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Examining the Emotional Literacy Skill Levels of High School Studentsⁱ

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Abstract

The aim of this study, which was carried out in the center of Eskişehir using the survey model of quantitative research, is to describe the emotional literacy skill levels of the high school students and analyze them based on different variables. The study was conducted with 1103 high school students who were selected using stratified sampling method and as the data collection tool, “Emotional Literacy Skill Scale” developed by the researcher was used. The analyses of the data indicated that the high school students in the center of Eskişehir generally have medium and high levels of emotional literacy. When the demographic variables are examined, there are statistically significant differences in the emotional literacy skill total scores based on the gender, school type, and Grade Point Average (GPA) variables. It is observed that female students and students with high GPAs have higher scores in many dimensions; thus, the schools, which accept students with high scores and where the female students are the majority, have better average in terms of emotional literacy skill.

Keywords: *Emotional Literacy, Emotional Intelligence, Social and Emotional Learning, Survey Method, High School.*

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ⁱ This study was presented at Ankara University, International Congress on Education for Issues and Challenges and also was adapted from master’s thesis.

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Introduction

Our society has been experiencing many changes and transformations in the race of adapting itself to rapidly changing and improving world. In the focus of these change and transformations, the student, who is expected to be both a promising citizen and a self-realized individual, forms the raw material of education (Özden, 2005). It is known that students' realizing of themselves, self-control abilities, motivation levels, social awareness, and success in the interpersonal relations are directly proportionate to the quality of the education they get (Eryaman, 2008). Behaviorist view on education, which was dominant until the recent years in Turkish education system, regarded students as mechanisms that could be controlled and shaped (Çelik, 2007). Therefore, it focused only on the success rate in tests and held a rote learning structure (Gedikoğlu, 2005). However, in the recent years it has been understood that academic success is not an important factor in the real life success (Tufan, 2011). As the time has passed, it was realized that students' affective characteristics and thoughts are ignored with the view of teaching is done to make the students informed (Özden, 2005); and as a result of this, it was observed that the number individuals who are indifferent or harmful to the environment they live in has increased (Haskan ve Yıldırım, 2012). After long years of ignorance, educators and researchers have oriented their interests into the concept of emotion and started to think upon this issue (Goldie, 2007). One of the concepts claimed in the international literature in terms of emotions oriented to demolishing or minimizing the current problems is the term emotional literacy skill.

The concept of emotional literacy was first used by Steiner in 1979 (Killick, 2006). Steiner defined emotional literacy skill as "to know your emotions in such a way to improve your personal power, quality of other people's and your life". In this definition, emotional literacy skill is regarded as a source of personal power. Emotional literacy is a term that includes an individual's competency of being aware of and understanding their own or others' emotional situations and of responding other people's emotions in order to help (Weare, 2004; Killick, 2006; Antidote, 2003). In its simplest sense, emotional literacy emphasizes that in the focus of the emotional problems individuals have, rather than problems related to feeling emotions, there are problems in expressing those feelings, in other words finding the appropriate explanation for the emotion that is felt. As already implied by Hein (2013), emotional literacy is "the ability to express sentences composed of two words in which certain emotional expressions are used". For example "..... I feel".

In order to remove expression problems, knowledge and skill capacity in motivation, empathy, self-awareness, social skills, and self-regulation has an utmost importance. These topics constitute the chief points of emotional literacy, in other words, they reflect the main characteristic of it.

Emotional literacy skill in education states the sum of social, emotional and behavioral skills that are necessary in every aspect of an individual's family, school, and social life and emphasize

getting on well with others and effective learning. This skill is not only related to the learnings in educational process; it also supports the possibility of students' improvement of themselves both in cognitive and affective dimensions for the internalization and sustainability of the things they learn. Only in this way, individuals will take responsibility of their learning with the ease of expressing their feelings and will benefit from a curriculum enriched in terms of emotional view. Such a curriculum will help individuals analyze their emotions and affective features and facilitate the performing of these in the right place at the right time.

Andrew Moffat (2017) published a book on studying emotional literacy as "the schema of work". In this book, Moffat plans to upskill students emotional literacy skills through the teaching of 26 significant emotions. These feelings are: Anger and calmness, generosity and stinginess, happiness and sadness, courtesy and selfishness, thought and thoughtlessness, excitement and fear, pride and embarrassment, poverty and loneliness, shyness and self-confidence, love and exclusion, modesty and arrogance, courage and tension, acceptance and jealousy. With the thought of emotional training, positive increase in emotional literacy skills and well-being are observed and by the way the high level of emotional literacy is important in that it affects both the individual and the community (Uzan, 2018).

Emotional literacy skill contains a lot of factors supporting the need for bringing up individuals who can think analytically, are independent, have the problem-solution skill, can show empathy, which are also required for contemporary education. There is a need for realist research that can reveal the fact that individuals have the ability to understand the emotions, expressing skills, and clear and positive emotional awareness perception. In directing the future and making plans, individuals can be brought up with a characteristic which enable them to make determinations and reach self-content. Thanks to the education that helps reach this content, it is anticipated that effective communication will be developed and individual and social peace will be achieved. It is also predicted that as well as revealing emotional awareness, empathy, motivation, and social skills, with the emotional literacy skill which has the capacity to support these features (Weare, 2004; Antidote, 2003; Steiner, 2003), violence will be rehabilitated and emotions can be supported such as literacy types belonging to key skills.

Based on these occasions, when the positive features that emotional literacy can provide are born in mind, it is clearly seen that there is neither a settlement in our country that can assist the development of emotional literacy skill nor an abundance of studies focusing on this issue in the national literature. With reference to this lack, this study aims to identify the emotional literacy skill level of high school students and evaluate emotional literacy components in terms of certain variables.

In this study, which is considered to serve as a model to describe the present situation and thus contribute to the field, answers for the following questions will be sought:

1. How does the emotional literacy skill level of the high school students range?
2. Do the emotional literacy skill levels of the high school students differ significantly with reference to their
 - a. gender,
 - b. GPA,
 - c. school type?

Method

This study was constructed using quantitative research method and techniques. The study, aiming to describe the emotional literacy level of the high school students, used the survey method. This model is useful in identifying special and detailed views of the characteristic structures of people towards various topics in large types of research, getting their views and expectations, and wanting them to classify themselves (Wolfer, 2006). The population of the study consists of 35936 high school students studying in state high schools in the center of Eskişehir. Since reaching each person in study population would be difficult for the researcher in terms of time and costs, sampling method was used. Based on the 90% confidence interval and 0.5 margin of error, 1103 high school students who were reached was determined to be enough. Therefore, using the stratified sampling method, the sampling of the study consisted of high school students selected according to the number that would be enough to represent different school types. The schools were grouped as Science High School, Anatolian Teacher Training High School, Anatolian High School, Girls' Vocational School, Industrial Vocational High School, Vocational High School of Tourism, and Anatolian Technical High School. As the research model is survey model, in the name of a possible generalization, students of each grade (9th, 10th, 11th, 12th) representing each grade level from these groups were randomly selected. Demographic information related to the participants is presented in Table 1 below.

Table 1. Demographic Information Related to Student Participants

Options	Group	N	%
Gender	Female	641	58.1
	Male	462	41.9
	Total	1103	100.0
GPA	Low	315	.6
	Intermediate	504	8.9
	High	284	36.9
	Total	1103	33.7
High School Type	Science High School	178	16.1
	Anatolian Teacher Training High School	93	8.4
	Anatolian High School	421	38.2
	Girls' Vocational School	110	10.0
	Industrial Vocational High School	70	6.3
	Vocational High School of Tourism	54	4.9
	Anatolian Technical High School	177	16.0
	Total	1103	100.0

When the data regarding the students are examined, it is seen that 58.1% of them are female while 41.9% of them are male. In terms of their GPA in the last term, it is seen that 29% of the students have low, 45% of them have intermediate, and 26% of them have high levels of academic success. When the table showing the distribution of students according to school types, it is observed that 16.1% of the participants are Science High School students, 8.4% of the participants are Anatolian Teacher Training High School students, 38.2% of the participants are Anatolian High School students, 10% of the participants are Girls' Vocational School students, 6.3% of the participants are Industrial Vocational High School students, 4.9% of the participants are Vocational High School of Tourism students, 16% of the participants are Anatolian Technical High School students.

Data Collection Tool

In this study, first of all “Emotional Literacy Skill Scale” was decided to be prepared by the researcher for the aim and scope of the research. As a first step, the relevant literature was reviewed and emotional literacy models were examined. In these models, the most repeated characteristics that an emotional literate person should have are “motivation, showing empathy, emotional awareness, self-regulation, and social skills” (Weare, 2004;

Killick, 2006; Antidote, 2003; Steiner, 2003). Items referring to the features that belong to these dimensions were written in five dimensions, examined one by one, and overlapping items were removed. In order to verify the content validity, the draft form was analyzed by five faculty members who work at the Faculty of Education with at least a Ph.D. degree. Three more items were added to the scale with the suggestions of a faculty member after the reviewing process and the draft form was finalized with 23 items in total.

Using the draft form, a pilot study was carried out with 373 students. As a result of Kaiser Meyer Oklin = .78 and Bartlett ($p < .01$) test analyses gathered through the collected data, it was understood that exploratory factor analysis could be applied to the collected data. With the exploratory factor analysis done by using Varimax rotation method, the analysis was repeated several times by removing 2 items which loaded to more than one factor and whose factor loads were below than .30. After the removal of the 2 items in the Self-Regulation Dimension and realizing that the other 2 remaining items could be related to Motivation Dimension, the scale consisted of 4 dimensions. As an explanation to this, students in the sampling are thought to associate the valid items about the self-regulation strategies with their motivational processes. Hence, these items were analyzed in the Motivation Dimension. The factors are named as “Motivation, Empathy, Emotional Awareness, and Social Skills”. With its final version of 21 items, it was detected that the factor loads of the items varied between .721 and .447. Besides, the eigenvalues of the factors vary between 1.245 and 4.037 and the total variance that the 4 factors explained was 41%. The literature regarding education states that in the factor analysis, if the percentage of the total variance that the factors explain over is 40%, it can be acceptable (Kline, 1994; as cited in Baloğlu and Karadağ, 2008; Kurt, 2001).

In this study, also Confirmatory Factor Analysis was applied to look at the factorial structure of the factor structure. Confirmatory Factor Analysis is conducted to determine the factors and structure of a previous research and its theory (Rasch, Kubinger and Yanagida, 2011; Keith, 2006). The following table shows the parameters for the Confirmatory Factor Analysis.

Table 2. The adjustment parameters of the confirmatory factor analysis

Parameter Adjustment	Coefficient
GFI	0.95
AGFI	0.94
PGFI	0.75
CFI	0.90
RMSEA	0.04
df	183
χ^2	574.72
χ^2/df	3.13

The χ^2 / df ratio calculated according to the confirmatory factor analysis results is 3.13. The Chi Square ($\chi^2 = 574.72$) test is sensitive to the sample size and when the sample size is greater than 200, the results are generally not reliable. Since the number of participants is 373, it is considered that this value is derived from the sample size. Other fit indices of the model [CFI=0.90, GFI=0.95, AGFI=0.94, PGFI=0.75, RMSEA=0.04] also suggest that the recommended model for the scale is appropriate (Keith, 2006; Hair, Black, Babin and Anderson, 2010).

In the next step, in order to define the item discrimination, the scores were sorted in descending order and two groups - 27% lower group and 27% upper group – were formed. As a result of the independent t-test scores applied to these groups, the difference between upper and lower groups were found as significant ($p < .01$). Therefore, the significant difference between the upper and lower score obtained from the scale shows that the scale is discriminant in testing the targeted feature.

Finally, a reliability test was applied to the scale that consists of 4 factors and 21 items. It was found that the Emotional Literacy Skill Scale had .78 Cronbach Alpha value. It has the condition that the reliability of an ideal scale should be over .70 (DeVellis, 2012; Bryman, 2008). After the reliability analyses the scale consisting of 4 factors and 21 items and prepared in 4 likert-type design was obtained.

Analysis of Data

The data analysis started after confirmatory factor analysis and a repeated reliability analysis was carried out to 1103 forms. The obtained data was found as appropriate and before analyzing the data, in order to see whether the data distributed normally, frequency and graphic distributions were analyzed, and skewness and kurtosis values and homogeneity tests were applied. According the results of these tests and calculations, it was detected that the data carry an appropriate feature for parametric tests.

In the analysis of the first research question, in order to describe the general situation of all the participants of the study, frequency and percentage calculations were used. In the analysis of the second research question, since the variable of “gender” as a part of students’ demographic information has 2 categories, Independent Samples T-test was used. In addition, for such variables as “GPA” and “school type” which has 3 or more categories, one-way analysis of variance (ANOVA) was used. At the end of the analysis, in the case of a significant difference, Tukey HSD multiple comparison test was applied in order to detect which group is the source of the difference. In interpreting the results of the statistical calculations, 0.5 was accepted as the significance level.

Results

The findings obtained as a result of the analyses carried out in association with the scope and research questions of the study are as follows;

The Distribution of High School Students Based on Their Emotional Literacy Skill Levels

In the analysis of the distribution of the high school students based on their emotional literacy skill levels, the scores they got from Emotional Literacy Skill Scale are examined. The emotional literacy skill scores were summed and their distribution as “low, medium, and high” categories, which had been defined previously, are presented as frequency and percentage in Table 2 below;

Table 2. Students’ Emotional Literacy Skill Level Frequency and Percentage Values

Emotional Literacy Skill Level	Frequency (f)	Percentage (%)
Low Level	7	0.6
Medium Level	481	43.6
High Level	615	55.8
Total	1.103	100.0

When the table above is examined, it is seen that the majority of the high school students have a high level of emotional literacy (55.8%). Secondly, the students have a medium level of emotional literacy with a percentage of 43.6%. Lastly, few of the students have a low level of emotional literacy (0.6%).

The Evaluation of High School Students’ Emotional Literacy Skill Levels Based on Demographic Variables

The high school students’ emotional literacy skill levels were examined whether they varied in terms of the variables of gender, GPA, and school type. The values regarding this examination are as follows:

Gender

Through the research questions of the study, the results of the analysis whether the emotional literacy skill level scores of the high school students have difference according to their gender are presented in Table 3 below.

Table 3. The Comparison Between Gender and Emotional Literacy Skill Total & Subscale Scores

Subscales	Gender	n	X	SS	t	P
Emotional Literacy S. Total Score	Female	641	66.32	7.33	6.508	.000
	Male	462	63.35	7.67		
1- Motivation	Female	641	22.16	3.24	2.347	0.19
	Male	462	21.68	3.33		
2- Empathy	Female	641	20.27	2.80	8.909	0.00
	Male	462	18.64	3.14		
3- Emotional Awareness	Female	641	15.16	2.67	4.033	0.00
	Male	462	14.49	2.74		
4- Social Skills	Female	641	8.72	2.24	1.426	.154
	Male	462	8.52	2.22		

SD= 1101

When the Emotional Literacy Skill Total Scores are examined, while the female students have a high level of emotional literacy ($\bar{X}=66.32$), male students are at medium level with their scores ($\bar{X}=63.35$). The t-test analysis showed that there is a significant difference between the genders of the students in favor of the female students [$t(1101)= 6.508, p=.000$]. In the Motivation subscale, the female students are highly motivated ($\bar{X}=22.16$), whereas male students have medium level of motivation ($\bar{X}=20.27$). In addition to this result, according to the t-test analysis, it is seen that the female students differ significantly from male students [$t(1101)= 2.347, p=.019$]. When the scores of the students in the Empathy subscale are examined, it is observed that there is a significant difference between the genders of the students in favor of the female students [$t(1101)= 8.909, p=.000$]. It was also detected that the female students have a high level of empathy ($\bar{X}=20.27$), and the male students have medium level of empathy ($\bar{X}=18.64$). The analysis of the Emotional Awareness Scores showed that both the female students ($\bar{X}=15.16$) and the male students are at the medium level ($\bar{X}=14.49$). When the t-test scores are examined, it is found that there is a significant difference between the genders of the students in favor of the female students [$t(1101)=4.033, p=.000$]. Based on the scores of Social Skills, it is observed that there is no significant difference between the genders of the students [$t(1101)= 1.426, p=.154$]. It was also detected that both the female students ($\bar{X}=8.72$) and the male students are at the medium level ($\bar{X}=8.52$).

GPA (Grade Point Average)

The analysis of the emotional literacy skill total and subscale scores of the high school students based on the variable of their GPA are presented in Table 4 below.

Table 4. The Analyses of the Emotional Literacy Skill Total and Subscale Scores Based on the Variable of GPA

Subscale	The Values of n, X and SS				ANOVA Results					
	Level	N	X	S.D.	S.V.	S.S.	D.F.	M.S.	F	p
1-Emotional Literacy Total Score	Low	315	61.80	8.23	B. Groups	12129.47	2	6064.73	128.68	0.00
	Medium	504	64.09	5.92	In Group	51843.19	1100	47.13		
	High	284	70.47	6.76	Total	63972.66	1102			
	Total	1103	65.08	7.62						
2- Motivation	Low	315	21.10	3.65	B. Groups	897.08	2	448.54	44.74	0.00
	Medium	504	21.67	2.98	In Group	11028.40	1100	10.03		
	High	284	23.44	2.90	Total	11925.48	1102			
	Total	1103	21.96	3.29						
3-Empathy	Low	315	18.42	3.29	B. Groups	1179.26	2	589.63	70.88	0.00
	Medium	504	19.42	2.74	In Group	9150.78	1100	8.32		
	High	284	21.20	2.64	Total	10330.04	1102			
	Total	1103	19.59	3.06						
4-Emotional Awareness	Low	315	14.19	2.82	B. Groups	759.09	2	379.55	56.36	0.00
	Medium	504	14.54	2.54	In Group	7408.05	1100	6.73		
	High	284	16.27	2.41	Total	8167.15	1102			
	Total	1103	14.88	2.72						
5-Social Skills	Low	315	8.09	2.27	B. Groups	352.28	2	176.14	37.61	0.00
	Medium	504	8.46	2.17	In Group	5151.55	1100	4.68		
	High	284	9.56	2.04	Total	5503.83	1102			
	Total	1103	8.64	2.23						

In the results of ANOVA, it is seen that there is a significant difference between the GPAs of the participants and their emotional literacy skill scores [$F(2,1100) = 128.68, p=.000$]. According to the results of the Tukey Test ($p=0.00$), which was carried out to see in which range of GPA the differences are, it was observed that the students whose GPAs are low ($\bar{X}=61.80$) differ significantly from those whose GPAs are medium ($\bar{X}=64.09$) and high ($\bar{X}=70.47$). According to the results of ANOVA, there is a significant difference between the scores the participants get from the Motivation dimension and their last term GPA [$F(2, 1100) = 44.74, p=.000$]. The results of the Tukey Test

($p=0.00$), which was applied to see in which range the differences are, indicated that students whose GPAs are high ($\bar{X}=23.44$) differ significantly from those whose GPAs are medium ($\bar{X} =21.67$) and low ($\bar{X}=21.10$). The analyses of ANOVA also showed that there is a significant difference between the scores the participants get from the Motivation dimension and their last term GPA [$F(2, 1100) = 70.88$ $p=.000$]. The results of the Tukey Test ($p=0.00$), carried out to see in which range the differences are, point out that there is a significant difference between the scores of the students whose GPAs are high ($\bar{X}=21.20$) and those of whose GPAs are medium ($\bar{X}=19.42$) and low ($\bar{X}=18.42$). This result reveals that the students whose GPAs are high use the skill of empathy more efficiently. The scores of the participants in Emotional Awareness Dimension differ significantly based on their last term GPA according to results of ANOVA [$F(2,1100) = 56.36, p=.000$]. Tukey Test was applied in order to see in which range the differences are and it indicated that there is a significant difference between students with high GPA ($\bar{X}= 16.27$) and those with medium ($\bar{X}=14.54$) and low ($\bar{X}=14.19$) GPA. The findings demonstrate that there is a positive correlation between academic success and emotional awareness level. According to the results of ANOVA, a significant difference between the last term GPAs of the students and their scores they got from social skill dimension is found. It is observed that the students whose GPAs are low ($\bar{X}=8.09$) differ significantly from those with medium ($\bar{X}=8.46$) and high ($\bar{X}= 9.56$).

This indicates that success is directly proportional to the level of emotional literacy. It can be said that it may contribute to motivation and self-sufficiency of the students.

School Type

The analysis of the emotional literacy skill total and subscale scores of the high school students based on the variable of school type are presented in Table 4 below.

Table 5. The Analyses of the Emotional Literacy Skill Total and Subscale Scores Based on the Variable of School Type

The Values of n, X and SS			ANOVA Results								
Subscale	Level	N	X	S.D.	S.V.	S.S.	D.F.	M.S.	F	p	
1- Emotional Literacy Total Score	Science H.S.	178	63.39	8.42	B. Groups In Group Total	1423.51	6	237.25	4.16	0.00	
	Teacher H.S.	93	64.48	7.66		62549.14		1096			57.07
	Anatolian H.S.	421	66.04	6.83		63972.66		1102			
	Girls' Voc. H.S.	110	66.21	7.83							
	Industrial Voc. H.S.	70	62.87	6.50							
	Tourism Voc. H.S.	54	65.46	7.07							
	A. Technical H.S.	177	64.89	8.52							

	Total	1103	65.08	7.62						
2- Motivation	Science H.S.	178	21.39	3.77	B. Groups	133.04	6	22.17	2.06	0.55
	Teacher H.S.	93	21.60	3.11	In Group	11792.43	1096	10.76		
	Anatolian H.S.	421	22.10	3.02	Total	11925.48	1102			
	Girls' Voc. H.S.	110	22.55	3.42						
	Industrial Voc. H.S.	70	21.67	2.58						
	Tourism Voc. H.S.	54	21.83	3.54						
	A. Technical H.S.	177	22.20	3.50						
	Total	1103	21.96	3.29						
3- Empathy	Science H.S.	178	19.08	3.25	B. Groups	295.013	6	49.169	5.370	.000
	Teacher H.S.	93	19.39	3.04	In Group	10035.025	1096	9.156		
	Anatolian H.S.	421	20.00	2.90	Total	10330.038	1102			
	Girls' Voc. H.S.	110	20.40	2.88						
	Industrial Voc. H.S.	70	18.72	2.66						
	Tourism Voc. H.S.	54	19.64	2.65						
	A. Technical H.S.	177	19.05	3.35						
	Total	1103	19.59	3.06						
4- Emotional Awareness	Science H.S.	178	14.63	2.87	B. Groups	60.54	6	10.09	1.36	.226
	Teacher H.S.	93	14.96	2.36	In Group	8106.60	1096	7.40		
	Anatolian H.S.	421	15.02	2.60	Total	8167.15	1102			
	Girls' Voc. H.S.	110	14.74	2.79						
	Industrial Voc. H.S.	70	14.23	2.66						
	Tourism Voc. H.S.	54	15.19	2.97						
	A. Technical H.S.	177	15.03	2.92						
	Total	1103	14.88	2.72						
5- Social Skills	Science H.S.	178	8.27	2.19	B. Groups	71.429	6	11.905	2.402	0.26
	Teacher H.S.	93	8.52	2.23	In Group	5432.398	1096	4.957		
	Anatolian H.S.	421	8.91	2.26	Total	5503.828	1102			
	Girls' Voc. H.S.	110	8.51	2.08						
	Industrial Voc. H.S.	70	8.24	2.42						
	Tourism Voc. H.S.	54	8.79	2.19						
	A. Technical H.S.	177	8.59	2.16						
	Total	1103	8.64	2.23						

In the results of ANOVA, it is seen that there is a significant difference between the school types of the participants and their emotional literacy skill total scores [$F(6,1096) = 4.16, p=.000$]. According to the results of the Tukey Test ($p=0.00$), which was carried out to see in which range the differences are, there are significant differences between the students of ($p=0.05$);

- Science High School (\bar{X} =63.39) and Anatolian High School (\bar{X} =66.04) and Girls' Vocational High School (\bar{X} =66.21),
- Industrial Vocational High School (\bar{X} =62.87) and Anatolian High School (\bar{X} =66.21).

Similarly, there is a significant difference between the school types of the participants and their scores they get from the empathy subscale [$F(6,1096) = 5.370, p=.000$]. According to the results of the Tukey Test ($p=0.05$), which was carried out to see in which range the differences are, indicate that

- The scores of the Science High School students (\bar{X} =19.08) and the scores of the students of Anatolian High School (\bar{X} =20.00) and Girls' Vocational High School (\bar{X} =20.40),
- The scores of the Anatolian High School students (\bar{X} =20.00) and the scores of the students of Science High School (\bar{X} =19.08), Industrial Vocational High School (\bar{X} =18.72), and Anatolian Technical High School (\bar{X} =19.05),
- The scores of the students of Girls' Vocational High School (\bar{X} =20.40)) and the scores of the students of Science High School students (\bar{X} =19.08, Industrial Vocational High School (\bar{X} =18.72), and Anatolian Technical High School (\bar{X} =19.05) differ significantly from each other.

There is also a significant difference between the students' scores in social skills dimension and their school type [$F(6,1096) = 2.402, p=.026$]. The results of the Tukey Test, which was carried out to see in which range the differences are, indicate that there is a significant difference between the scores of the Science High School students and those of the students of Anatolian High School ($p=0.05$).

Another finding of the study is that there is no significant difference between the scores that the students get from the motivation [$F(6, 1096) = 2.06, p= 0.55$] and the emotional awareness [$F(6, 1096) = 1.36, p= .226$] dimensions based on their school type.

These data shows that the achievements of the students in the schools and the gender differences effect much the emotional literacy skills of the students. It was observed that the students of Vocational High School and Anatolian High School had higher emotional literacy scores than the other secondary school students in comparing the total scores of emotional literacy and subscale scores of secondary students compared to high school students. It is clear that these two schools are the result of the fact that the number of students in terms of number is dominated by girl students. However, the fact that the highest average in the social skills subscale belongs to Anatolian High School and the

lowest average belongs to the Industrial Vocational High School students shows that the students have positive characteristics in social skills related to their success status. The masses addressed by these two schools are thought to be influenced by the socio-cultural relations of the environment and the students.

Discussion, Conclusion and Suggestions

Discussion and Conclusion

This study seeks to address the emotional literacy levels of students. Emotional literacy generally refers to utilize skills such as empathy, self-regulation, self-motivation, social skills, emotional awareness, emotional regulation, problem-solving. Emotional literacy skill contributes positively to students' academic achievements, relations with others, mental health, social skills, attitudes towards school and sense of self, etc. (Kandemir ve Dündar, 2008). The results achieved in the context of students' emotional literacy skill levels are presented below.

The results of the study revealed that most of the students have high levels of emotional literacy skills. That is a critical and important result as it emphasizes that the motivation, empathy, emotional awareness and social skills levels of the majority of the students participated in the study are appreciable and above intermediate and low levels. Rae (2012) highlights that students who have successful emotional literacy skills also have skills of sophisticated self-control, efficient listening proficiencies, active and effective engagement in the class, using emotional vocabulary, naming his/her emotions perfectly, showing anger management skills and having positive sense of self. It is assumed that over half of the respondents demonstrate such basic and fundamental skills but that result need to be interpreted with caution and attention because the students were to answer the item individually about themselves, so they may have chosen the positive options. Also the research was run in the central districts of a developed city, the intensity of opportunities may be one of the positive effects in the results.

According to the comparisons made between students' genders, there found to be statistically significant difference between the scores in favor of girls. The results of girls' being more motivated and having empathic concern were expected as the girls have a natural tendency to address their feelings more than boys. Also this result is in complete agreement with an earlier study which focused on the high school students' levels of showing empathy and it outlined that girls have higher points than the boys in apologizing behaviors (Şenol, Akça, & Çümen, 2012). Similarly, in another study, Alver (2005) pointed out that girls have higher levels of empathy skills than boys. In addition to empathy skills, in their study examining motivation skills of students, Yaman and Dede (2007) stated that girls were more motivated than the boys in specific motivational areas. On the other hand,

Korkmaz, Şahin, Kahraman and Öztürk (2001) could not find significant differences between girls and boys in their study of empathy.

As for the analyses made upon students' GPA, it was determined that students with high averages differentiated in a statistically significant way from those who got medium and low averages. This result has strengthened the hypothesis that emotional literacy skill is directly proportionate to the success. Remarkably, this result is related to the motivation and self-efficacy of the students. This fits well with the work of Gumora ve Arsenio (2002) on emotionality and school performance emphasizing that emotional regulation affines with students' GPA. Other works on relationship between emotional intelligence and school success demonstrated that the students with higher emotional intelligence capacity succeed in their school subjects academically (Agnoli et al, 2012; Yazıcı, Seyis ve Altun, 2011). Besides, these results differ slightly from those who inserted that there was not a connection between academic success and emotions (Newsome, Day and Catano, 2000; Reiff et al, 2001).

In terms of the comparisons made according to students' school types, Girls' Vocational High School and Anatolian High School have differentiated statistically from other school types and got higher levels of emotional literacy skills. Given that two schools have girl students predominantly, it is assumed that gender has effected this result of the study in a way. However, in social skills dimension the highest point average belongs to Anatolian High school and the lowest point average belongs to Industrial Vocational High School. That result supports that success associates positively with social skills of the students.

Suggestions

It is necessary to place themes oriented to improve emotional literacy skill in the curricula and this is highly recommended. It is considered that some support programs developed based on motivation, empathy, emotional awareness, and social skills will contribute to use of the skills in terms of the components of emotional literacy in real life and to transfer them to the school life. Training the administrators, teachers, and the general staff in schools through support programs will reinforce the sense of setting that is enriched in terms of emotional environment.

In the activities, which will be prepared regarding the psychological and physiological changes in the high school era, the needs and interests of the male students should be considered and they must be encouraged to reach the aforementioned skills. Besides, in such schools as Technical High School and Industrial Vocational High School where the majority of the students is male, the skills related to emotional literacy should be placed in formal and hidden curricula.

Bearing the fact that emotional literacy and the school performance are directly related, it is suggested that performance activities that improve students' productivity processes and support their exchange of emotions must be placed in the classrooms.

It is important that the emotional literacy skill education expands not only individually but also in all the aspects of the social life of the learning process with all its components; thus, it is of utmost necessity that parents should be a part of the curricula. Through the special programs developed for the families of the students, a step to reach a healthier and more productive adult model will be provided.

This study is limited to the self-evaluations of the students' emotional literacy skill levels. Further studies, which include teacher-student and parent-teacher evaluations, might result in achieving richer findings.

Besides, this study is based on quantitative data. It is considered that in the further studies, using qualitative methods such as observing the behavior or studies that provide long term and detailed results (e.g. observation, case study, interviews) will be effective.

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