

RESEARCH ARTICLE / ARAŞTIRMA MAKALESİ

The Relations among the Emotional Intelligence Levels, the Ways of Coping with Stress and the Informational Literacy of the Health College Nursing Students

Hemşirelik Öğrencilerinin Duygusal Zekâ Düzeyleri İle Stresle Başa Çıkma Tarzları ve Bilgi Okuryazarlığı Arasındaki İlişki

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ABSTRACT

Aim: Study was conducted with the aim of detecting the correlation between the emotional intelligence levels, styles of coping with stress and information literacy of nursing students.

Methods and Results: The data in this study were collected via a "Personal Information Form" prepared by the reserachers themselves, a Emotional Intelligence Evaluation Form (EIEF), Scale of Stress Coping Styles (SSCS) and a Information Literacy Scale. The population of the study consists of all the students of 3rd and 4th grades in nursing department of a Faculty Of Health Sciences (N=419), and the sample included voluntary students present at school at the time of data collection (n=212). It was found out that emotional intelligence levels of the students were of normal level as total scale score averages; were they used self-confident approach and helplessness approach most in coping with stress; their information literacy levels were found below average as total score average was. There was a statistically

significant, positive but a poor level of correlation between the average total score of EIEF and average scores from the subscale of “self-confident approach” in SSCS.

Conclusions: It was determined that as the level of emotional intelligence increased, the students got a higher level of self-confidence and better skills of identifying the need for information.

Keywords: Emotional Intelligence, Styles of Coping with Stress, Information Literacy, Nursing, Student

ÖZET

Amaç: Çalışma hemşirelik öğrencilerinin duygusal zekâ düzeyleri ile stresle başa çıkma tarzları ve bilgi okuryazarlığı arasındaki ilişkinin belirlenmesi amacıyla gerçekleştirildi.

Method ve Bulgular: Bu çalışmada veriler, araştırmacılar tarafından hazırlanan “Kişisel Bilgi Formu”, “Duygusal Zekâ Değerlendirme Ölçeği” (DZDÖ), “Stresle Başa Çıkma Tarzları Ölçeği” (SBTÖ), ve “Bilgi Okuryazarlığı Ölçeği” kullanılarak toplandı. Araştırmanın evrenini, bir Sağlık Bilimleri Fakültesi hemşirelik bölümünün 3. ve 4. Sınıfı öğrencileri (N=419), örneklemini ise veri toplama aşamasında okulda bulunan gönüllü öğrenciler oluşturdu (n=212). Öğrencilerin duygusal zekâ düzeylerinin normal düzeyde olduğu; stresle başa çıkmada en çok kendine güvenli yaklaşım ve çaresiz yaklaşım yöntemlerini kullandıkları; Bilgi Okuryazarlığı Ölçeği toplam puan ortalaması ise ortalamanın altında bulundu. DZDÖ toplam puan ortalaması ile stresle başatma tarzı ölçeğinin alt boyutlarından “kendine güvenli yaklaşım” puan ortalaması arasında istatistiksel olarak anlamlı, pozitif yönde ve zayıf düzeyde bir ilişki belirlendi.

Sonuçlar: Öğrencilerin duygusal zekâ düzeyi yükseldikçe kendine güvenli yaklaşım ve bilgi ihtiyacını tanımlama becerilerinin de arttığı saptandı.

Anahtar Kelimeler: Duygusal Zekâ, Stresle Başa Çıkma Tarzı, Bilgi okuryazarlığı, Hemşirelik, Öğrenci

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Introduction

The nurses who have improved emotional intelligence, are mentally healthy individuals that are able to get satisfaction from life, achieve their goals, conform the changing conditions. That's way they are able be sensitive not only for the physiological needs but also emotional needs of the patients or healthy individuals with whom they work and take the proper approach as well⁷. Human beings are social beings who can convey what they have learned, while interacting with their environment throughout their life, to their community and next generations as well. What makes this possible is the communication skill of them. As a health science, nursing is focused on producing proper responses for the needs of the human being as biopsychosocial and spiritual being. The communication activity, which is one of the nursing interventions, is an element that is of vital importance among other domains such as treatment, therapy, rehabilitation, education, and the health promotion^{1,2}. The emotional intelligence, although playing a part among the most important communication skills that play a role in the provision of a successful and an efficient service by the nurses, have also considerable contributions for them in order to derive satisfaction from their personal and occupational lives through strengthening the inter-individual communication^{3,4}. The term "Emotional Intelligence" was first used at 1990, by two psychologists, Peter Salovey and John Mayer, from Yale and New Hampshire Universities respectively. The term has been defined as "the ability for understanding and questioning the emotions, assimilating the emotions into the thought, regulating the emotions of oneself and others by using motivational, cognitive, physiological various experiences as well."^{5,6}. In the study of Akerjordet and Severinsson (2004)⁷ it has been determined that the nurses who possess improved emotional intelligence are mentally healthy individuals who are able to get satisfaction from life, achieve their goals, conform the changing conditions; and while working with both healthy individuals and patients, being sensitive not only for their physiological needs but also their emotional needs, able to take the proper approach. Nursing education plays a crucial role in raising nurses with emotional intelligence. As a quite difficult, applied process, nursing education also requires the acquisition of the theoretical knowledge and skills. Nursing students confront with stress factors throughout their educational lives that affect their academical performance and quality of life. Aside from the stress element, which is a universal problem among the nursing students, it is indicated that the risk of the development of mental health problems in nursing students is high, compared with the students of other health disciplines^{8,9}. The facts related with the technology-based

change and progress require new and highly qualified human resources in the recent information society. In an environment in which the information increases in such an intense and rapid way, it is possible for the individuals to be successful only through engaging in a lifelong learning process. Lifelong learning demands from the individual the skills for acquiring, evaluating and expediently using the informations that are needed for solving an encountered problem or taking a decision. Informational literacy is a concept that corresponds to these skills. The responsibility for building these skills related to the informational literacy belongs to the educational institutions. Universities, which are decisive in large part for the intellectual and occupational shaping of the individual, also have the responsibility for graduating students as information literate individuals¹⁰. As a requirement of this responsibility, the aim of our study is defined as the determination of the relations among the emotional intelligence levels, the ways of coping with stress students and the informational literacy of the health college nursing students.

Methods

In our research, which was intended to be a descriptive study, we gathered the data through “Personal Information Form,” “Emotional Intelligence Evaluation Skill” (EIES), “Ways of Coping with Stress Scale” (WCSS) and “Informational Literacy Scale.” All of the forms were prepared by us. The population of the study consisted of the third and the fourth year students of Nursing Department of a Health Sciences Faculty (N=419), and its sample comprised the students who were present attending the courses by the time we conducted our study and volunteer for participating in the research (n=212). Forms were applied after a preliminary brief that indicated the purpose and the requirements of the study.

EIES was developed by Schutte and colleagues in order for evaluating the emotional intelligence of the students (1998)¹¹. Ergin (2000)¹² conducted its Turkish language validity and reliability studies. EIES, which consists of 30 articles, includes 5 subdimensions as “being aware of one’s emotions” (articles 1, 2, 4, 17, 19, 25), “managing one’s emotions” (articles 3, 7, 8, 10, 18, 30), “self-motivation” (articles 5, 6, 13, 14, 16, 22), “empathy” (articles 9, 11, 20, 21, 23, 28) and “social skills” (articles 12, 15, 24, 26, 27, 29) The scoring of the articles of the scale, which is prepared in Likert type, as the following: “totally disagree” (1 point), “partially disagree” (2 points) “slightly disagree” (3 points), “slightly agree” (4 points), “partially agree” (5 points), “totally agree” (6 points). There are no reverse-phrases in the

evaluation. If the score that is taken from the sum of EIES has been found to be 155 and above, than the emotional intelligence level is regarded as “quite high;” if it has been between 130 and 150 than the emotional intelligence level is regarded to be “normal” (that is, it needs to be improved to some degree), and if the former has been 129 and below than the latter is regarded to be low (namely, it certainly needs to be improved).

In order for evaluating the ways of coping with stress of the students we used WCSS, which had been developed by Folkman and Lazarus (1988)¹³, abridged and adapted to Turkish language by Şahin and Durak (1995)¹⁴. As for the WCSS, it consists of 30 articles, uses a score interval of 0-3, in the calculation of the social support aspect 1st and the 9th articles are taken into account through reverse scoring. The scores of the each factors is calculated separately. The scores that are taken from the questions that belongs to the factor are added up, then the result is divided into the number of the questions that belong to that factor in order to obtain the mean score for it. The lowest and the highest scores that are possible for every subscale are 0 and 3. Whereas the total score is not calculated at all. The increase in the scores that are taken from the factors of self-confidence, optimism, social support indicates that coping with the stress is effective. Whereas the increase in the scores that are taken from the factors of helpless and submissive approaches signifies that ineffective methods are used in dealing with the stress.

In the Informational Literacy Scale, which has been developed by Adıgüzel (2011)¹⁵ the options and the limits for the options are listed and scored as the followig: for “every time,” the score is 5 points; “usually,” 4; “sometimes,” 3; “rarely,” 2; “never,” 1. Since the scale is for the knowledge acquisition and configuration approaches of the students, we have not grouped its articles as positives and negatives. In that case, the highest possible score that can be taken from the scale is 145 and the lowest is 29. Scale consists of 4 subdimensions. The 14th, 15th, 20th, 21st, 22nd, 23rd, 24th, 28th articles lies in the “Defining the need for knowledge” subdimension; the 3rd, 4th, 5th, 16th, 17th, 18th, 19th, 25th, 26th, 27th and 29th, “Reaching the knowledge;” 6th, 7th, 8th, 11st ve 13th, “Using the knowledge;” 1st, 2nd, 9th, 10th and 12nd, “Ethical and legal regulations on the use of Knowledge.”

Evaluation of Data

The data were analyzed by SPSS 21 program, frequency, arithmetic mean and t test in independent groups, Mann Whitney-U and Pearson correlation tests. Frequency analysis was

used to determine demographic characteristics, t test was used to compare two different groups in independent variables, pearson correlation and Mann Whitney-U test were used to determine the relationship between the subscale scores of the scales.

Ethical Issues

Written permission was obtained from the faculty publication commission before starting the study. The aim of the study was explained to the students who formed the research sample and informed consent was obtained from them in order to participate in the research in the light of volunteerism principle. Permission was obtained from the authors to use the scale in the study.

Results

Eighty-seven point three percent (n=185) of the students who participated in the study were female; 67,5% (n=143) of them fell within the age interval of 18-21.

When the emotional intelligence levels of the students were examined the total scale mean score was determined to be ($\chi = 131,12 \pm 22,45$, min= 50, max= 177) in the normal scale (Table 1)

While the mean scores of the subdimensions of “Controlling one’s emotions” (24,44±5,90) and “Empathy” (27,35±5,27) were found to be at low level, that of “Social skills” (26,12±5,28) and “Awareness of One’s Emotions” (27,11±5,35) subdimensions were determined to be at normal level (Table 2).

With regard to the fact that whether the students had voluntarily attended the nursing department or not, statistically significant difference (U=3357,50; p= 0,026) was found among their “Awareness of one’s Emotions” subdimension means scores.

And we found a statistically significant correlation between this case of being content with receiving nursing education and mean scores of the “Self-motivation” subdimension (p<0.05). “Empathy”, “self-motivation”, “Being aware of one’s emotions”, and “Being able to control one’s emotions” are indispensable qualities that are required for the nursing occupation.

The students who had voluntarily attended the department of nursing were found to be highly aware of their emotions, compared with others. When it was examined that if they were content with receiving nursing education, 71,2% (n=151) of them were determined to be “content.” According to the genders of the students who participated in the research, a statistically significant difference was found in their “Managing one’s emotions”

subdimension mean scores ($U=1833,50$; $p= 0,025$). It was determined that the male students had relatively high scores regarding the attitude of “Managing one’s Emotions.” Statistically significant differences were found in their both “Managing one’s Emotions” ($U=3944,00$; $p= 0,000$) and “Social skills” ($U=4169,50$; $p= 0,001$) subdimension mean scores according to their year of education. The attitudes of “Managing one’s emotions” and “Social skills” were determined to be relatively high in the fourth year students. As regards the subdimensions of the WCSS, “Self-confident approach” score was determined to be $12,44\pm 2,35$; “Optimistic approach,” $8,41\pm 1,70$; “Helpless approach,” $11,05\pm 3,31$; “Submissive approach,” $7,73\pm 2,41$; and “Social support seeking,” $6,50\pm 1,89$. It was determined that the students most frequently used the “Self-confident approach” and the “Helpless approach” as a method for coping with the stress. The fact that the mean score of the “Self-confident approach” subdimension of the WCSS were found to be high ($12,44\pm 2,35$) compared with the other subdimensions, demonstrated that coping with stress was “effective.” The Informational Literacy Scale total mean score of the group with whom the study was conducted was found to be $\bar{x}= 64,42 \pm 18,25$ (min= 29, max= 116), a value that was below the average. A statistically significant, weak positive correlation ($r=0,487$; $p<0.01$) was found between the total mean score of the EIES and the mean score of “Self-confident approach” subdimension of the WCSS. Again, a statistically significant, strong positive correlation ($r=0,854$; $p<0.01$) was found between the total mean score of the EIES and the mean score of “Defining the need for knowledge” subdimension of the Informational Literacy Scale.

Table 1. EIES and its subdimension mean scores and medians of the students who were included in the research

DIMENSIONS	X±SD	Median (Min.-Max)
Being aware of one’s own emotions	27,11±5,35	29 (8-36)
Controlling one’s emotions	24,44±5,90	26 (7-36)
Self-motivation	26,08±5,34	27 (10-36)
Empathy	27,35±5,27	29 (9-36)
Social skills	26,12±5,28	27 (10-36)
Total score	131,12±22,45	135 (50-177)

The scores that were taken from the EIES and its subdimensions and the research results are evaluated according to the score intervals given in the following table.

Table 2. The scoring of the EIES and the research results.

DIMENSIONS	Low	Normal	High	RESULTS
Being aware of one's emotions	25 and below	26-30	31 and above	27,11
Controlling one's emotions	26 and below	27-31	32 and above	24,44
Self-motivation	26 and below	27-30	31 and above	26,08
Empathy	25 and below	26-30	31 and above	27,35
Social Skills	24 and below	25-29	30 and above	26,12
Total Score	129 and below	130-154	155 and above	131,12

Discussion

In our study we determined that the emotional intelligence levels of the nursing students who were included in the research were at the “normal” level. When we reviewed the literature we saw that there were studies which came to similar results. Ünsar and colleagues (2009)¹⁶, Avşar and Kaşıkçı (2010)¹⁷, and Cerit (2012), in their researches which have been conducted with the nursing college students like ours, have also found that the emotional intelligence mean scores of the nursing students are normal. And when we examined the EIES and its subdimension means scores of the students who were included in the study, while their “Controlling one’s emotions” and “Self-motivation” subdimension mean scores were found to be at low level, their “Empathy,” “Social skills” and “Being aware of one’s emotions” subdimension means scores were at normal level. In contrast with this, it was seen that in Cerit’s study (2012)¹⁸ while “Controlling one’s emotions,” “Self-motivation,” “Empathy,” and “Social skills” subdimension mean scores had been found to be at normal level, “Being aware of one’s own emotions” subdimension mean scores had been determined to be at low level. In accordance with our findings, other studies¹⁶⁻²⁰ also confirm that the fact that the emotional intelligence levels of the nursing students are not at the satisfactory level is quite important since it indicates that they are not ready to assume their occupational role yet. In parallel with the Cerit’s study, we found that the “Being aware of one’s emotions” attitude of

the students who had voluntarily attended the nursing were relatively high. The individuals who do a job willingly and gladly can more readily and easily produce or find appropriate solutions when confronted with problems. Otherwise, since they cannot show enough performance in their jobs as a result of the not being able to overcoming problems; physical, psychological, social and economical aspects of their lives as well as their patient care performance are affected negatively¹⁶. We determined that the students who were included in the study were content with receiving nursing education in general. Thus, it can be thought that the students who are content with receiving nursing education will contribute in the emergence of more successful outcomes in the nursing services, through being aware of their roles and responsibilities and being able to more easily motivating themselves. We determined that there was a statistically significant difference among the “Managing one’s emotions” subdimension means scores of the students who were included in the research, according to their genders; and the male students had a high performance only in the “Managing one’s emotions” subdimension compared with girls.

When we reviewed the studies that had investigated the relation between the emotional intelligence and gender we came across with different results. For instance, in the study of Sevindik and colleagues (2012)²¹ a statistically significant difference has been determined in the emotional intelligence levels according to the gender; it has been seen that female students have a relatively high emotional intelligence subdimension mean scores than that of the male. In contrast with this, in the study of Tambağ and colleagues (2014)²² the total emotional intelligence scores of the male students as well as their qualities of utilization and expression of emotions have been found to be relatively high at a statistically significant degree. As regards the study of Austin and colleagues (2007)²³ the emotional intelligence scores of the female students have been found to be higher than that of the male. The fact that the emotional intelligence levels of the female students are generally higher than that of the male makes us to think that they can express their emotions more easily, and be more successful in comprehending the emotions of other person. As a result, in bringing up nurses of high emotional intelligence, the nursing education has a crucial importance.

The students who were included in the research group were determined to mostly use the “Self-confident” and the “Helpless approach” in coping with stress. The fact that the “Self-confident approach” subdimension mean scores of the WCSS are high compared with its other subdimensions, demonstrates that coping with stress is “effective.” Timmins and

colleagues (2011)⁸ in their study which they have conducted with the nursing students, have determined that students employ various methods in coping with stress. It is accepted that both academical and clinical constituents of the nursing programs lead to stress in the students. In that case, stress affects negatively either the lifestyles or the mental health of some of the students⁸. For this reason, the educators should support the students during the theoretical education as well as especially in the clinical domain, and consider this situation in the preparation of the curriculum in order to provide a healthy nursing labor force.

Informational Literacy is a whole body of skills. It comprise knowledge skills, high level thinking skills, personel skills and various literacy skills²⁴. In our study we have determined that the total score of informational literacy is “below the average” among the nursing students, and that as the emotional intelligence level of them increases their “Self-confident approach” and “Defining the need for knowledge” skill also increase. Informational literacy has vital importance in the education of the nurses. We think that this study can be guiding in determining the informational literacy levels of the students who has taken an informational literacy course and the gains of the course could be evaluated on the basis of the data that have been obtaned herein.

Conclusions

We have determined that the emotional intelligence levels of the nursing students are at the “normal” level; male students are more succesful in managing their emotions; and the “social skills” of the students are relatively high at the last year of their education. Additionally, we have determined that the students mostly employ the “Self-confident approach” and “Helpless approach” in order to cope with stress. And the total score of informational literacy has been found to be “below the average.” We have determined that as the emotional intelligence levels of the students increase, their rate of employing the “Self-confident approach” when coping with stress and their “Defining the need for knowledge” skills increase as well. As a result of this study, it is reccomended that the competency levels of the students regarding the informational litearcy be improved.

Conflict Of Interest: None declared

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