that the level of communication skills of the students would be higher with increasing number of siblings of them. However, the findings have not supported this hypothesis. But, according to a study conducted by Baykan and Naçar (2008) on a first term students of Erciyes University Medical faculty regarding communication skills, students who have more than one or more siblings have higher mean scores.

According to our results, a statistically significant difference was determined between the students on the dimension of mental communication skills and the total inventory by gender. Male students have higher mean scores than female. It shows that when compared male students, female students were better in terms of communication skills. However, the studies of Bingöl & Demir (2011) and Baykan and Naçar (2008), indicated the opposite result that the communication skills mean score of female students was higher than male students.

In terms of the behavioral communication skills and the total inventory there was a statistically significant difference among the students by the departments. In the study carried out by Tepeköylü et al. (2009) on the determining Physical Education and Sports School students' communication skills, however, it was not got a similar finding. According to their study there was no statistically significant difference between the levels of communication skills of the students.

While we found a statistically significant difference in the emotional communication skills based on the place of residence among participants, there were not determined statistically significant differences in the level of communication skills of students according to the place of residence in the study done by Bingöl & Demir (2011).

In terms of the number of books read in a year of it was determined a significant difference between the students for the emotional communication skills. It was seen that the communication skills scores were higher of the participants who were reading more books. Reading provides individual intellectual development, develops the power of understanding and thus facilitates communicating with others. As a result, it was found that the students who read more books had higher levels of communication skills. At the same time a strong habit of reading also positively affect students' academic achievement. Indeed, in a research carried out by Kurulgan and Çekerol (2008) it was determined that the students who read one or more books in a month showed higher academic success than others.

As a result, effective use of communication skills is very important for health professionals. Therefore, to investigate the factors that would be effect on communication skills and improve the level of communication skills are extremely important.

Depending on the above results the following recommendations can be given:

1. In the field of communication skills, working on a larger population

can provide more detailed results studies.

2. To focus on practical training based on communication difficulties and effective communication techniques for the curriculum of students.
3. To provide different options for elective courses on communication skills in the curriculum.
4. To give drama training with the subject of communication to the students.

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