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# THE RELATIONSHIP BETWEEN EMOTIONAL INTELLIGENCE AND PATIENT-CENTERED CARE IN PATIENT'S PERSPECTIVE<sup>1</sup>

# HASTA PERSPEKTİFİNDEN DUYGUSAL ZEKÂ VE HASTA MERKEZLİ BAKIM İLİŞKİSİ

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#### **Abstract**

The study aims to determine the emotional intelligence levels of individuals and their perceptions of patient-centered care, to determine whether there is a difference according to socio-demographic characteristics, and to examine the relationship between emotional intelligence and patient-centered care. A descriptive research model was used in the study. Research data were obtained with Rotterdam Emotional Intelligence Scale, Patient-Centered Care Scale, and personal information form. Descriptive statistics, difference analysis, correlation analysis, and regression analysis were used to analyze the research data. The emotional intelligence levels and patient-centered care perceptions of the participants were high. There is a difference between emotional intelligence according to the gender, age, and income status of the participants. There is a difference between patient-centered care according to the educational status of the participants. There is a positive moderate relationship between individuals' emotional intelligence levels and patient-centered care perceptions. The models revealing the effect of emotional intelligence on patient-centered care and its subdimensions are significant and positive. Individuals who can control their emotions have patient-centered service expectations. Providing patient expectations leads to an increase in service quality and patient satisfaction.

**Keywords:** Emotional intelligence, patient-centered care, health care, patient

#### Öz

Çalışmanın amacı bireylerin duygusal zekâ düzeyleri ile hasta merkezli bakım algılarının belirlenmesi, sosyo-demografik özelliklere göre fark olup olmadığının tespit edilmesi, duygusal zekâ ile hasta merkezli bakım ilişkisinin incelenmesidir. Araştırmada tanımlayıcı araştırma modeli kullanılmıştır. Araştırma verileri Rotterdam Duygusal Zekâ Ölçeği, Hasta Merkezli Bakım Ölçeği ve kişisel bilgi formu ile elde edilmiştir. Araştırma verilerinin analizinde tanımlayıcı istatistikler, fark analizleri, korelasyon analizi ve regresyon

202

<sup>&</sup>lt;sup>1</sup> This study was produced from the master's thesis titled "The Effect of Emotional Intelligence on the Perception of Patient-Centered Care: A Study from a Patient's Perspective" prepared by Ceyda ATAÇ under the supervision of Assoc. Prof. Dr. Harun KIRILMAZ.



INTERNATIONAL JOURNAL OF HEALTH MANAGEMENT AND STRATEGIES RESEARCH

Cilt/Volume: 10 Sayı/Issue: 3 Yıl/Year: 2024 ISSN -2149-6161

analizi kullanılmıştır. Katılımcıların duygusal zekâ düzeyleri ve hasta merkezli bakım algıları yüksek düzeydedir. Katılımcıların cinsiyeti, yaşı ve gelir durumuna göre duygusal zekâ arasında farklılık söz konusudur. Katılımcıların eğitim durumuna göre hasta merkezli bakım arasında farklılık vardır. Bireylerin duygusal zekâ düzeyleri ve hasta merkezli bakım algıları arasında pozitif yönlü orta düzeyli ilişki vardır. Duygusal zekânın hasta merkezli bakım ve alt boyutlarına etkisini ortaya koyan modeller anlamlı ve olumludur. Duygularını kontrol edebilen bireylerin hasta merkezli hizmet beklentisi oluşmaktadır. Hasta beklentilerinin karşılanması, hizmet kalitesinin artmasını ve hasta memnuniyetini sağlamaktadır.

Anahtar Kelimeler: Duygusal zekâ, hasta merkezli bakım, sağlık hizmeti, hasta

#### INTRODUCTION

Emotional intelligence has recently been included in many studies and has become popular in social sciences and psychology. Emotional intelligence is a concept specific to both individuals and society. Since individuals are open to learning and developing by learning, they provide harmony within society. Individuals who make investments for themselves achieve lifelong success in every field. To achieve their goals and objectives, they must not only have logical thinking but also a certain level of emotional intelligence. Individuals with advanced emotional intelligence are more successful than those with low emotional intelligence. Individuals who attach importance to the feelings, thoughts, wishes, and expectations of the people around them and shape their behaviors accordingly, achieve mutual agreement (Güllüce & İşcan, 2010; Kılıç et al., 2007).

Emotional intelligence, which aims to handle cognitive abilities and emotions together, positively affects individuals in terms of emotional intelligence competencies by teaching them the ability to correctly identify the emotions of individuals and the emotions of other individuals, to understand easily, to motivate themselves when necessary, to be understanding in interpersonal relationships, to manage their emotions and to empathize (Güney, 2013). For this reason, the appeal of emotional intelligence is an important factor that affects individuals' work performance, life satisfaction, fulfillment, and positive impact on the people around them in daily life, as well as their abilities related to emotions (Cote & Miners, 2006). For this reason, the concept of emotional intelligence, which has been accepted as an important concept from past to present, is predicted to maintain its importance in the future.

In the field of health care, if health personnel can easily express their ideas and feelings to other individuals if they can criticize individuals but no one is offended by this situation, if there is a sense of cooperation and unity within the institution, if the personnel can be sociable and supported, in other words, if there is a "we" atmosphere within the institution, then it is stated that that institution works by the concept of emotional intelligence. The concept of emotional intelligence is a way of understanding oneself and other people. Interpersonal relationships are more important for organizations than consciousness characteristics. In the management approaches of today's organizations, not personal skills and achievements, but collaborative skills and achievements become important. The way of collaborative work within the team to be result-oriented and efficiency-oriented is closely related to the emotional intelligence of the employees within the organization. First of all, the goals of the employees in the service sectors are to provide the appropriate service to the patient individuals in the best way in line with their needs on time and since the health service requires continuous one-to-one communication, it is stated that there is a great need for the dominance and renewal of emotional intelligence in the health service sector (Kılıç et al., 2007).



INTERNATIONAL JOURNAL OF HEALTH MANAGEMENT AND STRATEGIES RESEARCH

Cilt/Volume: 10 Sayı/Issue: 3 Yıl/Year: 2024 ISSN -2149-6161

Emotional intelligence has a potential role in medicine, nursing, and other health professions. In this framework, it is suggested that emotional intelligence is important for effective practice, especially in terms of patient-centered care delivery (Birks & Waat, 2007). Healthcare services are one of the areas where emotional intelligence should be given the most importance due to the different structures of healthcare institutions; working under intense workloads; the presence of healthcare professionals who are experts in their fields, have different skills, and attach importance to teamwork; the intensity of competition and the vital importance of healthcare services (Goleman, 1995). Providing personalized care during service delivery in health systems is a situation that is increasing day by day. Patient-centered care is defined as "understanding the patient as a unique human being". The concept of patient-centered care is gaining importance in health systems to increase the satisfaction of patients and improve their outcomes at the same time. As a result of the studies, it is concluded that patient-centered care practice leads to improvements in health status, increases intra-organizational bonding, reduces unnecessary health service use, and allows improvements in care rates (Erdoğan & Kırılmaz, 2020).

Patient-centered care is about an agreement between health care providers and patients, based on effective communication and practice, focused on improving the health status of individuals and healthy lifestyles. Patient-centered care aims to enable patients to make informed decisions about their health (Pulvirenti et al., 2014). It is a model in which healthcare providers can make joint decisions with patients and their families to identify the needs and priorities of patients and provide services accordingly (Kreindler, 2013). In patient-centered care, "the sick person or the individual in charge of care is recognized as the administrative resource and the main partner to provide compassionate and responsive health care, respecting their choices, priorities and needs". Healthcare providers and health professionals organize healthcare services for the individual patient with understanding and respect, and a collaborative partnership is established between the individual patient and health professionals (Bankert et al., 2014).

Patient and community involvement is an important component used in many areas of health care, from the service process to decisions about financing (Fraenkel, 2013). The fact that patients and family members take an active role in the decision-making process with a patient-centered care perception enables patients to access the most appropriate treatment and care services for their health problems and enables them to exhibit appropriate behaviors in protecting and improving their health (Şahin & İğde-Artıran, 2014). The adoption of approaches such as patient-centered care perception, which determines the satisfaction of patients for health institutions and enables their participation in decisions, enables organizations to gain a clear competitive advantage and will contribute to the development of health systems. To provide a competitive advantage in the health sector where competition exists, health institutions need to provide services for patient-centered care perception (Erdoğan & Kırılmaz, 2020).

#### **METHOD**

#### **Ethical Aspect of the Research**

Ethics committee approval was obtained from Sakarya University Social and Human Sciences Ethics Committee (Date: 05.01.2023, Number: 207348).



INTERNATIONAL JOURNAL OF HEALTH MANAGEMENT AND STRATEGIES RESEARCH

Cilt/Volume: 10 Sayı/Issue: 3 Yıl/Year: 2024 ISSN -2149-6161

#### **Population and Sample**

The population of the study is individuals over the age of 18 living in Sakarya province. As of 2023, the population of Sakarya is 1.098.115 (<a href="https://cip.tuik.gov.tr/">https://cip.tuik.gov.tr/</a>). The sample size of the research was determined according to the following formula (Bal, 2001; Karagöz, 2014).

$$n = \frac{N \times p \times q \times Z^2}{[(N-1) \times t^2] + (p \times q \times Z^2)}$$

$$n = \frac{1.098.115 \times 0.5 \times 0.5 \times 1.96^2}{[(1.098.115 - 1) \times 0.05^2] + (0.5 \times 0.5 \times 1.96^2)}$$

$$n = \frac{1.054.630}{2746} = 384$$

Accordingly, the sample representing the universe is 384 people. Between 17.02.2023 and 15.05.2023, the data obtained from 500 participants who agreed to participate in the research by simple random sampling method were analyzed and evaluated.

#### **Data Collection Tools**

The questionnaire method was used as a data collection tool in the study. The questionnaire consists of three parts. The first section includes questions that determine the socio-demographic characteristics of the participants.

The second part includes the Rotterdam Emotional Intelligence Scale developed by Pekaar et al. (2017) and adapted into Turkish by Tanriögen and Türker (2019) to measure the emotional intelligence levels of individuals. Mayer and Salovey's (1990) emotional intelligence model consists of four dimensions and 28 questions (Stys, Brown, 2004: 12; Newsome, Day, Catano, 2000: 1006). The first dimension (perceiving emotions) is the ability to be aware of one's own emotions and to communicate these emotions and emotional needs to others. The second dimension (assimilating emotions) is the ability to distinguish and identify the different emotions one feels. People with strong abilities in this area feel and identify their own emotions more than most other people. The third dimension (understanding emotions) is the ability to understand mixed emotions, just like feeling two emotions at the same time and to identify the transition from one to the other. Finally, the fourth dimension (managing emotions) is the ability to make or not to make connections with unhelpful emotions from given situations. The scale is organized in a 5-point Likert scale.

The third section consists of the Patient-Centered Care Scale developed by Cramm and Nieboer (2018). Consisting of 8 dimensions and 36 items, the Patient-Centered Care Scale is organized in a 5-point Likert structure. Turkish adaptation of the scale was conducted by Kırılmaz et al. (2023). Patient-Centered Care Scale consists of patient preference, physical comfort, care coordination, continuity and transition, emotional support, access to care, information and education, and family and friends dimensions.

#### **Statistical Analyzes**

IBM SPSS 24 program was used to test the hypotheses according to the research model. Descriptive statistics, difference analysis (independent samples t-test and one-way analysis of variance), correlation analysis, and regression analysis were used to analyze the data. If there was a significant difference between the groups in the one-way analysis of variance, post-hoc tests were



INTERNATIONAL JOURNAL OF HEALTH MANAGEMENT AND STRATEGIES RESEARCH

Cilt/Volume: 10 Sayı/Issue: 3 Yıl/Year: 2024 ISSN -2149-6161

used to determine from which group the difference originated. The data were tested at a 95% confidence interval.

#### **RESULTS**

Of the 500 individuals who participated in the study, 327 (65.4%) were female and 173 (34.6%) were male. As for the age distribution of the participants, it was concluded that 277 people (55.4%) were in the 18-25 age range and 53 people (10.6%) were in the 46-55 age range. When the educational status is examined, the largest group among the participants is bachelor's degree graduates with 300 people (60.0%) and the smallest group is associate's degree graduates with 45 people (9.0%). Considering the income status, it was concluded that 72 people (14.4%) had low income, 395 people (79.0%) had medium income and 33 people (6.6%) had high income. The overall mean of the emotional intelligence scale was 3.63; the highest mean among the subdimensions was 3.82 for evaluating one's own emotions and the lowest mean was 3.42 for controlling one's own emotions. Accordingly, it can be said that the participants have a high level of emotional intelligence. The overall mean of the patient-centered care scale is 3.51; the highest mean among the sub-dimensions is patient preference and family and friends dimensions 3.61; the lowest mean is emotional support 3.29. Accordingly, it can be said that the participants' perception of patient-centered care is at a high level. The Cronbach Alpha value of the emotional intelligence scale developed by Pekaar, Bakker, Linden, and Born (2017) was 0.890; the Cronbach Alpha value of the Rotterdam emotional intelligence scale adapted into Turkish by Tanriöğen and Türker (2019) was 0.940; and the Cronbach Alpha value of the emotional intelligence scale in this study was 0.900. The Cronbach Alpha value of the patient-centered care scale developed by Cramm and Nieboer (2018) was 0.890; the Cronbach Alpha value of the patient-centered care scale adapted into Turkish by Kırılmaz et al. (2023) was 0.961; and the Cronbach Alpha value of the patientcentered care scale in this study was 0.969. The Cronbach Alpha coefficients of the sub-dimensions of the scales were found to be at an acceptable level. Therefore, it is possible to say that the reliability of the scales used in the study is high.

**Table 1.** Reliability Analysis and Descriptive Statistics

Scales	Cronbach's Alpha	Mean	Standard Deviation	Item
<b>Emotional Intelligence</b>	0.909	3.63	0.521	28
Evaluating their own emotions	0.889	3.82	0.716	7
Evaluating the emotions of others	0.884	3.69	0.676	7
Controlling their own emotions	0.813	3.42	0.751	7
Controlling the emotions of others	0.902	3.60	0.764	7
Patient-Centered Care	0.969	3.51	0.742	36
Patients' preferences	0.925	3.61	0.823	7
Physical comfort	0.852	3.46	0.878	5
Coordination of care	0.861	3.36	0.926	4
Continuity and transition	0.843	3.54	0.846	4
Emotional support	0.932	3.29	1.026	4
Access to care	0.777	3.55	0.833	5
Information and education	0.874	3.60	0.899	4
Family and friends	0.904	3.61	0.961	3

Table 2 shows the t-test results showing whether there is a statistically significant difference in the perception of emotional intelligence and patient-centered care according to socio-demographic characteristics (gender, age, educational status, income status). When the table is examined, there is a significant difference (p<0.05) according to the gender of the participants in terms of evaluating their own emotions and evaluating the emotions of others from the sub-dimensions of emotional



INTERNATIONAL JOURNAL OF HEALTH MANAGEMENT AND STRATEGIES RESEARCH

Cilt/Volume: 10 Sayı/Issue: 3 Yıl/Year: 2024 ISSN -2149-6161

intelligence. Accordingly, it was determined that men ( $\bar{x}$ =3.90) had a higher level of evaluating their own emotions than women ( $\bar{x}$ =3.78). On the other hand, it was determined that women ( $\bar{x}$ =3.74) had a higher level of evaluating others' emotions than men ( $\bar{x}$ =3.59). According to the age group of the participants, it is seen that the sub-dimension of evaluating one's own emotions, one of the sub-dimensions of emotional intelligence, differs statistically according to the age group (p<0.05). It is revealed that the difference is between the 18-25 age group and the 26-35 age group, the 36-45 age group, and the 46-55 age group.

No significant difference was found in emotional intelligence levels and all sub-dimensions according to the participants' educational background (p>0.05). Significant differences were found in general emotional intelligence levels, evaluation of own emotions, and evaluation of others' emotions sub-dimensions according to the income status of the participants (p<0.05). According to the result of the post-hoc analysis conducted to determine which groups the difference originated from, it was determined that the emotional intelligence levels were between those with low income and those with high income. It was determined that those with low income ( $\bar{x}$ =3.50) had lower general emotional intelligence levels than those with high income ( $\bar{x}$ =3.77). It was determined that those with low income ( $\bar{x}$ =3.66) had lower levels of evaluating their own emotions than those with high income ( $\bar{x}$ =3.49) had lower levels of evaluating others' emotions than those with medium ( $\bar{x}$ =3.71) and high income ( $\bar{x}$ =3.84).

Table 2. Difference Analysis on Level of Emotional Intelligence

	Se	Sex		Age		Education		Income	
Scales and Sub-dimensions	- <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del>	p	<b>x</b>	p	Ī.	р	Ī.	р	
Emotional Intelligence	3.63 <sup>a</sup> 3.63 <sup>b</sup>	0.226	3.60 <sup>a</sup> 3.71 <sup>b</sup> 3.65 <sup>c</sup> 3.62 <sup>d</sup>	0.411	3.77 <sup>a</sup> 3.52 <sup>b</sup> 3.62 <sup>c</sup> 3.63 <sup>d</sup>	0.120	3.50 <sup>a</sup> 3.64 <sup>b</sup> 3,77 <sup>c</sup>	0.028	
Evaluating their own emotions	3.78 <sup>a</sup> 3.90 <sup>b</sup>	0.021	3.70 <sup>a</sup> 3.98 <sup>b</sup> 3.94 <sup>c</sup> 3.99 <sup>d</sup>	0.001	3.94 <sup>a</sup> 3.71 <sup>b</sup> 3.77 <sup>c</sup> 3.95 <sup>d</sup>	0.057	3.66 <sup>a</sup> 3,83 <sup>b</sup> 4.07 <sup>c</sup>	0.023	
Evaluating the emotions of others	3.74 <sup>a</sup> 3.59 <sup>b</sup>	0.036	3.70 <sup>a</sup> 3.75 <sup>b</sup> 3.66 <sup>c</sup> 3.60 <sup>d</sup>	0.596	3.73 <sup>a</sup> 3.55 <sup>b</sup> 3.69 <sup>c</sup> 3.71 <sup>d</sup>	0.538	3.49 <sup>a</sup> 3.71 <sup>b</sup> 3.84 <sup>c</sup>	0.014	
Controlling their own emotions	3.38 <sup>a</sup> 3.50 <sup>b</sup>	0.685	3.38 <sup>a</sup> 3.47 <sup>b</sup> 3.43 <sup>c</sup> 3.53 <sup>d</sup>	0.493	3.70 <sup>a</sup> 3.32 <sup>b</sup> 3.41 <sup>c</sup> 3.37 <sup>d</sup>	0.051	3,44 <sup>a</sup> 3.41 <sup>b</sup> 3.46 <sup>c</sup>	0.920	
Controlling the emotions of others	3.62 <sup>a</sup> 3.55 <sup>b</sup>	0.067	3.63 <sup>a</sup> 3.65 <sup>b</sup> 3.58 <sup>c</sup> 3.35 <sup>d</sup>	0.090	3.73 <sup>a</sup> 3.48 <sup>b</sup> 3.63 <sup>c</sup> 3.50 <sup>d</sup>	0.204	3.40 <sup>a</sup> 3.62 <sup>b</sup> 3.69 <sup>c</sup>	0.063	

**Sex:** <sup>a</sup> Female, <sup>b</sup> Male. **Age:** <sup>a</sup> 18-25, <sup>b</sup> 26-35, <sup>c</sup> 36-45, <sup>d</sup> 46-55. **Education:** <sup>a</sup> High school, <sup>b</sup> Undergraduate, <sup>c</sup> Graduate, <sup>d</sup> Postgraduate. **Income:** <sup>a</sup> Low, <sup>b</sup> Middle, <sup>c</sup> High.

There is no statistically significant difference in the participants' perceptions of patient-centered care and all its sub-dimensions according to gender variable (p>0.05). According to the age group of the participants, it is seen that the sub-dimension of access to care, one of the sub-dimensions of patient-centered care perception, differs statistically according to the age group (p<0.05). It is revealed that the difference is between the 18-25 age group and the 26-35 and 36-45 age groups. Significant differences were found in general patient-centered care perceptions and all sub-



INTERNATIONAL JOURNAL OF HEALTH MANAGEMENT AND STRATEGIES RESEARCH

Cilt/Volume: 10 Sayı/Issue: 3 Yıl/Year: 2024 ISSN -2149-6161

dimensions according to the participants' educational status (p<0.05). According to the result of the post-hoc analysis performed to determine from which groups the difference originated, it was determined that there was a difference between high school and undergraduate and graduate groups in patient-centered care perceptions. It was determined that those with high school education ( $\bar{x}$ =3.88) had higher perceptions of general patient-centered care than those with undergraduate ( $\bar{x}$ =3.47) and graduate ( $\bar{x}$ =3.44) education. This result is similar in all sub-dimensions of patient-centered care perceptions. No significant difference was found in general patient-centered care perceptions and all sub-dimensions according to the income status of the participants (p>0.05).

**Table 3.** Difference Analysis Regarding Perception of Patient-Centered Care

	Se	x	A	ge	Educ	ation	Income	
Scales and Sub-dimensions	- <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del> <del>-</del>	p	Ī.	p	Ī.	р	x	p
Patient-Centered Care	3.48 <sup>a</sup> 3.55 <sup>b</sup>	0.458	3.49 <sup>a</sup> 3.51 <sup>b</sup> 3,57 <sup>c</sup> 3,48 <sup>d</sup>	0.852	3.88 <sup>a</sup> 3.50 <sup>b</sup> 3.47 <sup>c</sup> 3.44 <sup>d</sup>	0.003	3.45 <sup>a</sup> 3.52 <sup>b</sup> 3.48 <sup>c</sup>	0.723
Patients' preferences	3.61 <sup>a</sup> 3.60 <sup>b</sup>	0.358	3.62 <sup>a</sup> 3.59 <sup>b</sup> 3.61 <sup>c</sup> 3.58 <sup>d</sup>	0.983	3.90 <sup>a</sup> 3.60 <sup>b</sup> 3.60 <sup>c</sup> 3.50 <sup>d</sup>	0.047	3.63 <sup>a</sup> 3.61 <sup>b</sup> 3.61 <sup>c</sup>	0.986
Physical comfort	3.42 <sup>a</sup> 3.53 <sup>b</sup>	0.591	3.41 <sup>a</sup> 3.49 <sup>b</sup> 3.55 <sup>c</sup> 3.48 <sup>d</sup>	0.577	3.80 <sup>a</sup> 3.51 <sup>b</sup> 3.40 <sup>c</sup> 3.44 <sup>d</sup>	0.034	3.40 <sup>a</sup> 3.46 <sup>b</sup> 3.47 <sup>c</sup>	0.854
Coordination of care	3.31 <sup>a</sup> 3.45 <sup>b</sup>	0.775	3.32 <sup>a</sup> 3.37 <sup>b</sup> 3.44 <sup>c</sup> 3.40 <sup>d</sup>	0.717	3.83 <sup>a</sup> 3.34 <sup>b</sup> 3.30 <sup>c</sup> 3.30 <sup>d</sup>	0.003	3.32 <sup>a</sup> 3.36 <sup>b</sup> 3.45 <sup>c</sup>	0.807
Continuity and transition	3.52 <sup>a</sup> 3.56 <sup>b</sup>	0.233	3.58 <sup>a</sup> 3.45 <sup>b</sup> 3.55 <sup>c</sup> 3.42 <sup>d</sup>	0.484	3.94 <sup>a</sup> 3.52 <sup>b</sup> 3.51 <sup>c</sup> 3.44 <sup>d</sup>	0.006	3.54 <sup>a</sup> 3.54 <sup>b</sup> 3.45 <sup>c</sup>	0.853
Emotional support	3.25 <sup>a</sup> 3.36 <sup>b</sup>	0.800	3.32 <sup>a</sup> 3.23 <sup>b</sup> 3.36 <sup>c</sup> 3.15 <sup>d</sup>	0.610	3.79 <sup>a</sup> 3.40 <sup>b</sup> 3.29 <sup>c</sup> 3.02 <sup>d</sup>	0.000	3.20 <sup>a</sup> 3.32 <sup>b</sup> 3.20 <sup>c</sup>	0.587
Access to care	3.48 <sup>a</sup> 3.68 <sup>b</sup>	0.860	3.43 <sup>a</sup> 3.73 <sup>b</sup> 3.71 <sup>c</sup> 3.64 <sup>d</sup>	0.003	3.86 <sup>a</sup> 3.52 <sup>b</sup> 3.45 <sup>c</sup> 3.68 <sup>d</sup>	0.003	3.42 <sup>a</sup> 3.58 <sup>b</sup> 3.46 <sup>c</sup>	0.266
Information and education	3.58 <sup>a</sup> 3.62 <sup>b</sup>	0.607	3.56 <sup>a</sup> 3.62 <sup>b</sup> 3.70 <sup>c</sup> 3.56 <sup>d</sup>	0.611	3.97 <sup>a</sup> 3.50 <sup>b</sup> 3.54 <sup>c</sup> 3.61 <sup>d</sup>	0.018	3.48 <sup>a</sup> 3.62 <sup>b</sup> 3.59 <sup>c</sup>	0.503
Family and friends	3.63 <sup>a</sup> 3.57 <sup>b</sup>	0.458	3.68 <sup>a</sup> 3.50 <sup>b</sup> 3.52 <sup>c</sup> 3.53 <sup>d</sup>	0.285	3.97 <sup>a</sup> 3.56 <sup>b</sup> 3.65 <sup>c</sup> 3.36 <sup>d</sup>	0.003	3.46 <sup>a</sup> 3.64 <sup>b</sup> 3.56 <sup>c</sup>	0.339

**Sex:** <sup>a</sup> Female, <sup>b</sup> Male. **Age:** <sup>a</sup> 18-25, <sup>b</sup> 26-35, <sup>c</sup> 36-45, <sup>d</sup> 46-55. **Education:** <sup>a</sup> High school, <sup>b</sup> Undergraduate, <sup>c</sup> Graduate, <sup>d</sup> Postgraduate. **Income:** <sup>a</sup> Low, <sup>b</sup> Middle, <sup>c</sup> High.

Table 4 presents the findings regarding the relationship between emotional intelligence and patient-centered care. Correlation coefficients (r) between 0.10 - 0.29 indicate a low relationship between 0.30 - 0.49, a medium relationship between 0.30 - 0.49, and a high relationship between 0.50 - 1.00. A negative r value indicates that the relationship is in the opposite direction, while a positive r



INTERNATIONAL JOURNAL OF HEALTH MANAGEMENT AND STRATEGIES RESEARCH

Cilt/Volume: 10 Sayı/Issue: 3 Yıl/Year: 2024 ISSN -2149-6161

value indicates that the relationship is in the same direction (Cohen, 1988). In the correlation analysis conducted to analyze the mutual relationships between emotional intelligence and patient-centered care and its sub-dimensions, the relationships between the variables were examined and the Pearson correlation coefficient was used in this direction. According to the results of the analysis, it was determined that there was a positive moderate relationship between emotional intelligence levels and patient-centered care perceptions (r=0.341; p<0.01). A positive significant relationship was found between all other dimensions. On the other hand, when the table is examined, it is seen that the sub-dimensions of the scales are also in a positive and significant relationship among themselves.

Table 4. Relationship between Emotional Intelligence and Patient-Centered Care

Table 4. Relationship between Emotional intelligence and I attent Centered Care														
Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Emotional Intelligence	1	,730**	,711**	,670**	,756**	,341**	,350**	,256**	,314**	,278**	,245**	,229**	,296**	,285**
2. Evaluating their own emotions		1	,392**	,393**	,320**	,266**	,258**	,209**	,236**	,203**	,162**	,233**	,237**	,225**
3. Evaluating the emotions of others			1	,180**	,510**	,227**	,209**	,195**	,203**	,181**	,142**	,164**	,208**	,214**
4. Controlling their own emotions				1	,318**	,230**	,251**	,163**	,218**	,164**	,206**	,147**	,171**	,188**
5. Controlling the emotions of others					1	,253**	,283**	,171**	,242**	,247**	,189**	,117**	,234**	,192**
6. Patient-Centered Care						1	,875**	,843**	,854**	,831**	,863**	,757**	,847**	,778**
7. Patients' preferences							1	,713**	,701**	,665**	,747**	,534**	,682**	,650**
8. Physical comfort								1	,755**	,602**	,688**	,607**	,628**	,547**
9. Coordination of care									1	,721**	,704**	,588**	,647**	,571**
10. Continuity and transition										1	,693**	,592**	,681**	,660**
11. Emotional support											1	,536**	,670**	,704**
12. Access to care												1	,699**	,495**
13. Information and education													1	,680**
14. Family and friends														1

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed)

With the regression model developed, the effect of emotional intelligence on patient-centered care was tried to be determined. For this purpose, the effects of emotional intelligence on patientcentered care and its sub-dimensions (patient preferences, physical comfort, care coordination, continuity, and transition, emotional support, access to care, information and education, family and friends) were tried to be determined by using the enter regression analysis method in the model. As seen in Table 5, the effects of emotional intelligence on patient-centered care (F=65.370; p=0.000), patient preferences (F=69.697; p=0.000), physical comfort (F=35.054; p=0.000), care coordination (F=54.411; p=0.000), continuity and transition (F=41.719; p=0.000), emotional support (F=31.897; p=0.000), access to care (F=27.591; p=0.000), information and education (F=47.939; p=0.000) and family and friends (F=43.925; p=0.000) are significant and positive. On the other hand, the relationship coefficient of the model showing the effect of emotional intelligence on patientcentered care was found to be 0.341 and the explained variance was 11.6% of the total variance. Accordingly, although the model is significant, its explanatory effect is low. Likewise, the explanatory effects of emotional intelligence on the sub-dimensions are also at low levels. The highest correlation coefficient was found in the patient preferences dimension (0.350) and explained 12.3% of the total variance.



INTERNATIONAL JOURNAL OF HEALTH MANAGEMENT AND STRATEGIES RESEARCH

Cilt/Volume: 10 Sayı/Issue: 3 Yıl/Year: 2024 ISSN -2149-6161

Table 5. The Effect of Emotional Intelligence on Patient-Centered Care

Independent	Unstandardized Coefficients		Standardized Coefficients	t	р	R	$\mathbb{R}^2$	F	р
Variable —	В	S.H.	Beta	_	r			-	P
(Constant)	1,746	,220		7,933	,000				
Emotional Intelligence	,485	,060	,341	8,085	,000	,341	,116	65,370	,000ª
(Constant)	1,599	,243		6,572	,000				
Emotional Intelligence	,554	,066	,350	8,348	,000	,350	,123	69,697	,000 <sup>b</sup>
(Constant)	1,887	,268		7,045	,000		,066		
Emotional Intelligence	,432	,073	,256	5,921	,000	,256		35,054	,000°
(Constant)	1,333	,277		4,805	,000		,098	54,411	
Emotional Intelligence	,558	,076	,314	7,376	,000	,314			,000 <sup>d</sup>
(Constant)	1,896	,256		7,394	,000		,077		
Emotional Intelligence	,451	,070	,278	6,459	,000	,278		41,719	,000e
(Constant)	1,537	,314		4,899	,000				c
Emotional Intelligence	,483	,086	,245	5,648	,000	,245	,060	31,897	,000 <sup>f</sup>
(Constant)	2,218	,256		8,665	,000				
Emotional Intelligence	,367	,070	,229	5,253	,000	,229 ,052		27,591	,000 <sup>g</sup>
(Constant)	1,740	,271		6,423	,000				
Emotional Intelligence	,511	,074	,296	6,924	,000	,296	,088	47,939	,000 <sup>h</sup>
(Constant)	1,701	,291		5,852	,000				
Emotional Intelligence	,525	,079	,285	6,628	,000	,285	,081	43,925	,000 <sup>i</sup>

Dependent Variables: a) Patient-centered care, b) Patients' preferences, c) Physical comfort, d) Coordination of care, e) Continuity and transition, f) Emotional support, g) Access to care, h) Information and education, i) Family and friends

#### DISCUSSION

One of the reflections of the change in the health sector in recent years is the transition from a physician-centered approach to a patient-centered approach. In the health sector, which focuses on human beings, it is important to include patients in the diagnosis, treatment, clinical procedures, and care process. As a result of the joint decision-making of the patient and the physician, it is predicted that it will contribute positively to patient satisfaction, reduce costs and inequalities in health service delivery, and contribute to the development of health by increasing the quality of care. It is thought that these benefits can be achieved with individuals with high levels of emotional intelligence. In this study, the effect of individuals' emotional intelligence levels on their perceptions of patient-centered care was investigated. When the averages of emotional intelligence are examined, it is seen that the general average of the emotional intelligence scale in Delikoyun's (2017) study is 3.29. In Balcı Süslü's (2016) study, when the averages of emotional intelligence skill levels are examined, it is seen that the general average of emotional intelligence skill levels are examined, it is seen that the general average of emotional intelligence skill levels are at a medium level.



INTERNATIONAL JOURNAL OF HEALTH MANAGEMENT AND STRATEGIES RESEARCH

Cilt/Volume: 10 Sayı/Issue: 3 Yıl/Year: 2024 ISSN -2149-616

In Kaçan et al.'s (2023) study, the overall mean of the emotional intelligence scale was 3.57; the highest mean among the sub-dimensions was 3.75 for evaluating one's own emotions and the lowest mean was 3.40 for controlling one's own emotions. In Dutoğlu and Tuncel's (2008) study, the general average of the emotional intelligence scale was 3.62. In Erdem, İlğan, and Çelik's (2013) study, the general average of the emotional intelligence scale was 3.81. In the study of Altıok et al. (2016), the general average of the emotional intelligence scale was 3.86. According to these studies, it can be said that the participants' emotional intelligence levels are above average. In this study, the overall mean of the emotional intelligence scale was 3.63; among the sub-dimensions, the highest mean was 3.82 in the dimension of evaluating one's own emotions and the lowest mean was 3.42 in the dimension of controlling one's own emotions. Accordingly, it can be said that the participants' emotional intelligence levels are above average.

When the patient-centered care averages are examined, it is seen that the general average of the patient-centered care scale is 3.20 in the study conducted by Uludağ (2016). In the study conducted by Kırılmaz et al. (2023), the general average of the patient-centered care scale was 3.48. According to these studies, it can be said that the participants' perceptions of patient-centered care are at a moderate level. In the study conducted by Cramm and Nieboer (2018), the general average of the patient-centered care scale was 3.83. According to this study, it can be said that the participants' perceptions of patient-centered care are above average.

In this study, the overall mean of the patient-centered care scale was 3.51; the highest mean among the sub-dimensions was the patient preference and family and friends dimensions with 3.61; and the lowest mean was the emotional support dimension with 3.29. Accordingly, it can be said that the participants' perceptions of patient-centered care are at a medium level. When the differences in emotional intelligence are examined, while no significant difference was found in the emotional intelligence levels of the participants according to the gender variable in the studies examined in the literature (Akbolat & Işık, 2012; Yalın, 2015), a significant difference was found in the emotional intelligence levels of the participants according to the gender variable in some studies (Çolak Okumuş & Uğur, 2017; Harrod & Scheer, 2005; Uslu, 2020). In this study, a significant difference was found in the dimensions of evaluating their own emotions and evaluating the emotions of others, which are sub-dimensions of emotional intelligence, according to the gender variable of the participants.

When the studies were examined, no significant difference was found in the emotional intelligence levels of the participants according to their age groups (Akbolat & Işık, 2012; Uslu, 2020; Yalın, 2015), while some studies found a significant difference in the emotional intelligence levels of the participants according to their age groups (Çolak Okumuş & Uğur, 2017). In this study, a statistically significant difference was found in the sub-dimension of evaluating their own emotions, one of the sub-dimensions of emotional intelligence, according to the age groups of the participants. When the studies were examined, no significant difference was found in the emotional intelligence levels of the participants according to their educational status (Çolak Okumuş & Uğur, 2017; Uslu, 2020), while in some studies, a significant difference was found in the emotional intelligence levels of the participants according to their educational status (Akbolat & Işık, 2012; Yalın, 2015). In this study, no statistically significant difference was found in the emotional intelligence levels of the participants according to their educational background.

In the study conducted by Uslu (2020), no significant difference was found in the emotional intelligence levels of the participants according to their income status. In this study, a statistically



INTERNATIONAL JOURNAL OF HEALTH MANAGEMENT AND STRATEGIES RESEARCH

Cilt/Volume: 10 Sayı/Issue: 3 Yıl/Year: 2024 ISSN -2149-6161

significant difference was found in the general emotional intelligence levels of the participants according to their income status and in the sub-dimensions of evaluating their own emotions and evaluating the emotions of others from the sub-dimensions of emotional intelligence. When the differences in patient-centered care were examined, no significant difference was found in the perceptions of patient-centered care according to the gender variable of the participants in the studies examined in the literature (Cai et al., 2023; Koponen, Simonsen, & Suominen, 2017; Uludağ, 2016). In this study, no significant difference was found in the participants' general patient-centered care perceptions and all sub-dimensions according to gender variables. When the studies were examined, no significant difference was found in the patient-centered care perceptions of the participants according to their age groups (Cai et al., 2023; Koponen, Simonsen, & Suominen, 2017). In this study, a statistically significant difference was found in the access to care sub-dimension, one of the sub-dimensions of patient-centered care perception, according to the age groups of the participants. When the studies were examined, no significant difference was found in the patient-centered care perceptions of the participants according to their educational status (Cai et al., 2023; Koponen, Simonsen, & Suominen, 2017). In this study, a statistically significant difference was found in general patient-centered care perceptions and all sub-dimensions according to the participants' educational status.

When the literature was examined, there were no studies that addressed the patient-centered care scale and income status variable. In this study, a statistically significant difference was found in general patient-centered care perceptions and all sub-dimensions according to the income status of the participants.

There are no empirical studies in the literature addressing the level of emotional intelligence and patient-centered care perception in the patient/citizen sample. In the study conducted by Çolak Okumuş and Uğur (2017), which addressed the level of emotional intelligence and patient-centered care perception in the sample of health personnel, it was determined that there was a statistically significant positive relationship between the general and sub-dimensions of the care behaviors scale and emotional intelligence scale and sub-dimensions, and the models revealing the effect of the general and sub-dimensions of the care behaviors scale and emotional intelligence scale and sub-dimensions were determined to be significant and positive. When the results obtained within the scope of this study were evaluated; it was determined that there was a positive moderate relationship between individuals' emotional intelligence levels and their perceptions of patient-centered care. The models revealing the effect of emotional intelligence on patient-centered care, patient preferences, physical comfort, care coordination, continuity and transition, emotional support, access to care, information and education, and family and friends are significant and positive.

#### **CONCLUSION**

Individuals' emotional intelligence levels positively affect their perceptions of patient-centered care. As a result of patients' ability to evaluate and control their own emotions and the emotions of others, they expect health institutions and professionals to prioritize a patient-centered care approach in service delivery. Thus, it is predicted that patient expectations will be met, patient satisfaction and healthcare service quality will increase. Due to limited time and financial means, it was not possible to conduct research with a larger sample group.



INTERNATIONAL JOURNAL OF HEALTH MANAGEMENT AND STRATEGIES RESEARCH

Cilt/Volume: 10 Sayı/Issue: 3 Yıl/Year: 2024 ISSN -2149-6161

In this study, the effect of emotional intelligence on the perception of patient-centered care was examined. In future studies, the relationship between patient-centered care and different variables can be examined from the patient's perspective. In this study, the quantitative research method was used and the questionnaire technique was used as a data collection tool. In future research, studies that address the issue of patient-centered care from the patient's perspective with different methods and techniques can be conducted. The study was conducted on a general patient sample. In future studies, studies on the perception of patient-centered care in a sample of specific disease groups can be conducted.

Similarly, patient-centered care perceptions of different patient profiles can be compared by conducting studies on a sample of patients receiving health services from family medicine centers. The current study was conducted in Sakarya province. Similar studies can be conducted in different regions and provinces so that broader solutions can be proposed with an inclusive study. Healthcare institutions and healthcare professionals should take into account the effects and benefits of patient-centered care practices; they should guide and inform patients and draw attention to the need to prioritize patient-centered care themselves.

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