

# Evaluating the Influence of Emotional Intelligence on Job Satisfaction Among Pharmacists

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**ABSTRACT:** This study aimed to investigate levels of work satisfaction and the use of emotional intelligence in job satisfaction among pharmacists. The sample comprised 82 pharmacists who were willing to participate in the study conducted within Erzurum, which is a province in Turkey. To collect the required data, three instruments were utilized: a socio-demographic data form, the Emotional Intelligence Scale, and the Minnesota Job Satisfaction Scale. Descriptive statistical analyses, independent groups t-test, one-way Analysis of Variance, LSD post-hoc test, and Pearson Correlation analyses were performed following the research questions. A moderate positive relationship is identified between total job satisfaction and total emotional intelligence ( $r=0.392$ ,  $p<0.01$ ). The findings, indicating a moderate relationship between total job satisfaction and total emotional intelligence scores among pharmacists, suggest that enhancing emotional intelligence could potentially lead to an improvement in their job satisfaction and overall quality of work life.

**KEYWORDS:** Emotional intelligence; job satisfaction; pharmacist; health services

## 1. INTRODUCTION

Emotional intelligence (EI) is a component of social intelligence and pertains to the assessment of an individual's aptitude, capability, and proficiency in comprehending, perceiving, managing, and directing their own or others' emotions [1]. It is posited that EI comprises four primary facets: self-awareness, which involves understanding one's own emotions; social awareness, which entails comprehending the emotions of others; self-management, which concerns regulating emotions; and relationship management, which involves handling interpersonal connections [2]. Conversely, job satisfaction (JS) refers to the positive emotional responses and attitudes that an individual harbors towards their occupation, specifically denoting the level of personal contentment derived from the job [3]. The World Health Organization regards EI as one of the ten life skills that foster constructive behavior in social and professional contexts [4]. Research indicates that elevated levels of EI are associated with mental well-being [5], enhanced capacity to solve social problems [6], improved relationship quality [7], superior academic performance, and heightened effectiveness in business endeavors [8]. Various studies conducted across professional domains demonstrate that heightened EI levels can enhance teamwork, organizational commitment, and communication [9, 10]. Brackett et al. propose that the ability to regulate emotions positively impacts employee satisfaction since individuals with high EI can effectively manage their emotions and are more receptive to positive emotions and organizational support, consequently leading to elevated job satisfaction [11].

In the realm of healthcare services, EI is increasingly recognized as crucial. Studies have demonstrated its positive impact on the social well-being of healthcare professionals, bolstering their psychological resilience, perception of social issues, empathy skills, job performance, overall life satisfaction, and

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significantly reducing stress [12]. Furthermore, it has been revealed that healthcare workers with elevated levels of EI can enhance patient safety, as they possess the ability to comprehend not only their own emotions but also those of their patients [13].

Given the demanding nature of their work, healthcare workers experience a high degree of occupational strain, which can result in emotional exhaustion. Emotional exhaustion is characterized as a sense of physical and emotional fatigue arising from stress and the demanding requirements of the job [14]. Healthcare professionals suffering from emotional burnout exhibit reduced energy levels, encounter difficulties in fulfilling their professional obligations, and struggle to find fulfillment in their work. This emotional exhaustion detrimentally affects the mental well-being of employees and the quality of care received by patients, leading to increased job turnover intentions and workplace conflicts. Consequently, EI is believed to have a substantial impact on healthcare workers' ability to carry out their daily duties and the emotional and physical care provided to patients [15].

EI skills are considered valuable for pharmacists [16]. Pharmacists, similar to other healthcare professionals, operate within work environments closely intertwined with patients [17, 18]. A study conducted by Ruble et al. in 2022 focused on pharmacists and revealed that higher levels of EI were associated with reduced levels of occupational stress, enhanced job performance, and improved psychological and emotional well-being [19]. Furthermore, EI is recognized as a vital component of effective leadership. It is posited that pharmacists with high EI exhibit greater professional adaptability and are more adept at collaborating in teams, leading to success in pharmacy practice [20, 21].

Emotional intelligence also plays a crucial role in expanding a pharmacist's capacity to address the emotional aspects of patient care [22]. In Ward et al.'s study, EI, motivation, core competencies, critical thinking, and work-life balance skills were found to be correlated with pharmacist success. The study highlighted the importance of EI in enabling pharmacists to empathize, actively listen, and regulate their emotions, all of which are essential for their professional success [23]. Moreover, a survey-based study conducted by Khalid et al. reported a positive association between high EI and organizational commitment and job performance among pharmacists working in the pharmaceutical industry [24]. Comprehending the significance of job satisfaction among pharmacists is crucial, as a deficiency in job satisfaction can adversely affect patient care and safety [25]. While there are individual studies examining job satisfaction and EI among pharmacists, no research has been identified thus far that specifically addresses the role of EI in job satisfaction within this professional group. This study aims to fill this gap by investigating the levels of job satisfaction and EI among pharmacists in a particular province. It also explores whether EI has an impact on job satisfaction among pharmacists and, if so, to what extent. Specifically, we hypothesised that pharmacists' EI would be positively related to their job satisfaction. Theoretically, EI can be said to have an impact on pharmacists' JS, but we do not have sufficient empirical evidence on pharmacists. Therefore, in this study we try to find out to what extent pharmacists' job satisfaction depends on their EI.

## 2. RESULTS

This section presents the findings regarding the relationship between EI levels and job satisfaction among pharmacists working in the Erzurum province.

### 2.1. General Findings

Table 1 displays the participation of a total of 82 pharmacists in the study, with 37 (45.1%) women and 45 (54.9%) men. While the number of those aged 26-30 is considerably higher (36.6%) than the others, the number of participants aged over 45 is also very low. There are equal numbers (41/41) of married and single pharmacists. Regarding the distribution of participants according to their work areas, it can be observed that the number of pharmacists working in community pharmacies is half (41) the number of pharmacists working in other areas. Moreover, more than half of the participants are university graduates, with the smallest group being master's degree graduates. It is worth noting that the number of participants who chose their profession voluntarily seems to be quite high (78%).

**Table 1. Sample characteristics (n = 82)**

Variables		N	(%)
Gender	Female	37	45.1
	Male	45	54.9
Age	Younger than 25	11	13.4
	26-30	30	36.6
	31-35	20	24.4
	36-40	10	12.2
	41-45	6	7.2
	Older than 45	5	6.2
Marital status	Married	41	50
	Single	41	50
Educational level	University	50	61.0
	Master's Degree	12	14.6
	Doctorate	20	24.4
Voluntary choice of their profession	Yes	64	78
	No	18	22
Years of seniority in the profession	0-5	43	52.4
	6-10	14	17.1
	11-15	8	9.8
	16-20	10	12.2
	≥ 21	7	8.5
Work area	Community pharmacy	41	50
	Hospital	23	28
	Other Public Institutions	2	2.5
	Academia	16	19.5

**2.1.1 Relationship between Emotional Intelligence with Demographic Characteristics and Job Satisfaction**

As shown in Table 2, the independent samples t-test analysis indicated that there was no statistically significant difference between male and female participants on any dimension, although females scored higher than males on almost all variables. Regarding the analysis of the results of the t-test in independent groups on the variable of choice of profession, a significant difference was found between the participants who chose their occupation voluntarily and those who did not in the sub-dimensions of intrinsic satisfaction, extrinsic satisfaction, total job satisfaction, and total EI ( $p=.007, .007, .005, .014$ ; respectively). In the sub-dimensions of self-control, well-being, emotionality, and sociability, the scores of those who voluntarily preferred their occupation were higher than those who did not voluntarily prefer their occupation, but no statistically significant difference was found. Furthermore, when analyzing the results of the t-test analysis in independent groups based on marital status, it was found that married pharmacists reported higher levels of total job satisfaction and its sub-dimensions compared to their single counterparts. On the other hand, single pharmacists scored higher in the sub-dimensions of emotionality, EI, and sociability. However, it is important to note that no statistically significant difference was observed between marital status and job satisfaction or EI. This means that the observed variations between married and single pharmacists' scores in certain aspects did not reach a level of statistical significance, and any differences might be due to random chance rather than being indicative of a true relationship between marital status and these variables.

**Table 2. Findings of Independent Samples t-Test Analysis between Genders, Voluntary Choice of Their Profession and Marital Status**

Variables			$\bar{X}$	<i>Sd</i>	<i>t</i>	<i>p</i>
Gender	Intrinsic Satisfaction	Female	43.24	10.787	.571	.570
		Male				

	Extrinsic Satisfaction	Male	41.98	9.297		
		Female	26.19	6.916	-.120	.905
	Total JS Score	Male	26.36	5.633		
		Female	69.43	17.238	.316	.753
	Self-control	Male	68.33	14.233		
		Female	18.08	4.751	-.125	.901
	Well-being	Male	18.20	3.871		
		Female	20.84	3.812	1.101	.274
	Emotionality	Male	19.96	3.437		
		Female	19.32	3.852	.904	.369
	Sociability	Male	18.60	3.401		
		Female	18.16	4.873	-.836	.405
	Total EI Score	Male	19.02	4.429		
		Female	94.97	15.369	.086	.932
<b>Voluntary choice of their profession</b>	Intrinsic Satisfaction	Male	94.71	12.234		
		Yes	44.09	9.488	2.756	.007*
	Extrinsic Satisfaction	No	37.06	9.873		
		Yes	27.25	6.115	2.776	.007*
	Total JS Score	No	22.83	5.361		
		Yes	71.34	14.973	2.879	.005*
	Self-control	No	59.89	14.688		
		Yes	18.56	4.338	1.686	.096
	Well-being	No	16.67	3.726		
		Yes	20.72	3.748	1.746	.085
	Emotionality	No	19.06	2.817		
		Yes	19.30	3.495	1.775	.080
	Sociability	No	17.61	3.791		
		Yes	19.14	4.316	1.900	.061
	Total EI Score	No	16.83	5.339		
		Yes	96.78	13.039	2.521	.014*
<b>Marital status</b>	Intrinsic Satisfaction	No	87.89	13.864		
		Married	42.95	10.443	.364	.717
	Extrinsic Satisfaction	Single	42.15	9.551		
		Married	26.59	6.136	.443	.659
	Total JS Score	Single	25.98	6.334		
		Married	69.54	15.878	.409	.683
	Self-control	Single	68.12	15.419		
		Married	17.34	4.436	-1.731	.087
	Well-being	Single	18.95	3.975		
		Married	20.68	3.629	.823	.413
		Single	20.02	3.616		

Emotionality	Married	18.56	3.860	-.918	.362
	Single	19.29	3.341		
Sociability	Married	18.27	4.450	-.714	.477
	Single	19.00	4.822		
Total EI Score	Married	92.20	11.714	-1.771	.080
	Single	97.46	15.027		

\*  $p < .05$

Regarding the one-way analysis of variance, no significant difference was observed between educational level and total EI, self-control, emotionality, and sociability sub-dimensions. However, a statistically significant difference was detected in the sub-dimensions of intrinsic satisfaction, total job satisfaction, well-being, and educational level ( $p = .019, .045, .002$ ; respectively) (Table 3).

**Table 3.** Findings of One-Way Analysis of Variance (ANOVA) on Educational Level, Work Area

		Educational level	X̄	Sd	F	p
Educational level	Intrinsic Satisfaction	University	40.12	10.040	4.145	.019*
		Master's Degree	46.92	6.543		
		Doctorate	46.00	9.873		
	Extrinsic Satisfaction	University	25.32	6.228	1.557	.217
		Master's Degree	27.83	6.073		
		Doctorate	27.75	6.043		
	Total JS Score	University	65.44	15.814	3.218	.045*
		Master's Degree	74.75	11.371		
		Doctorate	73.75	15.355		
	Self-control	University	18.10	3.765	.009	.991
		Master's Degree	18.17	5.289		
		Doctorate	18.25	4.972		
	Well-being	University	19.26	3.275	6.686	.002*
		Master's Degree	22.08	3.728		
		Doctorate	22.05	3.456		
	Emotionality	University	18.92	3.602	.016	.985
		Master's Degree	19.08	2.811		
		Doctorate	18.85	4.171		
Sociability	University	18.58	4.665	2.618	.079	
	Master's Degree	21.08	4.033			
	Doctorate	17.30	4.473			
Total EI Score	University	93.34	12.863	1.412	.250	
	Master's Degree	100.67	13.733			
	Doctorate	95.05	15.195			
Work area	Intrinsic Satisfaction	Community pharmacy	43.88	9.918	4.713	.004*
		Hospital pharmacy	37.30	7.528		
		Other Public Institutions in Pharmacy	35.00	.000		
	Extrinsic Satisfaction	Academic pharmacy	47.63	10.366	5.657	.001*
		Community pharmacy	27.66	6.235		
		Hospital pharmacy	22.43	4.611		

	Other Public	22.00	2.828		
	Institutions in				
	Pharmacy				
Total JS Score	Academic pharmacy	28.81	5.947		
	Community pharmacy	71.54	15.560	5.458	.002*
	Hospital pharmacy	59.74	11.427		
	Other Public	57.00	2.828		
	Institutions in				
	Pharmacy				
Self-control	Academic pharmacy	76.44	15.629		
	Community pharmacy	18.20	3.957	.659	.580
	Hospital pharmacy	18.43	4.187		
	Other Public	14.00	1.414		
	Institutions in				
	Pharmacy				
Well-being	Academic pharmacy	18.13	5.303		
	Community pharmacy	20.66	3.447	4.882	.004*
	Hospital pharmacy	18.57	3.501		
	Other Public	17.50	2.121		
	Institutions in				
	Pharmacy				
Emotionality	Academic pharmacy	22.50	3.077		
	Community pharmacy	19.24	3.404	.346	.792
	Hospital pharmacy	18.35	3.446		
	Other Public	18.00	5.657		
	Institutions in				
	Pharmacy				
Sociability	Academic pharmacy	19.06	4.343		
	Community pharmacy	18.41	4.455	1.009	.393
	Hospital pharmacy	19.30	4.931		
	Other Public	23.00	7.071		
	Institutions in				
	Pharmacy				
Total EI Score	Academic pharmacy	17.69	4.393		
	Community pharmacy	95.17	13.466	.161	.922
	Hospital pharmacy	94.17	14.736		
	Other Public	89.00	8.485		
	Institutions in				
	Pharmacy				
	Academic pharmacy	95.63	13.889		

\*  $p < .05$

When we examine the post-hoc analysis, which is one of the equal variance approaches and was selected due to the homogeneous distribution of the data, there is a significant difference between university graduates and master's and doctorate graduates in the sub-dimension of intrinsic satisfaction. As for total job satisfaction, a notable difference exists between university graduates and PhD graduates. Furthermore, there is a significant difference between university graduates and Master's and PhD

graduates in the sub-dimension of well-being. In all three sub-dimensions, the highest scores belong to Masters graduates and the lowest scores to university graduates (Table 4).

**Table 4.** Results of LSD Post Hoc Test Analysis for Educational Level

	Educational level (I)	Educational level (J)	Mean Difference (I-J)	Sig.
<b>Intrinsic satisfaction</b>	University	Master's Degree	-6.797*	.030
		Doctorate	-5.880*	.023
	Master's Degree	University	6.797*	.030
		Doctorate	.917	.794
	Doctorate	University	5.880*	.023
		Master's Degree	-.917	.794
<b>Total JS Score</b>	University	Master's Degree	-9.310	.060
		Doctorate	-8.310*	.042
	Master's Degree	University	9.310	.060
		Doctorate	1.000	.857
	Doctorate	University	8.310*	.042
		Master's Degree	-1.000	.857
<b>Well-being</b>	University	Master's Degree	-2.823*	.011
		Doctorate	-2.790*	.003
	Master's Degree	University	2.823*	.011
		Doctorate	.033	.979
	Doctorate	University	2.790*	.003
		Master's Degree	-.033	.979

\*  $p < .05$

The results of the one-way analysis of variance indicate that there is no significant difference between work area and the sub-dimensions of EI, self-control, emotionality, and sociability (Table 3). However, a statistically significant difference was found in the sub-dimensions of intrinsic satisfaction, extrinsic satisfaction, total job satisfaction, well-being, and work areas ( $p = .004, .001, .002, .004$ ; respectively). To identify the specific areas responsible for these differences, a post-hoc analysis was conducted (Table 5). According to the results of the post-hoc analysis the analysis of intrinsic satisfaction, extrinsic satisfaction, total job satisfaction, and well-being sub-dimensions revealed that the differences between work area were attributed to variations between community pharmacy and hospital, as well as between hospital and academia.

**Table 5.** Results of LSD Post Hoc Test Analysis for Work Area

Dependent Variable	Area of work (I)	Area of work (J)	Mean Difference (I-J)	Sig.
<b>Intrinsic Satisfaction</b>	Community pharmacy	Hospital	6.574*	.008
		Other Public Institutions	8.878	.193
		Academia	-3.747	.177
	Hospital	Community pharmacy	-6.574*	.008
		Other Public Institutions	2.304	.739
		Academia	-10.321*	.001
	Other Public Institutions	Community pharmacy	-8.878	.193
		Hospital	-2.304	.739
		Academia	-12.625	.075
	Academia	Community pharmacy	3.747	.177
		Hospital	10.321*	.001
		Other Public Institutions	12.625	.075
		Hospital	5.224*	.001

<b>Extrinsic Satisfaction</b>	Community pharmacy	Other Public Institutions	5.659	.177
		Academia	-1.154	.497
		Hospital	-5.224*	.001
	Hospital	Other Public Institutions	.435	.918
		Academia	-6.378*	.001
		Community pharmacy	-5.659	.177
	Other Public Institutions	Hospital	-.435	.918
		Academia	-6.812	.117
		Community pharmacy	1.154	.497
	Academia	Hospital	6.378*	.001
		Other Public Institutions	6.813	.117
		Hospital	11.797*	.002
<b>Total JS Score</b>	Community pharmacy	Other Public Institutions	14.537	.168
		Academia	-4.901	.253
		Hospital	-11.797*	.002
	Hospital	Other Public Institutions	2.739	.797
		Academia	-16.698*	.001
		Community pharmacy	-14.537	.168
	Other Public Institutions	Hospital	-2.739	.797
		Academia	-19.437	.076
		Community pharmacy	4.901	.253
	Academia	Hospital	16.698*	.001
		Other Public Institutions	19.438	.076
		Hospital	2.093*	.020
<b>Well-being</b>	Community pharmacy	Other Public Institutions	3.159	.201
		Academia	-1.841	.068
		Hospital	-2.093*	.020
	Hospital	Other Public Institutions	1.065	.670
		Academia	-3.935*	.001
		Community pharmacy	-3.159	.201
	Other Public Institutions	Hospital	-1.065	.670
		Academia	-5.000	.052
		Community pharmacy	1.841	.068
	Academia	Hospital	3.935*	.001
		Other Public Institutions	5.000	.052

\*  $p < .05$

We conducted a Pearson correlation analysis to explain the relationship between job satisfaction and the sub-dimensions of Eivariabes. Correlation coefficients, denoted by the symbol 'r' and ranging from -1 to +1, were employed to examine the relationships among the variables. A coefficient between 0.70 and 1.00 indicates a high level of relationship, between 0.30 and 0.70 indicates a medium level of relationship, and between 0.00 and 0.30 indicates a low level of relationship [26]. Upon reviewing Table 6, it is evident that a high level positive relationship exists between the intrinsic satisfaction sub-dimension and extrinsic satisfaction and total job satisfaction ( $r=0.849$ ,  $p<0.01$ ;  $r=0.978$ ,  $p<0.01$ ), while a moderate level positive relationship is observed between total EI and well-being ( $r=0.396$ ,  $p<0.01$ ;  $r=0.583$ ,  $p<0.01$ ). Additionally, a high level positive relationship is found between the extrinsic satisfaction sub-dimension and total job satisfaction ( $r=0.941$ ,  $p<0.01$ ), whereas a medium level significant relationship is noted between total EI and well-being ( $r=0.349$ ,  $p<0.01$ ;  $r=0.501$ ,  $p<0.01$ ). Furthermore, a low level significant relationship is observed between the self-control and sociability sub-dimensions ( $r=0.261$ ,  $p<0.05$ ;  $r=0.234$ ,  $p<0.05$ ). A moderate positive relationship is identified between the total job satisfaction sub-dimension and well-being and total EI ( $r=0.572$ ,  $p<0.001$ ;  $r=0.392$ ,  $p<0.01$ ), while a low level relationship is found between self-control and

sociability ( $r=0.254$ ,  $p<0.05$ ;  $r=0.250$ ,  $p<0.05$ ). The self-control sub-dimension demonstrates a moderate relationship with well-being and total EI ( $r=0.366$ ,  $p<0.001$ ;  $r=0.679$ ,  $p<0.01$ ) and a low level significant relationship with sociability ( $r=0.239$ ,  $p<0.005$ ). A moderate positive relationship is found between the well-being sub-dimension and total EI ( $r=0.577$ ,  $p<0.01$ ). A moderately significant relationship is observed between emotionality, sociability, and total EI ( $r=0.460$ ,  $p<0.001$ ;  $r=0.620$ ,  $p<0.01$ ). Additionally, a high level positive relationship is identified between the sociability sub-dimension and total EI ( $r=0.739$ ,  $p<0.001$ ) (Table 6).

**Table 6.** Result of Pearson Correlation Analysis

	Intrinsic Satisfaction	Extrinsic Satisfaction	Total JS Score	Self-control	Well-being	Emotionality	Sociability	Total EI Score
<b>Intrinsic Satisfaction</b>	r 1 p	.849** .000	.978** .000	.235* .033	.583** .000	.023 .836	.245* .027	.396** .000
<b>Extrinsic Satisfaction</b>	r .849** p .000	1	.941** .000	.261* .018	.501** .000	.030 .792	.234* .034	.349** .001
<b>Total JS Score</b>	r .978** p .000	.941** .000	1	.254* .021	.572** .000	.027 .813	.250* .024	.392** .000
<b>Self-control</b>	r .235* p .033	.261* .018	.254* .021	1	.366** .001	.165 .138	.239* .031	.679** .000
<b>Well-being</b>	r .583** p .000	.501** .000	.572** .000	.366** .001	1	.164 .141	.214 .054	.577** .000
<b>Emotionality</b>	r .023 p .836	.030 .792	.027 .813	.165 .138	.164 .141	1	.460** .000	.620** .000
<b>Sociability</b>	r .245* p .027	.234* .034	.250* .024	.239* .031	.214 .054	.460** .000	1	.739** .000
<b>Total EI Score</b>	r .396** p .000	.349** .001	.392** .000	.679** .000	.577** .000	.620** .000	.739** .000	1

\*\*  $p<.001$ , \*  $p<.05$

### 3. DISCUSSION

The pharmacy profession has experienced significant educational and professional changes in recent years, requiring pharmacists to effectively manage emotions, adapt to change, and navigate stressful environments [22]. This study aimed to determine the levels of job satisfaction and EI among pharmacists working in a specific province and explore the impact of EI on job satisfaction.

#### 3.1. Relationship between Job Satisfaction and Emotional Intelligence with Demographic Characteristics

Omur conducted a study on pharmacists, analyzing intrinsic and extrinsic job satisfaction scores based on workplace. The findings revealed that hospital pharmacists had lower mean intrinsic satisfaction scores compared to community pharmacists. Additionally, community pharmacists had lower mean extrinsic satisfaction scores than hospital pharmacists [27]. Another quantitative study conducted with community and public pharmacists in Cyprus reported the highest average job satisfaction across all sub-dimensions was observed among community pharmacists [28]. Similarly, our study found that community pharmacists exhibited the highest mean job satisfaction scores across all sub-dimensions compared to other non-academic public pharmacists. Furthermore, a statistically significant difference was observed in intrinsic satisfaction, extrinsic satisfaction, total job satisfaction, and work areas. The variations in work areas were attributed to the disparities between community pharmacy and hospital pharmacy, as well as between hospital pharmacy and academic pharmacy.

In a study conducted by Gören, an analysis of job satisfaction sub-dimensions showed generally high levels of intrinsic satisfaction, moderate levels of extrinsic satisfaction, and high average levels of total satisfaction [29]. Consistent with this, our study found that the mean score of extrinsic satisfaction was lower than the mean score of intrinsic satisfaction. Moreover, a high-level positive relationship was observed between the intrinsic satisfaction sub-dimension and extrinsic satisfaction, as well as total job satisfaction. Additionally, a high-level positive relationship was identified between the extrinsic satisfaction sub-dimension and total job satisfaction.

Our study did not find a statistically significant difference when comparing the job satisfaction sub-dimensions of male and female pharmacists. A study conducted with hospital pharmacists in Romania utilizing a questionnaire technique also reported no significant relationship between age, gender, educational level, seniority, working hours, and job satisfaction [30]. Similarly, another study reported no significant difference in job satisfaction based on gender [31]. However, contrasting results have been reported in other studies, suggesting that male pharmacists may experience lower job satisfaction than their female counterparts [32]. Additionally, while some studies found no significant gender differences in EI [33, 34], many studies have demonstrated that women tend to exhibit higher levels of EI than men [35-37]. In our study, the mean job satisfaction scores of male and female pharmacists were almost identical.

In Omur's study on pharmacists, it was observed that the mean job satisfaction scores of married and single pharmacists were similar and at a moderate level [27]. Similarly, a study conducted by Malik et al. with healthcare workers, including pharmacists, found that married healthcare workers tended to have relatively higher job satisfaction [38]. In our study, the mean job satisfaction scores of married and single pharmacists were found to be similar.

Regarding educational level, a study conducted with hospital pharmacists in Romania using a questionnaire technique reported no significant relationship between educational level and job satisfaction [30]. In contrast, our study found a statistically significant difference between intrinsic satisfaction, total job satisfaction, and educational level.

When examining studies related to levels of EI, it has been consistently found that individuals with a higher level of educational tend to have higher degrees of EI [37, 39]. Similarly, in our study, we found that pharmacists with master's and doctorate degrees had higher levels of EI. In Gören's study, a comparison based on marital status revealed that married individuals had higher well-being scores compared to singles [29]. In our study, we observed that the well-being scores of married individuals were nearly identical to those of singles.

Numerous studies have indicated that age does not significantly impact the level of EI [33, 34, 39]. Similarly, in our study, no significant difference was found between age and EI.

### 3.2. Relationship between Emotional Intelligence with Job Satisfaction

Gören's study also found that individuals with a seniority of 1-5 years had higher sociability scores compared to those with less than 1 year of seniority. Additionally, individuals with a seniority of 6-10 years had higher sociability scores compared to those with less than 1 year of seniority [29]. When comparing job satisfaction among pharmacists based on seniority, we found that job satisfaction scores were moderate and closely aligned. Another study reported that pharmacists with a working period of 16 years or more had higher scores in general job satisfaction compared to those with a working period of 0-5 years [27]. However, in our study, no significant difference was found between seniority and any dimension of EI.

In a study conducted by Ward et al. to evaluate pharmacist success, EI and maintaining a sense of work-life balance were found to be supportive of pharmacy practice success [23]. Similarly, in a 2022 study by Salmoneh that utilized quantitative and qualitative methods to measure the impact of factors such as a smart working environment, job security, and EI on employee satisfaction during COVID-19 in Jordanian pharmacies, it was found that pharmacists in community pharmacies in Amman acknowledged EI as a motivating factor contributing to job satisfaction [40]. Sub-dimensions of EI have been consistently associated with job satisfaction [41], and EI itself is positively correlated with job satisfaction [42, 43].

Gören's study examining the effects of EI levels of healthcare workers on job satisfaction reported a moderate, positive, and significant relationship between EI and job satisfaction. Additionally, it indicated a very weak positive and significant relationship between extrinsic satisfaction and sociability, which are sub-dimensions of job satisfaction and EI, as well as a very weak positive and significant relationship

between general satisfaction and sociability [29]. In our study, we found a moderate positive relationship between the intrinsic satisfaction sub-dimension and total EI and well-being, and a low positive relationship between sociability and self-control. Furthermore, we observed a moderate significant relationship between the extrinsic satisfaction dimension and total EI and well-being, as well as a low significant relationship between self-control and sociability sub-dimensions. There was a moderate positive relationship between the total job satisfaction sub-dimension and well-being and total EI, and a low-level relationship between self-control and sociability.

Despite providing important findings regarding the effect of EI on pharmacists' job satisfaction, our study does have limitations. Firstly, although the survey link was sent to 252 people, only 82 individuals responded, potentially limiting the generalizability of our findings. Conducting studies with a larger number of pharmacists would yield more comprehensive information on the subject. Secondly, the study population was selected from a limited region of Turkey, and variations in health systems and working conditions may influence job satisfaction results, rendering our findings non-generalizable. Therefore, further research conducted in different countries is needed to validate our results.

While this study provides valuable insights into the impact of EI on pharmacists' job satisfaction, it is important to acknowledge the following limitations. Firstly, the cross-sectional survey design with a modest sample size and response rate prevents us from drawing definitive conclusions about the causal relationships between EI and job satisfaction. The results may not be generalizable due to the specific study design. Secondly, the survey was sent to pharmacists registered with the Chamber of Pharmacists, and as community pharmacists are required to register with the Chamber, their number is significantly higher than pharmacists working in other settings (41/82); which may lead to an over-representation of community pharmacists. Future research should aim to include more diverse regions to validate and extend the results. Fourthly, the concept of EI is challenging to measure, and the use of self-report scales introduces potential biases such as social desirability and recall errors. These biases may impact the accuracy of the results in capturing pharmacists' true experiences and perceptions of EI and job satisfaction. Exploring alternative measurement methods and incorporating multiple data sources would strengthen the validity of future studies in this area.

#### 4. CONCLUSION

To the best of our understanding, this study represents the first exploration of the influence of EI on job satisfaction among pharmacists. The findings, indicating a moderate relationship between total job satisfaction and total EI scores among pharmacists, suggest that enhancing EI could potentially lead to an improvement in their job satisfaction and overall quality of work life. Pharmacists, like many professionals, often deal with high levels of stress, challenging situations, and interactions with patients and colleagues. Emotional intelligence, which encompasses the ability to recognize, understand, and manage one's own emotions and those of others, plays a crucial role in navigating these circumstances effectively. By providing training and interventions aimed at increasing EI, pharmacists may develop essential skills, such as empathy, emotional regulation, and effective communication, which can positively impact their work environment and job satisfaction. Future investigations could enhance the breadth and depth of knowledge in this area by employing larger sample sizes in their studies. Moreover, qualitative studies delving into the mechanisms through which EI shapes job satisfaction would yield invaluable contributions to the existing body of literature.

#### 5. MATERIALS AND METHODS

##### 5.1. Study design

A cross-sectional, descriptive study was conducted between November 2022 and January 2023 among pharmacists registered with the Erzurum Chamber of Pharmacists and currently practising pharmacy.

## 5.2. Study sample

Using a conservative (i.e. higher power  $b$  and effect size  $f$ ) a priori approach to sample size, a total of 70 samples were required to perform the ANOVA (G\*Power 3.1 [44], F-test,  $\alpha=0.05, b=0.90, f=0.5$ ). A questionnaire was sent via Whatsapp to all pharmacists registered with the Chamber of Pharmacists (pharmacists other than community pharmacists were not required to register); it explained the conditions for taking part in the survey; it also explained the profession of pharmacy and the importance of the study. The survey was open for approximately 1 month and pharmacists were reminded every 10 days. A total of 82 respondents completed the survey.

## 5.3. Study instrument

Three instruments were used to collect the necessary data: the socio-demographic data form, the Emotional Intelligence Trait Scale Short Form (EQTS-SF) and the Minnesota Job Satisfaction Scale. These three scales were combined into one questionnaire and created using Google Forms.

### 5.3.1. Socio-demographic Data Form

A researcher-created form was used to obtain descriptive information about the pharmacists. This form consisted of seven questions that inquired about the pharmacists' gender, age, years of experience in the profession, marital status, work areas, voluntary choice of their profession and educational level.

### 5.3.2. Emotional Intelligence Trait Scale Short Form (EQTS-SF)

The Emotional Intelligence Scale, originally developed by Petrides and Furnham [45] between 2000 and 2001, was adapted to Turkish by Işık in 2013 after undergoing reliability and validation procedures. The original scale consists of 30 items, rated on a seven-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Deniz, Özer, and Işık [46] adapted the scale into a Turkish version that includes a short form with 20 items, using the same Likert-type rating scale. The sub-dimensions of the scale encompass well-being, self-control, emotionality, and sociability. The intrinsic consistency reliability coefficient for the entire scale was determined to be .81, and the test-retest reliability coefficient was found to be .86, indicating that the Turkish adaptation of the scale is a valid and reliable measurement tool.

### 5.3.3. Minnesota Job Satisfaction Scale

The Minnesota Job Satisfaction ScaleThe Minnesota Job Satisfaction Scale is a scale developed by Weiss et al. [47] to measure job satisfaction, and was tested for validity and reliability in Turkish by Baycan [48]. The Minnesota Job Satisfaction Scale is a 5-point Likert-type scale with 20 items that show the intrinsic and extrinsic satisfaction factors experienced by individuals regarding their job. The lowest score that can be obtained from the scale is 20, while the highest is 100. The Minnesota Job Satisfaction Scale has three sub-dimensions, namely General Satisfaction, Intrinsic Satisfaction, and extrinsic Satisfaction. Previous studies reported that the Minnesota Job Satisfaction Scale is valid and reliable, with Cronbach's alpha coefficients ranging from 0.88 to 0.91.34–36 Baycan [48] found the Cronbach's alpha reliability coefficient of the Minnesota Job Satisfaction Scale to be 0.77. In this study, the Cronbach's alpha reliability coefficient of the Minnesota Job Satisfaction Scale was found to be 0.89.

## 5.4. Statistical Analysis

Data analysis was conducted using the Statistical Package for Social Sciences (SPSS) version 26.0 for Mac. In the analysis of the data, the Kolmogorov-Smirnov one-sample test was used to determine whether the data conformed to a normal distribution. The distribution of the data was found to be normal for all groups at the 5% significance level. Descriptive statistics, such as frequency, percentage, mean, and standard deviation, were used to describe the distribution of study variables. Descriptive statistical analyses, independent groups t-test, one-way Analysis of Variance (ANOVA), LSD Post-hoc test, and Pearson Correlation analyses were performed in accordance with the research questions at a significance level of  $\alpha=0.05$ .

## 5.5. Ethical Approval

The study received approval from the Atatürk University Clinical Research Ethics Committee (B.30.2.A.T.A.0.01.00/684).

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