

Evaluation of Emotional Intelligence and Communication Skills of Health Care Manager Candidates: A Structural Equation Modeling

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Abstract

Management in the field of health is a position in which the roles are in the forefront that are related to interpersonal relations and the role of communication skills and emotional intelligence is important in success of managers. For this reason, communication skills and emotional intelligence form an important issue for the students who are studying health care management. The aim of this study is to specify the communication skills and emotional intelligence level of students and evaluate this relation. The work group of the study is formed by 284 students studying at Hacettepe University, Department of Health Care Management. Descriptive statistics and structural equation modeling were used in data analysis. At the end of study, the emotional intelligence of female students were determined higher than the male students' and according to the Structural Equation analysis, a significant positive relation was found between communication skills and emotional intelligence of students.

Key Words: Communication Skills, Emotional Intelligence, Structural Equation Modeling, Turkey.

1. Introduction

New approaches and point of views come out with the changes in business life of today. These developments can affect the expectations from a working person, success criterions, working order so a working person is required to use his cognitive, emotional and physical power more extensively and effectively as a whole. As different from previous years, today the subjects like how people in the same working place communicate, get along each other and be in interaction with, gain importance. Also, the qualifications such as the emotional awareness of individual, managing his feelings and ability of establishing healthy relationships, come to the forefront. These kind of qualifications and competencies are dealt together with communication skills and emotional intelligence and are shown as the main factors that play role in the success of an individual. The variables such as knowledge, skills and talents, personality traits, interests, choice of profession have effect and role in success of an individual in business life.

However, for the professionals, besides having the knowledge and skills required by profession, having a developed emotional intelligence and a healthy interpersonal communication should not be ignored. Thus, opinions about the necessity of communication skills and emotional intelligence in business life are increasing day by day. The studies which are related to the success of individuals in business life, development of their careers or success and happiness in their personal lives show that only cognitive intelligence alone is not enough, the characteristics such as understanding their and others' feelings, expressing emotions, controlling emotions, developing empathy and awareness in communication, are also very important (Aksaraylı & Özgen, 2008; Dulewicz & Higgs, 2004; Baltaş, 2006, Çetinkaya & Alparlan, 2011; Doğan & Demiral, 2007; Gürbüz & Yüksel, 2008; Toy, 2007).

2. Concepts of Emotional Intelligence and Communication Skills

Emotional intelligence is defined as an ability of a person to observe and distinguish his own and the others' feelings and use this as a guidance for his thoughts and behaviors (Salovey & Mayer, 1990; Salovey & Grewal, 2005). It is also defined as awaking oneself, continuing his way despite difficulties, delaying the satisfaction by controlling his urges, balancing his mood, avoiding to let the troubles prevent to thinking, putting himself into someone's place and growing hope (Goleman, 2007).

A person who has high emotional intelligence takes notices around quickly, controls his urges, use his will, is inclined to teamwork, approaches to solve the problems by combining his cognitive and emotional power, doesn't deny his love and respect to people is in relation with him, sees his faults and adopts and corrects them. On the other hand a person with low emotional intelligence can be the slave of his urges, cannot control these urges, can manage his personal life in a bad way, can fail in his career or can act improperly to social principles and cultural values (Başaran, 2000). Emotional intelligence level affects directly both self sufficiency and business success. The people having developed emotional maturity have great contributions in success of institutions. Managers or workers who know their emotions and can control them, are sensible the wishes and requirements establish relationship based on confidence, say their ideas directly. They can prompt themselves and the people they are working with, towards desired result, can also provide high motivation by keeping optimist way of thinking. By this means, they result conflicts and problems in a positive and solution oriented way (Baltaş, 2006; Barbuto & Burbach, 2006; Çetinkaya & Alparslan, 2011; Skipper & Brandenburg, 2013).

Communication skills involve concepts such as establishing meaningful relationships with their surrounding, recognizing themselves and other people, becoming aware of their own feeling and recognizing the feelings of others, self actualization and coping with problems effectively (Kuzu & Eker, 2010). Communication is one of the most necessary processes in business life. Living and making business of people and group together depend on the success of communication system they established. Communication is an important process that connects people's activities each other and provides them to work conformably in a group. The communication abilities of people with each other identify their success in their jobs and private lives (Can et al., 2006).

In establishing accurate and effective communication, communication skills have an important role. Communication skills are related with speaking, writing, reading, listening and thinking. The communication skill of an individual is among the abilities necessary for success and it is seen as an important advantage in most of the occupations. Communication skills are important almost in every occupation and position; however, when management comes into question, it gains a special importance. So, communication skill is seen as one of the abilities that a manager must have and these managers have the properties of expressing and transferring their ideas to others clearly and being a good listener. Also they can establish good relations with the people from different positions inside and outside of their departments (Toy, 2007).

In the service-producing institutions, such as health care institutions, it is thought that having effective communication skills and emotional intelligence competencies are necessary and important for the managers also (Freshman & Rubino, 2004). As it is seen, the concepts of emotional intelligence and communication skills are closely related to each other. As the properties of communication skills and emotional intelligence are used as an important and a determiner measurement in functions of human resources management such as recruitment process, performance management, career development (Çetinkaya & Alparslan, 2011), it is believed that the university students educating healthcare management should be developed and trained in emotional intelligence and communication skills fields before starting a business life (Freshman & Rubino, 2004; Anderson et al., 2000). The evaluation of emotional intelligence and communication skills of university students have an importance in identification the requirements in this field of manager candidates and constitution educational programs for the development of these requirements. So, this study is designed to describe the relationship between emotional intelligence and communication skills of university students through the structural equation model. Evaluating the relationship between emotional intelligence and communication skills according to socio-demographic characteristics and parental properties of the students is also the aim of the study.

3. Study Method

3.1. Data Collecting Tools

In this study a questionnaire consisted of three parts was used as a data collecting tool.

Personal Information Form: It consists of 11 close-ended questions to identify properties related to their socio-demographic and families that can have effects on emotional intelligence and communication skills of students.

Emotional Intelligence Evaluation Scale (EIES): It was developed by Hall in 1999 and Turkish validity and reliability study were done by Ergin in 2000 with university students and the scale was used by Kuzu in 2008 on nursing students. The scale is consisted of five parts with six items each (totally 30 items) and six point likert type. The sub-dimensions of the scale are “awareness of emotions-DZ1”, “managing of emotions-DZ2”, “motivation of oneself-DZ3”, “empathy-DZ4” and “controlling relations-DZ5” and also there is not any reversed expression in evaluation (Kuzu, 2008; Aydin, 2010).

Communication Skills Evaluation Scale (CSES): It is five likert type scale consisting of 25 items which was developed by Korkut (1996a) to understand how individuals evaluate their communication skills. The scale does not have reversed items (Korkut, 2005), and it was scored as 0-4 at the beginning (Korkut, 1996b) and then in later studies it is scored as from never (1) to always (5) (Korkut, 1999).

The questionnaire form used in this research was taken from the thesis of Kuzu (2008). The Cronbach's Alpha reliability coefficients were 0.93 for EIES and 0.87 for CSES (Kuzu, 2008). The reliability of the questionnaire calculated again for this research by us. So, the Cronbach's Alpha reliability coefficients were 0.96 for EIES. The Cronbach's Alpha coefficients for the sub-dimensions of EIES are as follows 0.87 for the awareness of emotions, 0.81 for managing of emotions, 0,84 for motivation of oneself, 0.88 for empathy and 0.83 for controlling relations. The Cronbach's Alpha reliability coefficients were 0.84 for CSES.

3.2. Population and Sample

The students of Hacettepe University Faculty of Economy and Administrative Sciences Department of Health Care Management 2010-2011 Education Year Spring Term form the population of study (N=329). A sample was not chosen in the study, the whole of the students were tried to be reached however the number of reachable students were realized as 284 (86.32 %). The questionnaire was applied during March-June 2011.

3.3. The Analysis of Data

The analysis of data were done by using PASW statistical packaged software and AMOS version 4.0. The first of the analysis which was done in context of this study is descriptive statistical analysis. The aim of descriptive research is to draw the proper of an organization, an individual, a group, a condition or a fact. In descriptive analysis arithmetic mean and median as measure of central tendency and as distributing measurement standard deviation, frequency distribution and proportions were used. In order to identify if there is difference between demographic variables in context of study dimensions, Kruskal-Wallis Variance Analysis and Mann-Whitney U Test were used; after that Dunn's Z Test was used to find out where the difference came from.

The second of the analysis which was done in context of this study is explanatory analyses. The aim of explanatory analysis is to form reason-result relation between variables subjected to the study. However, during these efforts it is not possible to measure all variables. For example variables like income, age, student's grade can be measured directly whereas it is not possible to measure variables such as intelligence, behavior of purchasing, job satisfaction, happiness, life quality etc. directly. The first group from the variables is named as observed (manifest), the others are named as secret (latent) variable. In such situations, it is necessary to form regression equalities to show how inner (dependent-endogenous) structures tie to outer (independent-exogenous) structures. Structural equation model involves one or more than one regression equalities that describe how inner structures tie to outer structures. Their coefficients are usually named as path coefficients or mostly as regression coefficients (Cheng, 2001; Yılmaz & Çelik, 2005). As there are latent variables in the study the model was tested by Structural Equation Models (Structural equation modeling-SEM).

4. The Findings of Study

In Table 1 descriptive statistics of students of Hacettepe University Faculty of Economy and Administrative Sciences Health Care Management Department are given.

Table 1. Descriptive Statistics

Distribution of Students According to Age Groups (Numeric)	Frequency	Percentage (%)	Distribution of Students According to Financial Situations of Families	Frequency	Percentage (%)
Minimum	18	-	Low (Income is less than Expense)	43	15.3
Maximum	30	-	Mean (Income is equivalent to Expense)	205	73.0
Mean	21.55	-	Good (Income is more than Expense)	33	11.7
Median	21	-	TOTAL	281	100.0
Distribution of Students According to Gender	Frequency	Percentage (%)	Distribution of Students According to Family Types	Frequency	Percentage (%)
Female	171	60.2	Nucleus Family	234	83.3
Male	113	39.8	Large family	47	16.7
TOTAL	284	100.0	TOTAL	281	100.0
Distribution of Students According to Their Classes	Frequency	Percentage (%)	Distribution of Students According to Their Descriptions About Their Families	Frequency	Percentage (%)
1st grade	71	25	Positive*	194	69.3
2nd grade	102	35.9	Negative**	48	17.1
3rd grade	70	24.7	Mixed***	38	13.6
4th grade	41	14.4	TOTAL	280	100.0
TOTAL	284	100.0			
Distribution of Students According to the Place They Grown Up	Frequency	Percentage (%)	Distribution of Students According to the Preschool Education	Frequency	Percentage (%)
Village	42	14.8	Uneducated	205	72.2
Town	21	7.4	Nursery class	65	22.9
Country	85	29.9	Day Care Center	7	2.5
City	79	27.8	Both Day Care Center and Nursery Class	7	2.5
Metropolis	57	20.1	TOTAL	284	100.0
TOTAL	284	100.0			
Distribution of Students According to the Education of Their Mothers	Frequency	Percentage (%)	Distribution of Students According to the Education of Their Fathers	Frequency	Percentage (%)
Illiterate	38	13.4	Illiterate	8	2.8
Literate. Ungraduated	12	4.2	Literate. Ungraduated	6	2.1
Primary school graduate	135	47.7	Primary school graduate	88	31.1
Secondary school graduate	30	10.6	Secondary school graduate	54	19.1
High school graduate	48	17	High school graduate	69	24.4
University and above	20	7.1	University and above	58	20.5
TOTAL	283	100.0	TOTAL	283	100.0

* The child rearing style of parents

** Positive: Democratic, reassuring, supportive, and extremely free.

*** Negative: Irrelevant, over protective, out of balance, indecisive, domineering, authoritarian, with strict discipline, unaware from emotions- tepid the feelings.

**** Mixed: Positive and negative family manners are together.

As Table 1 was examined the age average of participant students was 21.55, 60.2% of them were girls. Seventy-three percent of the participants had middle income and 83.3 % of them were grown up in a nucleus family. As the education levels of parents were examined, it was understood that they had the highest proportion of primary school graduate and most of the participants did not have preschool education. Also approximately 75 % of them were grown up in places bigger than a village or a town.

The effects of demographic properties on emotional intelligence and communication skills of participants were tested by Kruskal-Wallis Variance Analysis and the obtained results were shown in Table 2.

Table 2. The effects of socio-demographic characteristics and parental properties on emotional intelligence and communication skills

DEMOGRAPHIC PROPERTIES	DZ1	DZ2	DZ3	DZ4	DZ5	CS
Gender	0.028	0.088	0.061	0.008	0.716	0.114
Age	0.262	0.656	0.918	0.320	0.585	0.409
The Place Grown Up	0.594	0.545	0.881	0.804	0.808	0.982
Financial Situation	0.914	0.582	0.918	0.341	0.500	0.810
Mother Education	0.823	0.512	0.583	0.500	0.364	0.568
Father Education	0.468	0.414	0.956	0.155	0.952	0.603
Family Types	0.455	0.055	0.558	0.824	0.604	0.865
Parents' Style	0.033	0.050	0.120	0.016	0.093	0.010
Preschool Education	0.237	0.675	0.806	0.559	0.804	0.202

$P < 0.005$

It was obtained firstly that among demographic variables gender has an effect on emotional intelligence ($p < 0.05$). The female students participated to study were more aware of their emotions (MWU: 7112.50), and they could make more empathy (MWU: 7340.50). It was obtained lastly that among demographic variables the child rearing style of parents (as named parents' style) has an effect on emotional intelligence and communication skills and in order to obtain where the differences come from, after Kruskal-Wallis Variance Analysis, Dunn's Z was used to make dual comparisons. At the end of analysis the students who defined their parents' style as mixed are aware of their emotions more than the ones who defined their parents' style as negative ($0.0415 < 0.05$). The students who defined their parents' style as mixed can make more empathy than the ones who defined their parents' style as negative ($0.0218 < 0.05$) or positive ($0.032 < 0.05$). Also the students who defined their parents' style as positive have high communication skills than the ones who defined their parents' style as negative ($0.010 < 0.05$).

The correlations of sub-dimensions of emotional intelligence scale with communication skills scale and with themselves are given in Table 3. As seen from the Table there is a positive correlation between them. The highest correlation is between managing emotions and motivating oneself ($r = 0.78$, $p \leq 0.01$), controlling relations and empathy respectively ($r = 0.67$, $p \leq 0.01$). The lowest correlation is between communication skills scale and controlling relations ($r = 0.34$, $p \leq 0.01$).

Table 3. The correlations of sub-dimensions of emotional intelligence with communication skills scale and between themselves

	MEAN	MEDIAN	SD	DZ1	DZ2	DZ3	DZ4	DZ5
Awareness of emotions	28.76	31.00	6.55					
Managing of emotions	24.24	26.00	6.76	0.48				
Motivation of oneself	27.15	28.50	6.52	0.56	0.78			
Empathy	28.16	30.00	6.35	0.51	0.47	0.59		
Controlling relations	26.54	28.00	6.41	0.51	0.52	0.57	0.67	
Communication skills	102.95	103.00	9.17	0.36	0.38	0.42	0.49	0.34

Finally in order to search the relationship between communication skills and emotional intelligence latent structure SEM was applied (Figure 1).

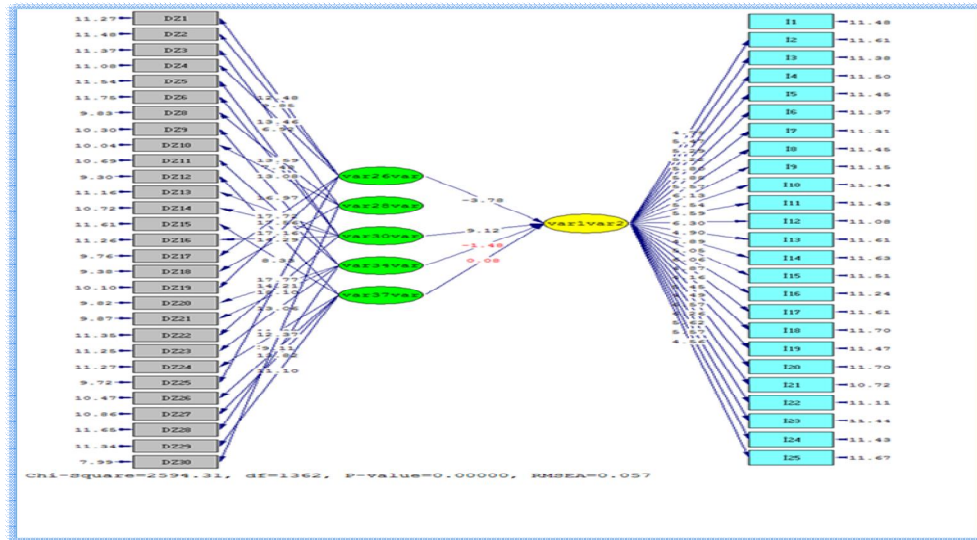


Figure 1. Emotional Intelligence and Communication Skills Structural Equation Model (var26var=DZ1, var28var=DZ2, var30var=DZ3, var34var=DZ4, var37var=DZ5, var1var2=Communication Skills Scale)

According to the model, in Figure 1, it was found a structural adjustment between empathy and controlling relations with communication skills scale. In other words it can be said that the students who empathetic and able to control own relations have high communication skills. Another finding is the lack of structural adjustment between managing emotions, a sub-dimensions of emotional intelligence scale, and communication skills scale. So according to this result, it cannot be said that students who can manage emotions have high communication skills. Different goodness of fit index which are used in evaluating model availability and there are statistical functions that these index have. Goodness of index measures the adjustment of observed, expected return matrix (covariant or correlation) or the consistency of model with empirical data (Schermelleh-Engel et al., 2003). The goodness of fit and acceptable adjustment limitations for some index are given in Table 4.

Table 4. The Adjustment Measures for Confirmatory Factor Analysis

Adjustment measures	Good adjustment	Acceptable adjustment	Measure value
RMSEA	0<REMSEA<0.05	0.05 ≤ RMSEA ≤ 0.10	0.057
NFI	0.95 ≤ NFI ≤ 1	0.90 ≤ NFI ≤ 0.95	0.92
CFI	0.97 ≤ CFI ≤ 1	0.95 ≤ CFI ≤ 0.97	0.96
RFI	0.90 ≤ RFI ≤ 1	0.85 ≤ RFI ≤ 0.90	0.91
X ² /sd.	<2/df	<3/df	1.909

Referances: Schermelleh-Engel et al . (2003); Iacobucci (2010).

As it can be seen in Table 4 the findings support the acceptability of structural model.

5. Discussion

In our study which was conducted on students of Hacettepe University Faculty of Economics and Administrative Science, Department of Health Care Management, from demographic variables, it was found that gender has an effect on awareness of emotions and empathy. The behavior of parents to their child about rearing them also have an effect on awareness of emotions and empathy, furthermore communication skills. From demographic variables the age, the place they were grown up, financial status of their parents and their family types and lastly the education level of parents have effect on neither emotional intelligence development nor communication skills. Girgin (2009) and Aydın (2010) reached the conclusion of emotional intelligence scores of university students do not differ according to gender. İşmen (2001), Palmer et al. (2005) and, Kuzu and Eker (2010) reached different conclusions, they found that the emotional intelligence scores of female students are significantly higher than male students.

In our study we reached similar results; it was obtained that gender has an effect on emotional intelligence and, emotional intelligence scores of female students are higher than male students ($p < 0.05$). When the studies, using different scales, related to emotional intelligence are examined, usually, it is seen that emotional intelligence or the sub-dimensions of emotional intelligence scores of women are higher than men (Ciarrochi et al., 2000; Ciarrochi et al., 2001; Göçet, 2006; Mayer & Geher, 1996; Gürbüz & Yüksel, 2008; Erdoğan, 2008). In contrast to these studies, in the study that Aksaraylı and Özgen (2008) conducted on 81 academics and in the another study that Hunt and Evans (2004) conducted on 414 people, emotional intelligence of male participants were higher than women. Dilekmen et al. (2008) and Pehlivan (2005) reached the conclusion that communication skills scores of teacher candidates do not change according to gender whereas Kuzu and Eker (2010) obtained it for nursing students. In this study we reached the same conclusion and gender do not have an effect on communication skills of students ($0.114 > 0.05$). Korkut (1999) and Çetinkaya (2011) found the communication skills scores of university students and teacher candidates respectively differ according to gender, so the communication skills scores of female students are significantly high than male students.

Kuzu and Eker (2010) found for nursing students, Ünsar et al. (2009) found for nursing and midwifery students, emotional intelligence scores do not differ according to the ages of students. Tutuk et al. (2002) and, Arifoğlu and Razi (2011) found for nursing students, Korkut (1999) found for university students that communication skills scores of students do not differ according to the ages of students. In our study, both emotional intelligence and communication skills have no difference according to the ages of students. Diversely, Kuzu and Eker (2010), reached the result that communication skills of nursing students aged 23 and older are low and there is significant difference between groups.

This study reveals that awareness of emotions, empathy and communication skills scores of students have difference according to the child rearing style of parents (as named parents' style in this article). Aydın (2010) found that there was no significant difference according to perceived family approach for emotional intelligence score. Erdoğan (2008), reached a conclusion that emotional intelligence scores of students have significant difference depending on parental approach, so the children who were grown up in democratic family environment have higher emotional intelligence scores. In the study, by Karademir et al. (2010), conducted on 170 students, it was obtained that the behaviors of families have statistically significant difference on emotional intelligence levels. Also, in the same study it was found that the family types that are named as nucleus family, big family or broken family have statistical difference on emotional intelligence and their financial situations do not make significant difference on it.

Kuzu and Eker (2010) found out that emotional intelligence and communication skills levels of nursing students do not have difference according to the places they were grown up and emotional intelligence level of students do not have difference according to the socio-economical conditions. Also, as communication skills levels of students differ according to education levels of mothers whereas they do not differ according to the education levels of their fathers. Arifoğlu and Razi (2011) found no significant difference between the education of parents and communication skills scores of nursing students.

Finally, according to structural equation model, a structural adjustment was found between empathy and controlling relations which are sub-dimensions of emotional intelligence scale and communication skills scale. In other words it can be said that the students who can establish empathy and can control relationships have high communication skills. Another finding is that there is no structural adjustment between managing emotions sub-dimension and communication skills scale. That means, according to the result it cannot be said that students who can managing their emotions, have high communication skills. In another studies, although the used scale was different, it was obtained that emotional intelligence has effect on communication skills. Gürşimşek et al. (2008), obtained a significant positive relation between emotional intelligence and communication skills in the study in which the relation between emotional intelligence and communication skills of totally 200 teacher candidate is examined. In another study was conducted on 1.417 university students of a state university, it was obtained that awareness of emotions, motivating oneself sub-dimensions of EIES, and the emotional intelligence score and communication skills score average of nursing students are higher than comparison group. According to the study, as the average of emotional intelligence score increase, the average of communication skills score increase (Kuzu & Eker, 2010). In a study of Çetinkaya and Alparslan (2011) on high school students, the effect of emphatic awareness on communication skills is statistically significant.

6. Conclusion

The aim of this study is to determine the relationship between emotional intelligence and communication skills of university students at Health Care Management Department through the structural equation model. Evaluating the relationship between emotional intelligence and communication skills according to socio-demographic characteristics and parental properties of the students is also the aim of the study. According to the results of the study, among demographic variables gender has an effect on emotional intelligence's awareness of emotions and empathy dimensions. Then female students are more aware of their emotions and they empathize more. It was also found that the other demographic variables the child rearing style of parents has an effect on emotional intelligence's awareness of emotions and empathy dimensions and communication skills. The students who defined their parents' child rearing-style positively have higher communication skills levels. Emotional intelligence and communication skills levels of students are independent from the other variables except the variables mentioned here. The other result of the study is about correlations of sub-dimensions of emotional intelligence with themselves. There are positive, significant and strong correlations between managing emotions and motivating oneself and, also between controlling relations and empathy. Lastly, according to the structural equation model, it was found a structural adjustment between empathy and controlling relations with communication skills scale. Then, the students who empathetic and can control relations have high communication skills levels.

Health sector is a dynamic field in which interpersonal communication is extensive and human provides service to human. The people who will work in health sector as a manager, when have developed emotional intelligence and communication skills have benefit for them in order to fulfill their missions successfully. There is an expectation that students developed in terms of emotional intelligence and communication skills have an important advantage to gain success when they start working life. It is necessary to effort in order to gain and develop those abilities to students in education period and to make difference about these concepts. It is also thought to make studies intended to develop students in terms of emotional intelligence and communication skills.

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