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## Emotional intelligence (EQ) levels of the senior students in secondary education system in Turkey based on teacher's perceptions\*\*

Osman Titrek<sup>1</sup>

**Abstract:** As in all sciences, interpersonal interactions develop new approaches. One of them is emotional intelligence (EQ), “observing and understanding capacity own and other’s emotion, definition of different type of emotion; and knowledge that you learned using to know other’s emotion and understanding. The purpose of this study is to determine EQ competence acquisition levels of senior students in secondary education system according to teacher perceptions. A survey method was used as the main research approach. Participants were 262 teachers who were selected from seven secondary schools in Adapazari that were selected randomly. Research questions were tested with ANOVA that includes Observed Power and Partial Eta analysis and *t*-test that includes Cohen *d* analysis. Results revealed that students, who have higher academic achievements, have the highest level in EQ traits as well. Science and Anatolian Secondary Schools’ students have higher EQ levels as cognitive skills.

**Keywords:** Emotional intelligence (EQ), Secondary school system, Educational programs, Students.

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\*Asst. Prof. Dr., Department of Educational Sciences, Faculty of Education, Sakarya University, Turkey.  
E-mail:[otitrek@sakarya.edu.tr](mailto:otitrek@sakarya.edu.tr)

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## Öğretmen görüşlerine göre Türkiye’de ortaöğretim sistemindeki son sınıf öğrencilerinin duygusal zekâ (EQ) düzeyleri

Osman Titrek

**Özet:** Son yıllarda, sosyal beceriler ve duygusal yeteneklerle ilgili yeni yaklaşımlar gelişmektedir. Bunlardan birisi olan duygusal zeka (EQ), “bireyin kendisinin ve başkalarının duygularını gözleme ve anlama kapasitesi, çeşitli tip duyguların ayırımının tanımlanması; bu bilginin, birisinin sahip olduğu duyguların bilinmesi ve anlaşılması için kullanılması” olarak tanımlanmaktadır. Araştırmanın amacı, öğretmenlerin görüşlerine dayalı olarak Türkiye’deki ortaöğretim sistemindeki okul türlerine göre, son sınıf öğrencilerinin EQ yeterlik düzeylerinde fark olup-olmadığını belirlemektir. Temel araştırma yaklaşımı olarak tarama modeli kullanılmıştır. Araştırmanın 262 öğretmen katılımcısı, Adapazarı’ndaki liselerden yansızlık kuralına göre seçilmiştir. Araştırma soruları Observed Power ve Partial Eta değerlerini de içeren Anova ve Cohen d analizi değerlerini de içeren t-test analizleri kullanılarak test edilmiştir. Araştırma sonuçları, Türkiye’de akademik yönden yüksek düzeyde zeki olarak tanımlanan ve çeşitli sınavlarla seçilmiş olan Fen Lisesi ve Anadolu Lisesi’nin öğrencilerinin, EQ yönünden de yüksek düzeyde yeterli algılandığı sonucunu ortaya çıkarmıştır. Teknik eğitim ve genel eğitim uygulayan liselerdeki öğrencilerin ise EQ düzeyleri, diğer liselerdeki öğrencilerden daha düşüktür.

**Anahtar Kelimeler:** Duygusal zeka (EQ), Ortaöğretim sistemi, Eğitim programları, Öğrenciler.

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Today, development of productive relationships in a business environment requires interpersonal skills. Research has revealed that the key source of interpersonal skills is the ability to recognize, interpret, and manage emotions during interpersonal interactions (Ashkansy, Hartel & Zerbe, 2000; Lopes, Salovey & Straus, 2003). As in all sciences, interpersonal interactions develop new approaches related to social competencies and emotional abilities. For that reason, while some approaches are disappearing, new approaches are replacing them. The last and the most important approach of this process in education-dimensional intelligence perception-is collapsing, and multi-dimensional perception is coming to be accepted. This multi-dimensional intelligence (Gardner, 1993) perception makes intelligence an important and current topic of educational sciences again. For instance social intelligence, success intelligence, practical intelligence (Sternberg, 1996), multiple intelligence (Gardner, 1993), spatial intelligence (Kabat-Zinn, 1994), kinesthetic intelligence (Goleman, 1995), personal intelligence (Healey, 1999), group intelligence (Goleman, 2000) and emotional intelligence (Mayer & Salovey, 1990; Goleman, 1995) are among the most important and effective concepts.

In the field of educational sciences, it seems that the deepest discussion about new approaches of the 21<sup>st</sup> century will be between the concepts of academic intelligence (IQ) and emotional intelligence (EQ) (Karsli, Gündüz & Ural, 2000). The emotional and social competencies are focused on skills which have been labeled as EQ (Druskat, 2007), and the concept derives partly from earlier ideas about social intelligence (Mayer, Caruso & Salovey, 1999; Mayer & Salovey, 1990). Mayer and Salovey's (1990) EQ structures have been originated based on the studies of Thorndike who defined one type of intelligence in 1920's as social intelligence which means to understand and manage people and to use your attitudes sagaciously in interpersonal relationships. Moreover, in the 1960's, according to Piaget "intelligence was an adaptation process to society" (Toker, Kuzgun, Necati & Uçkunkaya, 1968). In the 1980's, for Gardner "intelligence has multiple factors related to cognitive, emotional and social competencies. In particular, social and internal intelligence definitions of Gardner (1986) has related to emotional and social competencies" (Erçetin, 2001 & 2004; Titrek, 2007). Moreover, although the term of EQ was rendered popular by Goleman (1995), first used by Mayer and Salovey (1990 & 1993) and it focused on social and internal dimensions of intelligence.

### **What Is Emotional Intelligence (EQ)?**

Mayer and Salovey (1990 & 1993) defined EQ concept "as the capacity that individuals have for monitoring and understanding their feelings and those of others, describe the discrimination between various types of emotions and using this information to channel thoughts and knowing and recognizing one's own emotions, managing emotions, motivation, being aware of other's emotions, and being able to control relations with others" (p.185-211;p.433-442). This definition entirely focuses on self-consciousness. Viewed as one of the three components of the mind (cognition, affect, and motivation), EQ is divided into the following four dimensions: identifying emotions, using emotions, understanding and reasoning about emotions and managing and regulation of emotions (Mayer & Salovey, 1997).

According to the theoretical model of Bar-On (1997 & 2000), EQ is defined as a sum of emotional and social competencies that determine the modalities with which a person relates to both him/herself and to others in order to cope with environmental pressure and requests. EQ is thus, in this model, an important factor in determining success in life, and more generically, influences the well-being of individuals. EQ develops over time, changes in the course of life, and can be increased by means of training programs. Moreover, Goleman (1995 & 1998), focuses on the people who are not successful in life in spite of a high IQ, has defined the structure of EQ as recognizing one's own and other's emotions, positive thinking and the ability to be successful at personal relationships. He has defined the competencies in five basic dimensions: understanding emotions, controlling and managing emotions, actuating emotions and motivation, empathy, and social skills. This definition and its dimensions have led to the opinion that there is a deep relation between success in business life and EQ, as well as in education life.

There are two dominant approaches to conceptualizing and measuring EQ in school and life. Petrides and Furnham (2000 & 2001) have proposed that these two types of measure should be termed ability and trait-EQ respectively. One, labeled "trait-EQ," relates to typical performance and is the best operational way of by self-report. The second, labeled "ability-EQ," relates to actual ability, operationalised by maximal performance methods rather than self-report. Salovey and Mayer (1990) raised the possibility of individual differences in

abilities to perceive and express emotion, and to understand and manage emotion related information, and that these may be learned. More recently, Mayer and Salovey (1997) have defined EQ in terms of four factors, as “the ability to perceive accurately, appraise and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth” (Mayer, Perkins & Caruso, 2001, p.3). Mayer and Salovey's (1990 & 1997) conceptualization of EQ has been referred to as “ability EQ.” The trait-EQ based on personality perspective and it is important to know what exactly the traits are that mark EQ; which traits are concealed by this “key to success” (Goleman, 1995). Matthews, Zeidner and Roberts (2002) deal thoroughly with the most of the issues are involved.

The focus here is on trait EQ (Petrides & Furnham, 2001) which refers to dispositional information collected through typical performance measures (self-or peer-report). Petrides and Furnham (2001) distinguish this type of EQ from ability EQ which concerns actual abilities measured with maximal-performance tests. Mayer and Salovey (1993 & 1997) distinguished EQ from traits by defining traits as characteristic ways of behaving, involving dispositions toward behavior, and EQ as an ability which implies right answers with respect to feelings. This may be possible for the perception of emotions of other people (Mayer & Geher, 1996), but may be rather difficult, especially regarding the regulation of emotions.

There has been an increasing interest in the construct of EQ within a school context. Although some studies in the field of education have been focused on the EQ of students and on the role that this plays with respect to academic achievement, demonstrating that students with higher EQ had more success at school (Parker, Summerfeldt, Hogan, & Majeski, 2002; Parker et al., 2004). Other studies have demonstrated that teachers who promote EQ skills emphasize the value of individual differences, enhance group work and problem-solving skills, and channel students to develop adequate social competencies (Kaufhold & Johnson, 2005). These social competencies increase the relationship among pupils, their reciprocal respect and involvement in class activities (Obiakor, 2001).

### **Emotional Intelligence at Schools**

EQ will seriously affect educational approaches based on IQ that have mere logic, data, concrete thinking, and process. Also, it is organized according to approaches that are based on the rules where the emotions aren't involved, as it isn't possible for them to be successful in school life. It can be proposed that current educational programs should be re-arranged in order to bring in the competencies which these new approaches require. Such an influence will be felt deeply in educational programs which are inter-disciplinary, because school is a synthesis of educational programs and it is an organization of which only input and output is human. So, EQ is thought to be more important and significant in education (Karsli, et al., 2000). Educational programs at schools (where input and output are only human) are supposed to bring in personal, occupational, and emotional traits to be successful in all life. Students of secondary educational age are adolescents and in this period it should be considered that the most important personal traits that must be acquired are social, emotional personal and notably occupational identity (Can, 2004).

In order to gain this identity in a good manner to reach goals in life, identification of the acquisition levels of EQ traits can be shown as an indication of positive personal improvement and a successful future. Another subject increasingly gaining importance is the extent to which these current secondary school programs and EQ traits make a contribution to personal development. So, identifying the EQ traits for the students who are in the final year of secondary education, ready for life and identifying which type of school is successful at giving these traits can be stated as important tools for re-construction of the current secondary education system and changing the programs in accordance with these goals. The purpose of this research is to determine EQ traits' acquisition levels of the students in secondary education schools and within these acquisition levels, whether there are significant differences among school programs based on teacher's perceptions. Searching this relationship in a Turkish context can, furthermore, draw attention to the existence of these links in a different cultural context. How to deal with the deficiencies that will be defined is discussed by taking into consideration the previous research results. To accomplish this purpose, it has been attempted to answer the following questions:

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1. Does the acquisition level of EQ traits in secondary schools programs change significantly according to gender, teacher's education level, and teacher's experience variables?
2. Does EQ traits level differ according to secondary education programs?

### **Methodology**

This research is a type of follow-up research studying about EQ in Turkey. This study is one of a series of research studies about the use of The Competence Level Scale of EQ in Professional Life (EQCS), which was adopted as a result of factor analysis and reliability analysis in the PhD thesis 'The Correlation Research Between Academic Staff's Use of EQ in Work life And Academic Success Level In Education Faculties (Titrek, 2004). Thus, this scale was published in Turkish Psychological Counseling and Guidance Journal, in 2005. EQCS was used to measure EQ in schools as well.

### **Sample**

A survey method was used as the main research approach. In these schools, all teachers added research sample and the questionnaire were distributed to them randomly. 301 questionnaires were returned from teachers, but 262 of participant teachers' questionnaires were fixed to use for research purpose. 137 of teachers' were female (55 %) and 125 of them were male (45 %). In Turkey, there are seven high school types in Secondary Education System that selected schools for this research;

1. Science High School: students who have high academic achievement on science and math study in these high schools. 23 teachers from Science High Schools were participated in this research.
2. Anatolian High School: students who have high academic achievement study in these high schools. This school type performs a general but intensive academic program like Science High Schools for highly cognitive skilled students. 30 teachers from Figen Sakallioğlu Anatolian High School were participated in this research.
3. Technical and Industrial High School: academically average students graduate from this school type and their main aim is to work in industry. 46 teachers from Fatih Technical and Industrial High School were participated in this research.



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4. Vocational High School for Girls: academically average students graduate from this school type and their main aim is to work in industry. 41 teachers from Vocational High School for Girls were participated in this research.

5. General High School: academically average and bright students (who didn't manage to enter Science and Anatolian High Schools) graduate from this school type. 80 teachers from Ali Dilmen High School and Selçuk Esedoğlu High School were participated in this research.

6. Imam-Hatip High School: academically average and bright students graduate from this school type where they are studying intensive rules of Islamic beliefs in the school's program. 42 teachers from Imam-Hatip High School were participated in this research.

### **Measurement**

*The Competence Level of EQ in Professional Life Scale (EQCS).* EQCS was used for collecting data in this research. With this scale, the researcher asked the participant teachers whether or not their senior secondary high school students have EQ traits and tried to define EQ levels' of senior students.

*The validity and reliability of the instrument.* The scale was administered to 160 academicians and these data was used to determine the validity and reliability level of the scale. Construct validity of the scale was examined by exploratory factor analysis (EFA). EFA (principal component by using Varimax rotation) analysis started with 76 items. At the end of the analysis, items spread in five dimensions and this scale consisted of 72 items with responses based on a 5-point likert scale (from 1 = never to 5 = always). Score 1 and 2 means, students have low EQ traits, score 3 mean is there is a little deficiencies but they can develop, and score 4 and 5 means that EQ traits of students are high and developed. All EQ dimensions were accepted as a sub-scale of EQCS and it has a Total Internal Consistency Alpha of  $\alpha = .96$ . The first sub-scale, Understanding Emotions ( $\alpha = .76$ ; "I remain responsible for my own feelings, and reach the necessary conclusions." etc.) has 12 items. The total variance of a single factor of 52.136 % and the value of the factor items are over .30. Managing Emotions ( $\alpha = .80$ ; "Whenever there is any stress in my school life, it is easy for me to remain calm." etc.) has 15 items. It has a total variance of a single factor of 56.220 % and the values of factor items are over .30. Motivating Yourself ( $\alpha = .73$ ; "Although there may be



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barriers, I calm down and motivate myself towards the aims of my life.” etc.) has 13 items. The total variance of a single factor of 69.780 % and the value of the factor items are over .30. Empathy ( $\alpha = .76$ ; “I consider other people’s opinions in my school life.” etc.) has 12 items. The total variance of a single factor of 52.136 % and the value of the factor items is over .30. Finally, Social Skills sub-scale ( $\alpha = .88$ ; “I can easily persuade people.” etc.) has 19 items. The total variance of a single factor of 62.481 %, and the value of the factor items are over .30. Based on these findings, it can be used with validity and reliability in Turkish schools, and it was adapted by the researcher to reach aim of this study based on teacher’s views.

### **Procedure and Data Analysis**

EQCS was used to collect data consists of two parts. The first part of the scale includes remarks and personal data and the second part includes 72 EQ traits in the five sub-scales. The data was analyzed through SPSS 11.5 package program. Results and discussion have been made according to the data on hand. The total scores of the sub-scales were calculated before analysis and then data were analyzed based on these total points. In the first and second sub-problems, One-way ANOVA analysis was used and to find the source of this significant difference Tukey-b analysis was used. Also in the analysis, family wise errors and effect sizes were calculated (<http://web.uccs.edu/lbecker/Psy590/es.htm>, 2008). According to Büyüköztürk (2002) and Balci (1999) experimental and survey studies have groups that haven’t got a relationship, the participants’ view has to be in just one experimental condition and it has to be calculated exclusively in this condition as well. For this reason, teacher related factors in this research were analyzed with ANOVA includes Partial Eta and Observed Power; t-test includes Cohen d.

### **Findings and Results**

In the findings and comments to follow, the tables and comments about analyzing the results of sub-problem 1 and sub-problem 2 are explained.

**a. Analysis and comments of sub-problem 1.** The conducted mean scores of EQ sub-scales, EQ traits are acquired partially according to total sub-scale scores. Although all sub-scale means are close to each other at every sub-scale, according to acquisition level

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respectively, they rank in order of highest scores as follows: managing emotions ( $M= 3.19$ ;  $SD=7.6475$ ), understanding emotions ( $M =3.12$ ;  $SD=10.9911$ ), empathy ( $M =3.08$ ;  $SD=10.6635$ ), social skills ( $M =3.07$ ;  $SD=8.8940$ ), and motivating emotions ( $M =3.01$ ;  $SD=14.1660$ ). According to likert-scale scores, all sub-scale's scores were found within level 3 (the "sometimes" level). Actually, to say high EQ, the minimum scores on all dimensions should be level 4 (often).

**Table 1**

According to Gender ANOVA Analysis Results Whether EQ Traits Differ

Sub-Scales	Gender	M	SD	df	t	p	Cohen d / Effect size r
Understanding Emotions	Female	3,10	7,15118	256	1.627	.809	-0.036 / -0.01817
	Male	3,13	7,15118	194,653			
Managing Emotions	Female	3,17	9,84995	259	2.402	.736	-0.00314 / -0.00157
	Male	3,21	11,68874	207,603			
Motivating Emotions	Female	3,00	9,48000	253	2.707	.786	-0.00282 / -0.00141
	Male	3,03	11,39655	204,338			
Empathy	Female	3,07	7,73516	255	5.219	.821	-0.00229 / -0.00114
	Male	3,09	9,59835	210,230			
Social Skills	Female	3,05	12,36261	252	4.020	.764	-0.00216 / -0.00108
	Male	3,08	15,26659	207,214			

$p > .05$

As indicated in Table 1, regarding the teacher's perceptions in terms of gender there is no significant difference at the  $p < .05$  level in the sub-scales of EQ. Understanding emotions ( $t(1, 256)=1.627$ ;  $P=.809$ ), managing emotions ( $t(1, 259)=2.402$ ;  $P=.736$ ), motivating emotions ( $t(1, 253)=2.707$ ;  $P=.786$ ), empathy ( $t(1, 255)=5.219$ ;  $P=.821$ ), and social skills ( $t(1, 252)=4.020$ ;  $P=.764$ ) sub-scales' EQ scores do not differ significantly, but in all sub-scale means, male teachers' perceptions have more high EQ scores than females. In other words, in a student's acquisition of EQ, a teacher's gender does not lead to significant differences in terms of perceptions.

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**Table 2**

According to Education Level ANOVA Analysis Results Whether EQ Traits Differ

Sub-Scales	Education Level	$\bar{X}$	SD	df	F	p	Eta / Power
Understanding Emotions	Associate Degree	3.00	7.255	2	.286	.751	.122 / .764
	Undergraduate	3.18	5.130	254			
	Master	3.03	5.519				
Managing Emotions	Associate Degree	3.05	7.323	2	.365	.695	.106 / .924
	Undergraduate	3.16	6.102	257			
	Master	3.19	6.745				
Motivating Emotions	Associate Degree	3.06	7.711	2	1.755	.175	.152 / .887
	Undergraduate	3.18	7.849	251			
	Master	3.14	7.058				
Empathy	Associate Degree	3.08	5.964	2	2.906	.057	.106 / .796
	Undergraduate	3.18	5.335	253			
	Master	3.02	5.975				
Social Skills	Associate Degree	3.07	9.349	2	1.893	.153	.252 / .988
	Undergraduate	3.16	9.840	260			
	Master	3.08	9.976				

p> .05

As indicated in Table 2, regarding the teacher's perceptions in terms of education level there is no significant difference at the  $p < .05$  level in the sub-scales of EQ. Understanding Emotions ( $F(2, 254) = .286$ ;  $P = .751$ ), Managing Emotions ( $F(2, 257) = .365$ ;  $P = .695$ ), Motivating Emotions ( $F(2, 251) = 1.755$ ;  $P = .175$ ), Empathy ( $F(2, 255) = 2.906$ ;  $P = .057$ ), and Social Skills ( $F(2, 260) = 1.893$ ;  $P = .153$ ) sub-scales' EQ scores do not differ significantly according to teachers' education level (associate, an undergraduate, or a master's degree).

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**Table 3**

According to Teachers' Experience ANOVA Analysis Results Whether EQ Traits Differ

Sub-Scales	Experience	M	SD	df	F	P	Eta / Power
Understanding Emotions	1-9 years	3.14	6.416	2	.454	.636	.122 / .903
	10-20 years	3.10	5.277	256			
	21 years	3.13	6.066				
Managing Emotions	1-9 years	3.25	6.515	2	.768	.465	.106 / .766
	10-20 years	3.27	6.554	259			
	21 years	3.28	7.113				
Motivating Emotions	1-9 years	3.03	7.977	2	.546	.580	.152 / .932
	10-20 years	3.01	6.943	253			
	21 years	3.04	9.757				
Empathy	1-9 years	3.08	6.363	2	1.715	.182	.106 / .832
	10-20 years	3.09	5.747	255			
	21 years	3.11	5.847				
Social Competencies	1-9 years	3.08	9.859	2	.664	.516	.194 / .970
	10-20 years	3.05	9.287	252			
	21 years	3.06	9.976				

$p > .05$

As indicated in Table 3, regarding the teacher's perceptions in terms of teacher's experience there is no significant difference at the  $p < .05$  level in the sub-scales of EQ, such as 0-9 years, 10-19 years, and over 20 years. Understanding Emotions ( $F(2, 258) = .454$ ;  $P = .636$ ), Managing Emotions ( $F(2, 259) = .768$ ;  $P = .465$ ), Motivating Emotions ( $F(2, 253) = .546$ ;  $P = .580$ ), Empathy ( $F(2, 255) = 1.715$ ;  $P = .182$ ), and Social Skills ( $F(2, 252) = .664$ ;  $P = .516$ ) sub-scales' EQ scores do not differ significantly according to teachers' experience. Based on EQ sub-scales' results, teacher's experience level is not a significant variable for EQ traits.

**b. Analysis and Results of Sub-problem 2.** At this stage, whether or not teacher's perceptions vary based on school type was determined and significant differences were found.

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**Table 4**

According to School Type ANOVA Analysis Results Whether EQ Traits Differ

SUB-ES	Secondary School Programs	N	M	SD	df	F	p	Eta / Power
Understanding Emotions	Anatolian High Sch.	30	3.29	6,02150	6	1.465	.191	.130 / .928
	Technical High Sch.	46	2.89	9,67164	252			
	Vocational High Sch.	41	3.16	6,48610	258			
	General High Sch.	80	3.13	7,37184				
	Imam-Hatip High Sch.	42	3.20	7,24331				
	Science High Sch.	23	3.18	7,40628				
Managing Emotions	Anatolian High Sch.	30	3.44	10,63232	6	2.158	.048* (2,4-1,3,6)	.233 / .999
	Technical High Sch.	46	2.96	13,08192	255			
	Vocational High Sch.	41	3.37	9,06057	261			
	General High Sch.	80	3.11	10,59448				
	Imam-Hatip High Sch.	42	3.22	10,86369				
	Science High Sch.	23	3.34	9,10369				
Motivating Emotions	Anatolian High Sch.	30	3.36	9,98530	6	2.355	.032* (2,4-1,6,3)	.225 / .998
	Technical High Sch.	46	2.78	12,52198	256			
	Vocational High Sch.	41	3.13	9,83845	262			
	General High Sch.	30	3.00	10,10657				
	Imam-Hatip High Sch.	42	3.06	10,41976				
	Science High Sch.	23	3.19	10,25874				
Empathy	Anatolian High Sch.	30	3.21	9,02986	6	2.199	.044* (2,4-6,3,1)	.120 / .901
	Technical High Sch.	46	2.79	9,40626	251			
	Vocational High Sch.	41	3.25	7,04558	257			
	General High Sch.	80	3.02	9,39928				
	Imam-Hatip High Sch.	42	3.19	9,10978				
	Science High Sch.	23	3.29	7,29776				
Social Competencies	Anatolian High Sch.	30	3.35	14,34439	6	2.736	.014* (2, 4-1,6,3)	.185 / .963
	Technical High Sch.	46	2.79	16,17024	254			
	Vocational High Sch.	41	3.20	10,71499	260			
	General High Sch.	80	2.97	14,44345				
	Imam-Hatip High Sch.	42	3.15	13,08621				
	Science High Sch.	23	3.32	12,36884				

P<.05

As indicated in Table 4, regarding the teacher's perceptions in terms of secondary school programs there are significant differences at the  $p < .05$  level in the sub-scales of managing emotions ( $F(6, 251) = 2.158$ ;  $P = .048^*$ ), motivating emotions ( $F(6, 256) = 2.355$ ;  $P = .032^*$ ), empathy ( $F(6, 251) = 2.199$ ;  $P = .044^*$ ), and social skills ( $F(6, 254) = 2.736$ ;  $P = .014^*$ ). Based on the perceptions of teachers about EQ traits of students studying at secondary school

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programs, there is not a significant difference of the sub-scale of the understanding emotions. Actually, if the first sub-scale is observed, it can be said that, mean scores are similar with other sub-scale's scores. When Tukey-b analysis was performed to find the source, similar findings were revealed. There are significant differences between Anatolian High School, Science High School and Vocational High School for Girls teachers; and Technical and Industrial High School and General High School teachers' perceptions. Although, there is a similar finding in the Empathy sub-scale, Technical High School and Science High School teacher's perceptions vary at significant levels. In Turkey, students who have higher academic achievements, also have higher emotional and social development process. Furthermore, teacher's perceptions who are studying Vocational High School for Girl are more positive. Because Vocational High School students are almost female and when this research was done, in this school just two participant teachers were male. Also it can be said that female's EQ perceptions are higher than males.

### **Discussion**

In this study the construct of EQ for high school students was examined in a sample of Turkish high school teachers. The main purpose of this study is to show a) acquisition level of EQ traits in secondary school programs changes significantly according to gender, teacher's education level, and teacher's experience, and b) whether there is a significant difference between teacher's perceptions according to the secondary school programs in terms of EQ traits. Today, after secondary education most of the students start working in Turkey, in particular in Adapazari, because of the workforce demands of industry. Nowadays, EQ traits, which are thought to be the most important traits for success in business life are expected to be acquired in high levels. Senior students are expected to have EQ in high levels before they start working as well. In addition, it can be related to Toytok and Titrek's (2005) research findings which revealed that teachers have some deficiencies in EQ traits in Turkey, when they are managing classes. These deficiencies can give rising to students' EQ traits deficiencies as well.

Gender, teacher's education level, and teacher's experience about acquiring EQ traits do not lead to changes in teacher's perceptions. However, gender results are different from other research results. According to Goleman's (1995 & 1998), Sartorius' (1999), and

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Constantine and Gainor's (2001) research findings, females have a higher EQ level than males in all EQ dimensions. Both males and females generally have the same level of EI. However, male and females as groups tend to have a shared, gender-specific profile of strong and weak points. Also, females are generally more aware of their emotions, show more empathy, and are more adept interpersonally. Males, on the other hand, are more self-confident and optimistic, and can handle stress better (Teng Fatt, 2002, p. 64) . Moreover, Di Fabio and Palazzeschi (2008) researched the same subject in Italy and they found that on the interpersonal subscale, female teachers have higher EQ scores than male teachers. However, on the intrapersonal subscale, males obtained significantly higher scores than females. This research finding is similar with Turkish research findings. In Celep's (2000) research, about teachers, results revealed that female are more sensitive when compared to males in terms of empathy and human relations. In contrast, according to Weisinger (1998), education level makes regional, geographical etc. features equal. These research findings are in accordance with Weisinger's results.

According to the school programs, for Anatolian and Science Schools, where the students who pass the examinations based on academic achievement, teacher's perceptions about student acquisition of EQ traits are high in acquiring EQ traits compared to other high schools applying different programs. However, in Technical and Industrial High School (where the students who are most probably involved in business life after school) teacher's perceptions are the most negative. This can be a negative result when it is recognized that today in business life, people should have technical, conceptual, and human relationship skills (Katz & Kahn, 1978). While Technical and Industrial Schools are developing only technical skills, they should be expected to develop human and conceptual skills which are gaining importance in business life nowadays. Being low in acquisition levels, the results for students at General High Schools (Ali Dilmen High School and Selçuk Esedoğlu High Schools) make us think that there are deficiencies in Technical and Industrial High School (almost all students are male) and General High School Programs. In particular, it seems that current programs should be reviewed in these schools. Moreover, Imam-Hatip High Schools (where development of values within the education process are outstandingly important), are in the middle among seven high schools in terms of nearly every dimension which leads us to question current programs. On this matter, in Science and Anatolian High Schools (where



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the students are believed to have the most complex cognitive IQ traits and they are selected at the end of elementary school based on OKS exam results), EQ levels are highest in all sub-scales which lead to a conclusion that there is a relation between acquiring EQ and self-control and managing emotions. It can be stated that students who are involved in these programs are those who have the ability to control themselves. So, it can be suggested that activities such as improving self-control and managing emotions should be added to the curriculum programs that other schools practice in the classroom. According to teacher's perceptions in Turkey, if students have high academic and cognitive abilities, they have a high EQ level as well.

Also, when the results of the study done by Karsli et al. (2000) are examined, it can be found that EQ is not only important for education management, but also for management of political, social, economical, and cultural patterns. Education management factors about EQ which develop positive emotions, ideas and values are mostly ignored in education programs in Turkey. Furthermore, researches about EQ showed that the deficiencies in Turkish education programs related to EQ traits are self-defined in the areas of (Karsli et al., 2000; Titrek, 2004; Toytok & Titrek, 2005):

*Understanding and Managing Emotions:* Understanding negative and positive emotions, being aware of one's own feelings, understanding feelings such as self-confidence, dealing with stress, getting rid of negative emotions, being determined and patient, having ethical values, being aware of responsibilities, managing the emotions during activities such as searching for solutions to problems;

*Motivating Emotions:* Being calm in the event of obstacles, doing research before taking a risk, being determined to reach great goals, self-sacrifice, not being afraid of failure, motivating and deriving the people around such as influencing;

*Empathy and Social Skills:* Listening to people, being sensitive to others, reading face to understand people, helping others, being tolerant of others who have different types of ideas, having vision, being a leader, managing conflicts, having tasks in groups, and collective work.

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The development of these EQ traits can be put forward within the current programs and should be made a priority among teachers in order to eliminate these deficiencies. Teachers should develop students' EQ traits related to competencies more than traditional mission. Also, their students should develop EQ traits as much as cognitive and academic skills to be successful in all life (Toytok & Titrek, 2005). Nowadays, de-sensitiveness can be a reason for failure in school and life. Furthermore, teachers need to incorporate creative leadership traits with classroom and outdoor activities. When successfully integrated into a student's thinking, students are prepared for success in all aspects of society. When it is thought that these students will be managers in all positions of society in the future, today's educational system should try to develop the EQ traits of their students. In terms of educational quality and resources, it can be emphasized that new educational programs should focus on development of social and individual values such as close and intimate relationships, consciousness, collaboration, confidentiality, tolerance, respect, love, empathy, leadership, and etc.

As a result, the reasons should be examined for the fact that the teachers working at schools, where an academic education is extensively given to the students have higher EQ levels compared to the teachers working in other schools where different types of education is given. Based on the results of this research, it should be concluded that there is a further need to examine and determine the reasons why students from academically advanced high schools have higher average EQ traits score when compared to the students who attend to the other types of high schools. Moreover, teachers and parents should avoid authoritarian attitudes that affect their children/students in negative ways (Kesici, 2008) to develop EQ traits as well.

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