

## Original Article

## Emotional Intelligence of Turkish and Greek Nursing Students

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**Background:** Improving the Emotional Intelligence of nurses is of increasing relevance to the profession. One of the main components of Emotional Intelligence of particular concern to nursing is empathy which is an essential component in achieving good nurse-patient relationships. Thus, student nurses should be exposed to these notions in order to become successful professionals.

**Objectives:** The aim of this study is to determine the similarities and differences between Turkish and Greek nursing students' Emotional Intelligence levels and discuss possible reasons for these observations.

**Methodology:** A survey was conducted using the Emotional Intelligence Self-Evaluation Scale on two sample sets, 110 Greek and 110 Turkish nursing students. Data was analyzed by non-parametric tests using Mann-Whitney U and Kruskal-Wallis test to a confidence interval of  $p < 0.05$ .

**Results:** The mean age was  $21.1 \pm 2.5$ , range 18-35 years and 85.5% female. Third year students' average scores had significantly lower scores than other classes ( $p < 0.05$ ). Of the scale's five sub-dimensions, Turkish students' scores for 'Emotional Awareness, Empathy' ( $p < 0.01$ ), and Total Score ( $p < 0.001$ ) were significantly lower than Greek students who scored less well with 'Managing Ones' Emotions' ( $p < 0.001$ ). Yet, scores for 'Self Motivation' were equal between both groups. Third year students in both groups demonstrated lower scores which might be attributed to uncertainties faced by third grade students as they progress towards finishing their degree.

**Conclusions:** The study showed that gender is a key factor concerning empathy levels amongst student nurses with females indicating higher levels compared to male nurse students regardless of nationality. This finding holds significant importance as future nursing curriculae should take into account the need for gender specific enhanced training for Emotional Intelligence updates.

**Key words:** Emotional Intelligence, Empathy, Nursing Studies, Students

**Introduction**

The concept of Emotional Intelligence (EI) stems from developments in the field of psychology during the 1960s and includes many components such as the understanding, realization, control and management of feelings. The central premise of EI is the ability to understand one's own emotions and to control these accordingly. Thus, those who succeed in managing their own emotions and recognizing and understanding, those of others, are more able to act in a determined, logical manner with improved social

interaction (Mayer et al., 2008). There are many new EI theories focusing on different aspects of both emotions and intelligence. The most popular of these include Mayer & Salovey's Theory (Mayer et al., 2005), Goleman's Theory (Goleman (1998) and Bar-On's Theory (Bar-On, 2006). Mayer and Salovey's theory focuses on four basic components i.e. perception of feelings and understanding their impact, interpretation and management. Goleman (1998), identified EI as not just understanding of feelings but also making decisions according to those feelings. Bar-On (2006) described EI as a combination of

emotional, social and personal skills. Hence, EI includes many skills such as; perception of emotions, emotional awareness, managing feelings as desired and using feeling as a guide. These skills are classified in a hierarchy among themselves and form a step toward developing from simple to complex.

However, motivation has been readily acknowledged as another force behind a person's behavior. Well motivated people usually have high EI levels and can express their emotions without any difficulties. Also of relevance is empathy, defined as an ability to understand other people's emotions and thoughts as if they were your own. Empathy is essential in comprehending one's feelings and to predict how a person might feel after all communication has been exchanged. In this light, empathy and social skills are essential to smooth interpersonal relationships (Batool, 2013). Those with high EI generally present with successful school and job performances and tend to show leadership skills. In addition, people with high EI are generally mentally healthier (Goleman, 1998). Similarly, highly motivated people are more productive, enterprising, eager and are known to be problem solvers. Furthermore, those with high empathy skills are known to have good relationships and enduring marriages with adaptation skills and positive perspective on life. Self-confident people know what makes them strong but when they are also aware of their weakness too these individuals demonstrate increased anger control combined with a greater ability to deal with life's stresses (Roberts, 2010). It has been suggested that EI can be developed like cognitive intelligence. Early studies on EI investigated the presence of different types of intelligence in addition to cognitive intelligence. Further work by Moller & Bar-On (2000) revealed that IQ affects success in school but does not affect social skills, interpersonal relationships and forming social networks.

Although EI was first explored scientifically by Mayer and Salovey, Goleman has drawn more attention with his renowned book identifying EI as not just the understanding of feelings but also the ability to make decisions according to those feelings. In addition, actions like coping with adversities and removal of bad feelings are core topics of his EI theory with self-awareness, managing feelings, motivation, empathy and interpersonal relationships being the five basic components of it (Goleman, 1998). Similarly,

Bar-On (2006) described EI as a holistic set of emotional, social and personal skills which are outside the cognitive intelligence area. He also described EI under five headings, i.e. inner world, outer world, adaptation, coping with stress and general mood. Despite theoretical differences, it is widely acknowledged that the pillars of EI consist of five main components as follows: emotional awareness, managing one's emotions, empathy, self-motivation, coaching others' emotions.

**Emotional Awareness:** according to this notion, first, the person has to be aware of his/her own emotions. People, who feel different emotions to different situations and events of daily life, should be able to recognize and define these feelings. In this way, they are more able to control their behavior when angry, happy or sad. Self-conscious people, who are aware of their feelings, are likely to be successful on making decision or interpersonal relationships (Buckley et al., 2016). In addition, self-conscious people are more aware of their weakness, strengths and limits. In this context those with higher EI, possess a higher level of self-esteem and state of independence. Additionally, they can make optimum decisions more easily (Fitzpatrick, 2016).

**Managing One's Emotions:** being able to cope with one's feelings is as important as the perception of his/her emotions as they have to make sense of both positive and negative feelings accordingly. Coping with stress and anger are typical examples of good management of emotions. People, who can control their emotions are prone to tolerate emotional transitions and may adapt to changes more calmly, showing stability and consistent behaviors. In return, this gives confidence to those around them (Zeidner et al., 2009).

**Motivation:** is well-recognized as the power behind a person's behavior. It is defined as impetus in psychology, a demand that pushes people to behave and express their feelings accordingly. Highly motivated people, have high EI and they know why they do what they do. They have less difficulties expressing their feelings or thoughts and can also effectively manage their emotions. These people can be described as both creative and productive (Sontakke., 2016).

**Empathy:** is defined as an attempt to understand the feelings and thoughts of others. When people try to show empathy, they take heed of others and thus, really try to 'get into someone else's'

shoes'. Thus, empathy is a genuine effort to understand the other person's feelings yet not being overwhelmed by them nor guessing the others' feelings or predict what will others feel when they do something. In this context, empathy helps to grasp another persons fears and anxieties. In turn, this affects attitudes and behaviors within relationships. Finally, it is known that health workers, who show empathy, are less likely to be involved with medical malpractice activities (Landa & López-Zafra, 2010).

**Coaching Others' Emotions:** individuals communicate daily to maintain their social lives but the effectiveness of this communication is related to the developmental level of their social skills. Positive feelings help to build close relationships and keep a relationship strong while social skills and empathy have significant roles in effective communication and relationships. As empathy helps to understand better feelings and thoughts, it ontributes to positive feedbacks. Thus, coaching others' emotions also make relationships stronger and closer (Grant, 2007).

### **EI and Nursing**

It is known that those who exercise better control over their emotions are happier and more successful in general. They are more aware that there is a need to understand the feelings and thoughts of others and to help them manage these. People with high EI can adapt to difficulties more easily and can be effective in solution finding. Nurses have to communicate constantly with patients, their relatives and co-health workers. Therefore, nurse-patient communication is of paramount importance in nursing practice. In this context, their interaction is not just talking or consisting mainly of the nurse's perspective but rather understanding the patient's feelings and use this as a guide to provide effective care. Nurses also need to know how to control their own emotions. For example, such control is necessary in order to cope with difficult cases where the patient is terminally ill or is in a life-threatening situation (Holbery, 2015).

EI levels as measured during nurse studying is directly related to clinical skills competencies thus nurses, with high EI, are more successful in their professional careers. Also, when they empathize with others they can work more congenially with their coworkers. It has also been found that high EI improves patient care

outcomes and increases nursing job satisfaction (Beauvais et al., 2011).

One of the main components of EI of particular concern to nursing is empathy which is an essential component in achiving good nurse-patient relationships. When empathy is shown in the daily interactions within clinical environments, the team as a whole is more productive. For this reason, nurses must be aware that for better nurse-patient relationship, they need to be able to show empathy, be aware of their feelings, manage them properly and communicate effectively (Clancy, 2014). As EI is very important for the nursing profession, it is essential to create an environment where students can improve their EI skills before becoming a nurse. This can be done by adding curriculum courses on EI content and practice that may increase EI skills amongst students. In this way, there may be more professional nurses who are aware of their emotions and have higher levels of empathy. Thus, these staff nurses with high EI levels would in turn give better care to their patients and work better with fellow staff and even achieving greater job satisfaction for themselves (Srivastava & Bharamanaikar, 2004).

The aim of this study is to determine the similarities and differences between Turkish and Greek nursing students' EI levels and discuss possible reasons for these observations.

### **Methods**

A simple survey design was employed using a self-administered questionnaire i.e. the EI Self-Evaluation Scale (EIS-ES) for data collection (Hall, 1995). This also included demographic information on participants' gender, age, year of study and nationality. The study sample consisted of 220 bachelor degree nursing students in total, 110 of whom were from Turkey and 110 from Greece. Inclusion and exclusion criteria included being a nursing student, willing to participate and not to having previously partaken in a survey on EI. Ethical Considerations included permission to conduct the study in the nursing departments sought and granted by the heads of each corresponding department (Research Ethics Committee: 10/6/ATEI/12, 20/11/2015). The purpose and content of the study was explained to the students and individual written permission was sought. Anonymity was safeguarded as no names, surnames or other form of indirect indentification were recorded. Participants were

informed that the data would be used strictly for academic purposes only and would not be disclosed or shared with a third party. Data collection was conducted from January to June, 2016. The EIS-ES is a self-evaluation tool which measures tendencies and abilities within various areas of EI. It consists of 30 questions on a 6 point likert scale, i.e. 1. Disagree very much, 2. Disagree moderately, 3. Disagree slightly, 4. Agree slightly, 5. Agree moderately and 6. Agree very much. The EIS-ES design covers five areas of EI questions throughout the tool rather than tackling them under specific headings (Ünsar, 2013). These five areas with their corresponding questions are: Emotional Awareness (1, 2, 4, 17, 19, 25), Managing One's Emotions (3, 7, 8, 10, 18, 30), Self Motivation (5, 6, 13, 14, 16, 22), Empathy (9, 11, 20, 21, 23, 28) and Coaching Others' Emotions (12, 15, 24, 26, 27, 29).

### Statistical analysis

The scale's overall Cronbach Alpha coefficient was found to be 0.89 while subdimensions were as follows: Emotional Awareness (0.63), Managing One's Emotions (0.66), Self Motivation (0.72), Empathy (0.70) and Coaching Others' Emotions (0.74). After the evaluation of proper normal distribution by one sample Kolmogorov Smirnov and One Way Anova Tests, the data was analyzed by non-parametric tests using Mann Whitney U and the Kruskal Wallis test to a confidence interval of  $p < 0.05$ . The Statistical Package for Social Sciences v. 21 was used for all tests (Mehta & Patel., 1989).

### Results

The mean age of the total sample ( $N=220$ ) was  $21.1 \pm 2.5$  and the range was 18-35 years. Overall, 85.5% of the students were female, although gender distribution differed between the sub-samples, i.e. 93.6% (female Turkish) versus 77.3% (female Greek). Thus, there is a predominance of female nurses in the Turkish sample (93.3%) whereas the nursing school in Greece has a smaller percentage with approximately  $\frac{3}{4}$  of the sample consisting of females. The mean age of Greek nursing students was  $20.9 \pm 2.5$ , while the the mean age of Turkish nursing students was  $21.3 \pm 1.5$  and the range was 18-26 and 18-35 respectively.

In terms of current year of study, nearly half the Greek sample (47,3%, i.e.  $n=52$ ) are in the 2nd year of their education. More specifically, the distribution of the Greek sub-sample was as

follows: 1st year: 6 (5.5%), 2nd year: 52 (47.3%), 3rd year: 45 (40.9%) and 4th year: 7 (6.4%) whereas the Turkish sample is more evenly distributed across all four years of studying, namely, 1st year: 24 (21,8%), 2nd year: 25 (22.7%), 3rd year: 39 (35.5%) and 4th year: 22 (20%). With regard to gender, it was noted (table 1) that the average of the male student scores on the 'Empathy' subdimension were significantly lower than the female student scores ( $p < 0.05$ ). Yet, there is no correlation between gender and 'Emotional Awareness', 'Managing One's Emotions', 'Self-Motivation', 'Coaching Others' Emotions' subdimensions and Total Survey Score ( $p > 0.05$ ). As shown in table 2 below, it was statistically found that the third year students' average scores received from the Managing One's Emotions and Self Motivation subdimensions and Total Survey Score were significantly lower then other classes ( $p < 0.05$ ). There is not statistically meaningful correlations between year of education and Emotional Awareness, Empathy, Coaching Others' Emotions sub-dimensions ( $p > 0.05$ ). As shown in table 3, Turkish students' average scores for 'Emotional Awareness, Empathy' ( $p < 0,01$ ) subdimension, and Total Survey Score ( $p < 0,001$ ) were significantly lower then Greek students. In addition, Turkish and Greek students' average scores for 'Self Motivation' subdimension were equal. The Greek students' average scores received from 'Managing Ones' Emotions' subdimension were significantly lower than Turkish students ( $p < 0,001$ ). Yet, there was no statistically meaningful correlation between nationality and the 'Coaching Others' Emotions' subdimension ( $p > 0.05$ ). The Greek male students' average scores for the 'Managing One's Emotions' subdimension (table 4) was significantly lower then female students ( $p < 0.05$ ). However, there was no statistically significant correlation between gender and 'Emotional Awareness', 'Empathy', 'Coaching Others' Emotions' sub-dimensions and the Total Survey Score ( $p > 0.05$ ). In terms of year of study, analysis showed that Greek third year students' average scores for 'Emotional Awareness' and 'Empathy' subdimensions and Total Survey Score were significantly lower then other classes ( $p < 0.05$ ). Yet, the remaining three subdimensions, i.e. 'Managing One's Emotions', 'Self Motivation', 'Coaching Others' Emotions' showed no statistically significant correlations as  $p > 0.05$ .

**Table 1: Correlation of EI Subdimensions with Gender**

EISES Subdimensions	Gender	n	Mean Rank	Z	P
Emotional Awareness	Female	188	110.79	-0.732	0.464
	Male	32	102.92		
Managing One's Emotions	Female	188	108.19	-1.307	0.191
	Male	32	124.06		
Self-Motivation	Female	188	110.52	--0.011	0.992
	Male	32	110.39		
Empathy	Female	188	114.86	-2.473	0.013*
	Male	32	84.86		
Coaching Others' Emotions	Female	188	112.05	-0.880	0.379
	Male	32	101.38		
Total Survey Score	Female	188	111.86	-0.768	0.443
	Male	32	102.52		

\* p&lt;0.05, Z: Mann-Whitney U Test

**Table 2: Correlation of EI Subdimensions with Year of Education**

EISES Subdimensions	Year of Education	n	Mean Rank	X <sup>2</sup> KW	P
Emotional Awareness	1st Year	30	126.78	4.925	0.177
	2nd Year	77	105.48		
	3rd Year	84	104.13		
	4th Year	29	125.45		
Managing One's Emotions	1st Year	30	127.08	14.979	0.002*
	2nd Year	77	105.68		
	3rd Year	84	96.99		
	4th Year	29	145.28		
Self-Motivation	1st Year	30	134.63	9.945	0.019*
	2nd Year	77	104.77		
	3rd Year	84	100.30		
	4th Year	29	130.28		
Empathy	1st Year	30	120.53	6.649	0,084
	2nd Year	77	110.82		
	3rd Year	84	99.27		
	4th Year	29	131.79		
Coaching Others' Emotions	1st Year	30	129.90	7.139	0.068
	2nd Year	77	108.55		
	3rd Year	84	99.80		
	4th Year	29	126.62		
Total Survey Score	1st Year	30	135.17	16.923	0.001*
	2nd Year	77	104.23		
	3rd Year	84	96.29		
	4th Year	29	142.81		

\* p<0.05, X<sup>2</sup>KW: Kruskal-Wallis Test

**Table 3: Correlation of EI Subdimensions with Nationality**

EISES Subdimensions	Nationality	n	Mean Rank	Z	P
Emotional Awareness	Greek	110	110.79	-2.544	0.011*
	Turkish	110	102.92		
Managing One's Emotions	Greek	110	108.19	-4.225	0.000***
	Turkish	110	124.06		
Self-Motivation	Greek	110	110.52	-2.090	0.037*
	Turkish	110	110.39		
Empathy	Greek	110	114.86	-2.765	0.006**
	Turkish	110	84.86		
Coaching Others' Emotions	Greek	110	112.05	-1.425	0.154
	Turkish	110	101.38		
Total Survey Point	Greek	110	111.86	-3.742	0.000***
	Turkish	110	102.52		

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$ , Z: Mann–Whitney U Test

**Table 4: Correlation of EI Subdimensions with Greek Nursing Students' Gender and Year of Study**

EISES Subdimensions	Gender	N	Mean Rank	Z	Year of Education	n	Score	X <sup>2</sup> KW
Emotional Awareness	Female Male	85 25	56.75 51.24	-0.763 $p=0.445$	1st Year	6	70.00	10.775 $p=0.013^*$
					2nd Year	52	57.28	
					3rd Year	45	46.91	
					4th Year	7	85.07	
Managing One's Emotions	Female Male	85 25	51.35 69.60	-2.523 $p=0.012^*$	1st Year	6	63.00	1.171 $p=0.760$
					2nd Year	52	53.88	
					3rd Year	45	54.82	
					4th Year	7	65.43	
Self-Motivation	Female Male	85 25	54.99 57.22	-0.308 $p=0.758$	1st Year	6	43.33	5.535 $p=0.137$
					2nd Year	52	54.04	
					3rd Year	45	54.83	
					4th Year	7	81.07	
Empathy	Female Male	85 25	58.61 44.92	-1.893 $p=0.058$	1st Year	6	53.33	10.528 $p=0.015^*$
					2nd Year	52	58.16	
					3rd Year	45	47.63	
					4th Year	7	88.14	
Coaching Others' Emotions	Female Male	85 25	56.45 52.28	-0.576 $p=0.564$	1st Year	6	74.50	7.261 $p=0.064$
					2nd Year	52	54.87	
					3rd Year	45	50.07	
					4th Year	7	78.86	
Total Survey Score	Female Male	85 25	55.59 55.18	-0.057 $p=0.954$	1st Year	6	64.25	10.171 $p=0.017^*$
					2nd Year	52	54.96	
					3rd Year	45	49.60	
					4th Year	7	89.93	

\* $p < 0.05$ , Z: Mann–Whitney U, X<sup>2</sup>KW: Kruskal-Wallis Test

**Table 5: Correlation of EI Subdimensions with The Turkish Nursing Students' Gender and Year of Study**

EISES Subdimensions	Gender	N	Mean Rank	Z	Year of Education	n	Score	X <sup>2</sup> KW
Emotional Awareness	Female	103	54.89	-0.769 <i>p</i> =0.442	1st Year	24	57.42	1.197 <i>p</i> =0.754
	Male	7	64.43		2nd Year	25	51.42	
					3rd Year	39	58.87	
					4th Year	22	52.07	
Managing One's Emotions	Female	103	54.78	-0.914 <i>p</i> =0.361*	1st Year	24	57.65	10.668 <i>p</i> =0.014*
	Male	7	66.14		2nd Year	25	60.56	
					3rd Year	39	43.19	
					4th Year	22	69.23	
Self-Motivation	Female	103	55.04	-0.583 <i>p</i> =0.560	1st Year	24	69.58	8.278 <i>p</i> =0.014*
	Male	7	62.29		2nd Year	25	55.46	
					3rd Year	39	45.95	
					4th Year	22	57.11	
Empathy	Female	103	56.01	-0.646 <i>p</i> =0.518	1st Year	24	57.31	0.942 <i>p</i> =0.815
	Male	7	48.00		2nd Year	25	59.88	
					3rd Year	39	52.76	
					4th Year	22	53.41	
Coaching Others' Emotions	Female	103	55.55	-0.068 <i>p</i> =0.946	1st Year	24	60.44	1.525 <i>p</i> =0.676
	Male	7	54.71		2nd Year	25	57.36	
					3rd Year	39	50.82	
					4th Year	22	56.30	
Total Survey Score	Female	103	55.17	-0.417 <i>p</i> =0.677	1st Year	24	62.46	3.982 <i>p</i> =0.263
	Male	7	60.36		2nd Year	25	57.38	
					3rd Year	39	47.64	
					4th Year	22	59.70	

\**p*<0.05, Z:Mann-Whitney U, X<sup>2</sup>KW:Kruskall-Wallis Test

As seen in table 5 below, results show that there is no statistically significant correlations between Turkish nursing students' gender and all subdimensions and Total Survey Score (*p*>0.05). also, it can be seen that Turkish third year students' average scores for 'Managing One's Emotions' and 'Self Motivation' subdimensions were significantly lower than other classes (*p*<0.05). In the same light, the highest score for 'Managing One's Emotions' was noticed for 4th year students while for 'Self Motivation' it was recorded for 1st year students. Yet, there is no correlation between year of education and 'Emotional Awareness', 'Empathy', 'Coaching Others' Emotions' sub dimensions and Total Survey Score (*p*>0.05).

### Discussion

EI can be improved day by day but it should be noted that it may be affected by demographic criteria such as gender, ethnicity or age. Bar-On's (1997) work on EI revealed that there is a

notable difference between women's and men's EI levels. According to the author, women are more aware of their feelings, can communicate with others more easily and possess greater empathy. On the other hand, men are more able to cope with stressful and critical moments.

In this present study, it was found that the average of the male student's scores on 'Empathy' were significantly lower than the female students, regardless of nationality. For Greek students though it was found that the males' average scores for 'Managing One's Emotions' were significantly lower than the female students (*p*<0.05). For Turkish students, however, there was no gender difference in any of the dimensions taken. This is in keeping with previous research on Turkish nursing students and also British nursing students by Snowden et al., (2015) who found that gender (i.e. female) and age (i.e. increased) were both associated with significant increase in emotional intelligence levels.

One salient feature of EI is that it can be developed over time through experience. Furthermore, the year of education enables a comparison of age and experience. In this context, according to recent studies from Turkey, third grade students scored lower points on 'Managing One's Emotions' than others grades. The authors drew attention that this significant difference might be attributed to uncertainties faced by third grade students as they progress towards finishing their degree (Kahraman & Hicdurmaz, 2016; Basogul & Ozgur, 2016).

In this present study, for Greek third year students, 'Emotional Awareness', 'Empathy' and Total Survey Scores were significantly lower than other classes whereas Turkish third year students showed scores for 'Managing One's Emotions' and 'Self Motivation' to be significantly lower than other classes. Such findings raise issues of concern relating to third year nursing students in both Greece and Turkey although these are of different EI dimensions.

A recent meta-analysis by Michelangelo (2015) concluded that EI training and education improves the critical thinking skills and emotional competency of nursing students. Thus, the study suggests that EI training should be included in nursing school curricula. This is reinforced by Ranjbar (2015) who claims that this would not only serve the quality of nursing education but, furthermore, professional competencies and ultimately patient satisfaction. Yet, developers of nursing curricula should not embrace EI uncritically, but make full reference of the holistic notion of an emotionally intelligent practitioner. This has been verified by Orak et al., (2016) who investigating the effect of EI education on baccalaureate nursing students and found no improvement after an eight week training, thus calling for more carefully designed interventions in this area. The findings of our study, would further suggest that EI reinforcement should be done early in the nursing training, i.e. within the first two years in order to handle better the demands of the ongoing studying. In particular, our study showed that the third year students scored lower EI scores in both countries, thus proving to be at a pivot time within their in nursing education, indicating a somehow fragile emotional phase for these students. In these lines Shanta & Gargiulo (2014) also support that although EI may vary over years of nursing education it is still essential for developing nursing practice competencies,

thus should be part of any nursing curriculae. A study of five different nationalities in Canada, showed that there was no significant relationship between nationality and EI. Furthermore, it was reasoned that nationality and culture are two different dimensions which might explain why there was no relationship between nationality and EI (Siegling et al., 2014). In the present study though, a 'nationality' difference was observed as Turkish students' average scores of 'Emotional Awareness', 'Empathy' and the Total Survey Score were significantly lower than Greek ones. However, overall Turkish and Greek students' average scores for 'Self Motivation' were similar.

However, the Greek students' average scores on 'Managing Ones' Emotions' was significantly lower than the Turkish students'. Yet, it is surprising to find such differences, especially under the light of Turkey and Greece being geographically proximate and also share similar culture traits. Furthermore, the sub-sample were of similar ages and were studying the same humanistic discipline, i.e. nursing which has been a choice of profession for all individuals involved in this study. However, historical circumstances of the Turkish and Greek communities and their ethical and religious backgrounds may be contributing factors to the differences identified in terms of their EI levels.

## Conclusions

This study endorsed that female nurse students are better at showing empathy compared to male nurse students regardless of nationality. Turkish nursing students, showed no relationship between gender and EI levels while Greek students showed that females undergraduates are better at coaching others' emotions. Third year Turkish nursing students scored lower points at 'Managing One's Emotions' and 'Self Motivation' whereas third year Greek nursing students received lower scores for 'Emotional Awareness' and 'Empathy' than other year students, hence the third year of study seems to be a 'crisis' time on an emotional level for many students of both nationalities. It is important to have high levels of EI to increase the quality of nursing care. There are a few steps that can be taken to improve EI levels of the students before they become registered nurses. Adding courses or targeted seminars which are related to, or promote, EI within the current nursing curriculae should raise awareness both in academia and the

student populations and ultimately help students develop more sophisticated EI levels. A general recommendation out of this study's results would be to focus on the clinical importance of EI for student nurses and subsequently to staff nurses utilizing new educational openings for improved patient care.

## References

- Basogul C, Ozgur G. (2016) Role of Emotional Intelligence in Conflict Management Strategies of Nurses. *Asian Nursing Research*. 10(3):228–233.
- Bar-On R. (2006) The Bar-On Model of Emotional-Social Intelligence (ESI). *Psicothema*. 18:13- 25.
- Batool B. (2013) Emotional Intelligence and Effective Leadership. *Journal of Business Studies Quarterly*. 4(3):84-94.
- Beauvais A., Brady N., O'Shea E., Griffin M. (2011) Emotional intelligence and nursing performance among nursing students. *Nurse Education Today*. 31(4):396-401
- Buckley A, Corless L, Mee S. (2016) Providing empathetic care in nursing practice. *Nurs Times*. 13-19;112(15):22-23.
- Clancy C. (2014) The importance of emotional intelligence. *Nursing Management*. 21(8):15-21.
- Fitzpatrick J. (2016) Helping Nursing Students Develop and Expand Their Emotional Intelligence. *Nurs Educ Perspect*. 37(3):124-128.
- Goleman D. (1998). *Working with emotional intelligence*. Bantam Books, New York:347- 359.
- Grant A. (2007) Enhancing coaching skills and emotional intelligence through training. *Industrial and Commercial Training*. 39(5):257-266.
- Hall N. (1995) *Emotional Intelligence Self-Evaluation*, Institute of Health and Human Performance, Saddlebrook Resort, UK.
- Holbery N. (2015) Emotional intelligence – essential for trauma nursing. *International Emergency Nursing*. 23(1):13-16.
- Landa J., López-Zafra E. (2010) The Impact of Emotional Intelligence on Nursing: An Overview. *Psychology*. 1:50-58.
- Kahraman N, Hicdurmaz D. (2016) Identifying emotional intelligence skills of Turkish clinical nurses according to sociodemographic and professional variables. *J Clin Nurs*. 25(7-8):1006-1015.
- Mayer J., Salovey P., Caruso D. (2008). Emotional intelligence: New Ability or Eclectic Traits. *The Journal of American Psychologist*. 63:503–517.
- Mayer J., Salovey P., Caruso D., Sitarenios G. (2001) Emotional intelligence as a standard intelligence. *Emotion*. 1:232–242.
- Mayer, J.D. & Salovey, P. (2005) What is emotional intelligence? In P. Salovey & D. Sluyter (Eds) *Emotional development. Emotional literacy and emotional intelligence*. Basic Books, New York:28-43.
- Mehta C., Patel N. (1989) *SPSS IBM SPSS Exact Tests*. IBM Corp. 1989, USA
- Michaelangelo L. (2015) The overall impact of emotional intelligence on nursing students and nursing. *Asian Pacific Journal of Oncology Nursing*. 2:118-124
- Moller C., Bar-On R. (2000) *Heartwork*. Time Manager International Publishing, Denmark.
- Orak R., Farahani M., Kelishami F., Seyedfatemi N., Banihashemi S., Havaei F. (2016) Investigating the effect of emotional intelligence education on baccalaureate nursing students' emotional intelligence scores. *Nurse Education in Practice*. 20:64-69.
- Ranjbar H. (2015) Emotional intelligence training: A necessity for nursing education curriculum. *Nurse Education Today*. 35(11):1053.
- Roberts M. (2010) Emotional intelligence, empathy and the educative power of poetry: a Deleuzo-Guattarian perspective. *J Psychiatr Ment Health Nurs*. 17(3):236-241.
- Shanta L., Gargiulo L. (2014) A Study of the Influence of Nursing Education on Development of Emotional Intelligence. *The Journal of Professional Nursing*. 30(6):511-520
- Siegling A., Nielsen C., Petrides K. (2014) Trait emotional intelligence and leadership in a European multinational company. *Personality and Individual Differences*. 65:65–68.
- Snowden A., Stenhouse R., Young J., Carver H., Carver F., Brown N. (2015). The relationship between emotional intelligence, previous caring experience and mindfulness in student nurses and midwives: a cross sectional analysis. *Nurse Education Today*. 35(1):152-158
- Sontakke J. (2016) Achievement Motivation and Emotional Intelligence: A Correlational Study. *The International Journal of Indian Psychology*. 3(2):125-128
- Srivastava K., Bharamanaikar S. (2004) Emotional intelligence and effective leadership behaviour. *Psychological Studies*. 49(2-3):107-113.
- Zeidner M., Matthews G., Roberts R. (2009) *What we know about emotional intelligence: how It Affects Learning, Work, Relationships, and Our Mental Health*. MIT Press, Massachusetts, USA:41-57.