

## Enhancing Inpatient Care: The Impact of Therapeutic Recreation on Emotional Competence and Life Orientation

Tebessüm AYYILDIZ DURHAN<sup>1</sup>, Ferhat KILIÇARSLAN<sup>2</sup>, Ecem TÜRKMEN<sup>3</sup>, Beyza Merve AKGÜL<sup>4</sup>

<sup>1</sup>Gazi University, Ankara, Turkey

<https://orcid.org/0000-0003-2747-6933>

<sup>2</sup>Istanbul Aydın University, İstanbul, Turkey

<https://orcid.org/0000-0002-9363-1068>

<sup>3</sup>Gazi University, Ankara, Turkey

<https://orcid.org/0000-0003-0059-2037>

<sup>4</sup>Gazi University, Ankara, Turkey

<https://orcid.org/0000-0003-2950-4221>

**Email:** [tebessum@gazi.edu.tr](mailto:tebessum@gazi.edu.tr), [ferhatkilicarslan@aydin.edu.tr](mailto:ferhatkilicarslan@aydin.edu.tr), [ecemturkmen@gazi.edu.tr](mailto:ecemturkmen@gazi.edu.tr), [bmakgul@gazi.edu.tr](mailto:bmakgul@gazi.edu.tr)

*Type: Research Article (Received: 27.06.2024– Accepted: 25.09.2024)*

### Abstract

This study investigates the effects of therapeutic recreational activities on the emotional skills, competence, and life orientations of patients receiving inpatient treatment at Ankara Gülhane Training and Research Hospital. The sample consisted of 313 inpatients, 154 males, and 159 females. Data collection tools included a personal information form, the "Emotional Skills and Competence Scale (ESCQ-45)," and the "Life Orientation Test (LOT)." Statistical analyses used were descriptive statistics, independent sample t-test, ANOVA, LSD post hoc tests, multiple linear regression, and Pearson correlation analyses. Internal consistency coefficients were 0.96 for the ESCQ-45 and 0.92 for the LOT. Results showed high mean scores on the ESCQ-45 ( $\bar{x} = 3.81$ ) and low scores on the LOT ( $\bar{x} = 2.00$ ), indicating pessimistic life orientations. Participants' therapeutic recreational activity involvement, age, education level, treatment unit, and daily treatment frequency significantly influenced these measurements. There were negative and moderate correlations between emotional skills, competence, and life orientation, with emotional skills and competence being significant predictors of life orientation. Findings suggest that participation in therapeutic recreational activities has a limited impact on emotional skills and life orientation.

**Keywords:** Therapeutic Recreation, Patients, Emotional Skills and Competence, Life Orientation

## Introduction

Emotion is a positive or negative mental state that combines physiological input with cognitive evaluation and is effective in rational decision-making (Lall, 2010). Also, emotions are fundamental components of human biology and behavior, linking senses, thoughts and actions through various communication channels such as facial expressions, postures, body language, chemical signals and spoken language (Buckley, 2016).

Considering emotions as an important part of human psychology, the concept of emotional intelligence, according to Faria et al. (2006), refers to the ability to recognize the meaning of emotional patterns and solve problems involving an emotional context. Emotional skills and competence, in this context, include the practical and cognitive tools needed to develop an individual's emotional intelligence, which plays a critical role in ensuring success in social relationships and professional settings (Papoutsi et al., 2021).

An individual's success in life is influenced by various characteristics and behavior patterns (Gündoğdu et al., 2005). Today's world offers more options for individuals when focusing on their search for meaning and choosing the resources that will provide meaning in their lives, which complicates the decision-making process related to success (Demirbaş, 2010). In this context, life orientation plays a decisive role in how individuals experience, understand and evaluate these processes (Kahleoğulları, 2017). Life orientations for the planned future can affect psychological and physical health through their effects on coping responses (Hirsch et al., 2010). According to McKnight and Kashdan (2009), the lack of meaningfulness or purpose in life leads people to a void and thus to different psychological and physiological diseases.

Developments in modern medicine have made great progress in the diagnosis and treatment of diseases, however, the emotional and psychological needs of patients beyond their physical ailments should not be ignored (Mevlâna and Karaaziz, 2021). There are significant changes in the way a disabled person with special needs or those who receive inpatient treatment as a result of an accident or disability perceive time and spend time in this process (Gassaway et al., 2011). According to Tasiemski et al. (2005), typical changes in leisure activities include a decrease in sports participation and an increase in indoor and passive activities, especially watching television, listening to the radio and listening to music. Considering these changes, efforts to maintain emotional balance and the meaning of life throughout the disease process can affect treatment outcomes (Witkiewitz et al., 2020). In this context, the importance of therapeutic recreation activities, in which recreation activities aiming at individual and social well-being are seen as health services, is increasing.

Therapeutic recreation is an approach that aims to improve the physical, mental and emotional health of individuals through structured activities. Such activities help patients to handle the treatment process from a more positive perspective without being stuck in the hospital environment (Heo et al., 2019). In addition to being a preventive healthcare service (Groff and Zoerink, 2012), therapeutic recreation practices are considered as a valuable element of the recovery process for individual skills, interests and the goals of the person's treatment (Andrew et al., 2014). Therapeutic recreation, which has the potential to improve the quality of life of individuals by encouraging active participation, significantly supports the overall well-being of individuals by positively affecting health outcomes at both physical and mental levels (Reza, 2021).

This study aims to investigate the effects of patients' participation in therapeutic recreational activities on their emotional skills and competence levels and life orientations. It is thought

that the results of this study will help to make sense of how patients approach their treatment processes emotionally and to evaluate what role therapeutic recreational activities can play in this process. In this context, the following research questions were posed.

1. What impact does participation in therapeutic recreational activities have on patients' emotional skills?

H1: Patients who participate in therapeutic recreational activities score higher on emotional skills levels.

2. What impact does participation in therapeutic recreational activities have on patients' life orientation?

H2: Patients who participate in therapeutic recreational activities score more positively in terms of life orientation.

3. How do demographic variables such as age, gender, and educational level affect emotional skills and life orientation?

H3: Demographic variables such as age, gender and educational level show differential effects on emotional skills and life orientation.

4. How are the treatment unit and daily treatment frequency related to patients' emotional skills and life orientation?

H4: Treatment unit and daily treatment frequency show a significant relationship with emotional skills and life orientation.

## **Material and Method**

### **Research Design**

The relational survey model was used in this study. Relational survey model is a model that examines in which direction and to what extent two or more variables differ together (Karasar, 2009).

### **Universe and Sampling**

A total of 51.8% (n=162) of the individuals who participated in the study reported that they participated in therapeutic recreational activities, while 48.2% (n=151) reported that they did not. In terms of gender distribution, approximately half of the participants were male (49.2%, n=154) and half were female (50.8%, n=159). In terms of age groups, 32.6% (n=102) were aged 30 years and below, 33.2% (n=104) were between 31 and 50 years and 34.2% (n=107) were over 50 years. Regarding marital status, 29.7% (n=93) of the participants were single, while 70.3% (n=220) were married. Regarding education level, 54.6% (n=171) had high school education or less, while 45.4% (n=142) had higher education. In terms of treatment units, 28.1% (n=88) were in the internal medicine group, 51.8% (n=162) in the surgical group and 20.1% (n=63) in the specialty group. According to daily treatment frequency, 67.4% (n=211) received treatment once or twice a day, while 32.6% (n=102) received treatment more than twice a day (Table 1).

**Table 1.** Percentage and frequency values for demographic variables of the participants participants

		F	%
<b>Participation in Therapeutic Recreational Activities</b>	Yes	162	51,8
	No	151	48,2
<b>Gender</b>	Male	154	49,2
	Woman	159	50,8
<b>Age</b>	30 Years or Below	102	32,6
	Between 31 and 50 years old	104	33,2
	Over 50 Years	107	34,2
<b>Marital Status</b>	Single	93	29,7
	Married	220	70,3
<b>Education Level</b>	High School or Below Graduates	171	54,6
	Higher Education	142	45,4
<b>Unit of Treatment</b>	Internal Diseases Group	88	28,1
	Surgery Group	162	51,8
<b>Daily Frequency of Treatment</b>	2 or 1 times	211	67,4
	More than 2 times	102	32,6

### Data Collecting

Data were collected from a total of 313 inpatients at GATA (Ankara Gülhane Training and Research Hospital), 154 males and 159 females, through face-to-face interviews with questionnaires. In addition to the personal information form, "Emotional Skills and Competence Scale (ESCQ-45) and Life Orientation Test (LOT) were used as data collection tools.

**Emotional Skills and Competence Scale (ESCQ-45):** The Emotional Skills and Competence Scale (ESCQ-45), developed by Taksic (1998) and adapted into Turkish by Vatan (2015) to assess emotional skills and competencies, consists of 3 sub-dimensions (Perception and Understanding, Display and Naming and Regulation) and 45 questions. The scale is a 5-point Likert type. In the original study, the internal consistency coefficients for the ESCQ-45 were .92 for the total scores and .90, .89, and .79 for the subscales, respectively. In the current study, it was found to be .96, .91, .89, and .91. Higher scores on the scale indicate more skills and competence in these areas.

**Life Orientation Test (LOT):** The Life Orientation Test, developed by Carver, Scheier, Bridges (1994) to reveal the differences in optimism and pessimism among individuals, is a 10-item, 5-point Likert-type scale. The Life Orientation Test was adapted into Turkish by Kahleoğulları (2017). Item 3, item 7 and item 9 in the scale are reverse scored items. At the same time, item 2, item 5, item 6 and item 8 are filler items and are not scored. In the original study, the internal consistency coefficients for the LOT were .78. Scale's total score is formed by adding the responses of the individuals to the items to each other. Low scores indicate pessimism, while high scores indicate optimism.

### Data Analysis

In the analysis of the data, frequency and percentage from descriptive statistics methods will be used for personal information. In order to test whether all three scales and their sub-dimensions are normally distributed, kurtosis and skewness values will be examined and it will be determined whether the data are normally distributed according to the significance level, and parametric tests (independent sample t-test, one-way analysis of variance ANOVA)

will be applied if they are normally distributed. If the data are not normally distributed, nonparametric tests will be used.

### Findings

In this section, the findings obtained as a result of the analysis of the data collected from the participants through the scales for the solution of the research problem are presented.

**Table 2.** Arithmetic mean, standard deviation, normality distributions of measurement tools

	Min.	Max.	$\bar{x}$	S	Skewness	Kurtosis	$\alpha$
<b>ESCQ-45</b>	1,96	5,00	3,81	0,55	-,719	,197	,96
<b>Perception and Understanding</b>	1,88	5,00	3,79	0,56	-,728	,299	,91
<b>Display and Naming</b>	1,53	5,00	3,89	0,56	-,953	1,082	,89
<b>Regulation</b>	2,00	5,00	3,76	0,63	-,535	-,444	,91
<b>Life Orientation Test (LOT)</b>	1,00	4,33	2,00	0,69	1,388	1,692	,92

It is seen that the participants' responses to the measurement tools are normally distributed. In order for the data to be normally distributed, it should be between +2.0 and -2.0 (George & Mallery, 2010). Accordingly, it was determined that the data were normally distributed. It was concluded that the mean scores of the participants from the Emotional Skills and Competence Scale were at a high level ( $\bar{x}$  =3.81) and the highest mean scores were obtained from the display and naming sub-dimension ( $\bar{x}$  =3.89) and the lowest mean scores were obtained from the regulation sub-dimension ( $\bar{x}$  =3.76). It can be said that the mean scores of the participants' answers for the LOT were at a low level ( $\bar{x}$  =2.00). Accordingly, it is concluded that the participants are closer to pessimistic emotions.

**Table 3.** Independent sample t test results between measurement tools and participation in therapeutic recreation activities

	Participation	n	$\bar{x}$	S	t	p
<b>ESCQ-45</b>	Yes	162	4,01	0,50	7,095	0,076
	No	151	3,60	0,53		
<b>Perception and Understanding</b>	Yes	162	3,98	0,51	6,862	0,110
	No	151	3,57	0,54		
<b>Display and Naming</b>	Yes	162	4,07	0,50	6,004	0,046*
	No	151	3,70	0,56		
<b>Regulation</b>	Yes	162	3,99	0,58	7,184	0,304
	No	151	3,51	0,59		
<b>Life Orientation Test (LOT)</b>	Yes	162	1,91	0,65	-	0,064
	No	151	2,09	0,72		

\*p<0,05

Statistically significant differences were found between the status of participation in therapeutic recreation activities and the display and naming sub-dimension of the Emotional Skills and Competence Scale. It was concluded that these significant differences were in favor of individuals participating in therapeutic recreation activities.

**Table 4.** Independent sample t test results between measurement tools and gender variables

Participation in TR		Age	n	$\bar{x}$	S	t	p	LSD
Yes	<b>ESCQ-45</b>	$\leq 30^1$	77	4,03	0,49	1,164	0,315	
		31-50 <sup>2</sup>	52	4,07	0,44			
		$\geq 51^3$	33	3,90	0,58			
	<b>Perception and</b>	$\leq 30^1$	77	4,01	0,50	1,756	0,176	
31-50 <sup>2</sup>		52	4,04	0,43				

No	Understanding	$\geq 51^3$	33	3,84	0,62	1,320	0,270	
		$\leq 30^1$	77	4,06	0,49			
		$31-50^2$	52	4,14	0,42			
	Display and Naming	$\geq 51^3$	33	3,96	0,59	,350	0,705	
		$\leq 30^1$	77	4,01	0,58			
		$31-50^2$	52	4,02	0,55			
	Regulation	$\geq 51^3$	33	3,92	0,61	1,305	0,274	
		$\leq 30^1$	77	1,99	0,74			
		$31-50^2$	52	1,86	0,57			
	Life Orientation Test (LOT)	$\geq 51^3$	33	1,78	0,54	1,670	0,192	
		$\leq 30^1$	25	3,43	0,59			
		$31-50^2$	52	3,66	0,52			
Total	ESCQ-45	$\geq 51^3$	74	3,62	0,50	,933	0,396	
		$\leq 30^1$	25	3,44	0,58			
		$31-50^2$	52	3,60	0,55			
	Perception and Understanding	$\geq 51^3$	74	3,60	0,51	2,074	0,129	
		$\leq 30^1$	25	3,50	0,62			
		$31-50^2$	52	3,78	0,56			
	Display and Naming	$\geq 51^3$	74	3,72	0,54	1,741	0,179	
		$\leq 30^1$	25	3,33	0,69			
		$31-50^2$	52	3,60	0,59			
	Regulation	$\geq 51^3$	74	3,52	0,56	5,659	0,004*	1>2
		$\leq 30^1$	25	2,52	0,97			
		$31-50^2$	52	1,98	0,64			
Life Orientation Test (LOT)	$\geq 51^3$	74	2,02	0,62	1>3			
	$\leq 30^1$	102	3,88	0,58				
	$31-50^2$	104	3,86	0,52				
Total	ESCQ-45	$\geq 51^3$	107	3,70	0,54	3,247	0,040*	1>3
		$\leq 30^1$	102	3,87	0,58			
		$31-50^2$	104	3,82	0,54			
	Perception and Understanding	$\geq 51^3$	107	3,68	0,56	3,351	0,036*	1>3
		$\leq 30^1$	102	3,93	0,58			
		$31-50^2$	104	3,96	0,53			
	Display and Naming	$\geq 51^3$	107	3,79	0,56	2,630	0,074	
		$\leq 30^1$	102	3,84	0,67			
		$31-50^2$	104	3,81	0,60			
	Regulation	$\geq 51^3$	107	3,64	0,60	3,041	0,049*	1>3
		$\leq 30^1$	102	2,12	0,83			
		$31-50^2$	104	1,92	0,61			
Life Orientation Test (LOT)	$\geq 51^3$	107	1,95	0,60	2,429	0,090		
	$\leq 30^1$	102	2,12	0,83				
	$31-50^2$	104	1,92	0,61				

Statistically significant differences were found between age and measurement tools. For participants who did not participate in therapeutic recreation activities, it was concluded that significant differences between LOT and gender were found between participants aged 30 years and under and between 31 and 50 years and between participants aged 30 years and under and 50 years and over in favor of participants under 30 years. When these results are considered, it is seen that the participants exhibit low and medium level of LOT level according to the age variable and accordingly, they are closer to pessimistic emotions and this situation increases with increasing age. According to the results of the analysis including all participants, significant differences were found between the age variables of the participants and ESCQ-45 total scores, perception and understanding sub-dimension and regulation sub-dimensions.

**Table 5.** Independent sample t test results between measurement tools and education level variables

Participation in TR		Education level	n	$\bar{x}$	S	t	p
Yes	ESCQ-45	High School or Below	68	3,87	0,54	-	0,060
		Higher Education	94	4,12	0,44	3,200	
	Perception and Understanding	High School or Below	68	3,84	0,57	-	0,046*
		Higher Education	94	4,09	0,44	3,097	
	Display and Naming	High School or Below	68	3,92	0,55	-	0,031*
		Higher Education	94	4,17	0,43	3,162	
	Regulation	High School or Below	68	3,83	0,59	-	0,213
		Higher Education	94	4,11	0,54	3,068	
	Life Orientation Test (LOT)	High School or Below	68	1,96	0,59	0,954	0,505
		Higher Education	94	1,87	0,69		
No	ESCQ-45	High School or Below	103	3,63	0,52	1,093	0,966
		Higher Education	48	3,53	0,53		
	Perception and Understanding	High School or Below	103	3,60	0,54	0,853	0,749
		Higher Education	48	3,52	0,53		
	Display and Naming	High School or Below	103	3,75	0,56	1,372	0,808
		Higher Education	48	3,61	0,57		
	Regulation	High School or Below	103	3,54	0,58	0,833	0,409
		Higher Education	48	3,45	0,62		
	Life Orientation Test (LOT)	High School or Below	103	2,03	0,72	-	0,826
		Higher Education	48	2,22	0,70	1,502	
Total	ESCQ-45	High School or Below	171	3,72	0,54	-	0,820
		Higher Education	142	3,92	0,55	3,168	
	Perception and Understanding	High School or Below	171	3,70	0,56	-	0,527
		Higher Education	142	3,90	0,54	3,179	
	Display and Naming	High School or Below	171	3,82	0,56	-	0,310
		Higher Education	142	3,98	0,55	2,570	
	Regulation	High School or Below	171	3,66	0,60	-	0,310
		Higher Education	142	3,89	0,65	3,239	
	Life Orientation Test (LOT)	High School or Below	171	2,00	0,67	0,249	0,710
		Higher Education	142	1,99	0,71		

The education level variable significantly differentiates the ESCQ-45 scale in the perceiving and understanding and displaying and naming sub-dimensions. These significant differences are in favor of the participants who received higher education in both sub-dimensions among the participants participating in therapeutic recreation activities. Accordingly, as the level of education increases, significant differences emerge in perception and understanding and display and naming emotions. Although significant differences were not detected for the LOT scale, it is seen that participants who do not participate in therapeutic recreation activities have higher averages than those who participate.

**Table 6.** One way anova test between measurement tools and the variable of unit level of treatment

Participation in TR Activities		Unit	n	$\bar{x}$	S	t	p	LSD
Yes	ESCQ-45	Internal Diseases	43	3,94	0,57	1,614	0,202	
		Surgery	80	4,00	0,48			
		Specialization	39	4,13	0,42			
	Perception and Understanding	Internal Diseases	43	3,90	0,59	1,749	0,177	
		Surgery	80	3,97	0,48			
		Specialization	39	4,11	0,46			
	Display and	Internal Diseases	43	4,00	0,58	0,805	0,449	
		Surgery	80	4,07	0,49			

No	<b>Naming</b>	Specialization	39	4,14	0,41	1,972	0,143		
		Internal Diseases	43	3,91	0,64				
		Surgery	80	3,96	0,58				
	<b>Regulation</b>	Specialization	39	4,15	0,47	3,010	0,052		
		Internal Diseases	43	2,11	0,88				
		Surgery	80	1,85	0,46				
	<b>Life Orientation Test (LOT)</b>	Specialization	39	1,80	0,66	5,473	0,005*	3>1	
		Internal Diseases	45	3,42	0,45				
		Surgery	82	3,63	0,52				
	Total	<b>ESCQ-45</b>	Specialization	24	3,84	0,59	4,594	0,012*	3>1
			Internal Diseases	45	3,42	0,50			
			Surgery	82	3,59	0,53			
<b>Perception and Understanding</b>		Specialization	24	3,82	0,55	3,776	0,025*	3>1	
		Internal Diseases	45	3,54	0,48				
		Surgery	82	3,73	0,54				
<b>Display and Naming</b>		Specialization	24	3,92	0,71	6,382	0,002*	3>1	
		Internal Diseases	45	3,28	0,49				
		Surgery	82	3,56	0,62				
<b>Regulation</b>		Specialization	24	3,78	0,57	3,102	0,048*	1>2	
		Internal Diseases	45	2,31	0,83				
		Surgery	82	2,01	0,60				
Total	<b>Life Orientation Test (LOT)</b>	Specialization	24	1,96	0,79	7,523	0,001*	3>1	
		Internal Diseases	88	3,67	0,57				
		Surgery	162	3,81	0,53				
	<b>ESCQ-45</b>	Specialization	63	4,02	0,51	7,166	0,001*	3>1	
		Internal Diseases	88	3,65	0,59				
		Surgery	162	3,78	0,54				
	<b>Perception and Understanding</b>	Specialization	63	4,00	0,51	5,031	0,007*	3>1	
		Internal Diseases	88	3,77	0,57				
		Surgery	162	3,89	0,54				
	<b>Display and Naming</b>	Specialization	63	4,06	0,55	8,264	0,000*	3>2>1	
		Internal Diseases	88	3,59	0,64				
		Surgery	162	3,76	0,63				
<b>Regulation</b>	Specialization	63	4,01	0,54	6,496	0,002*	1>2		
	Internal Diseases	88	2,21	0,86					
	Surgery	162	1,93	0,54					
<b>Life Orientation Test (LOT)</b>	Specialization	63	1,86	0,71			1>3		

Statistically significant differences were found between the unit of treatment in the hospital and ESCQ-45 and LOT. These significant differences were observed in total scores and all sub-dimensions for both conditions and for participants who did not participate in TR activities. It was concluded that the total and sub-dimensions of ESCQ-45 for the participants who did not participate in TR activities were in favor of the participants who were treated in the specialty group. The specialty group includes patients treated in dermatology, gynecology and oncology units. For LOT, significant differences between the internal medicine group and the surgical group were in favor of the participants treated in the internal medicine group. The treatment units in the internal medicine group are internal medicine, nephrology and pulmonology units. The same situation is observed in the analysis results where both groups are included. Significant differences were found in favor of the participants treated in the specialty group for ESCQ-45 and in favor of the participants treated in the internal medicine group for LOT.

**Table 7.** Independent sample t test between measurement tools and number of daily treatments



Participation in TR. Activities	Daily treatments	n	$\bar{x}$	S	t	p	
Yes	ESCQ-45	1 or 2	120	4,00	0,51	-	0,634
		>2	42	4,06	0,46	0,669	
	Perception and Understanding	1 or 2	120	3,98	0,53	-	0,766
		>2	42	4,00	0,47	0,269	
	Display and Naming	1 or 2	120	4,04	0,51	-	0,341
		>2	42	4,15	0,43	1,434	
	Regulation	1 or 2	120	3,98	0,58	-	0,804
		>2	42	4,02	0,57	0,294	
	Life Orientation Test (LOT)	1 or 2	120	1,95	0,69	1,555	0,092
		>2	42	1,79	0,52		
No	ESCQ-45	1 or 2	91	3,58	0,52	-	0,920
		>2	60	3,64	0,53	0,669	
	Perception and Understanding	1 or 2	91	3,55	0,54	-	0,825
		>2	60	3,60	0,53	0,564	
	Display and Naming	1 or 2	91	3,67	0,56	-	0,591
		>2	60	3,75	0,57	0,877	
	Regulation	1 or 2	91	3,50	0,60	-	0,450
		>2	60	3,54	0,59	0,432	
	Life Orientation Test (LOT)	1 or 2	91	2,20	0,77	2,226	0,029*
		>2	60	1,93	0,61		
Total	ESCQ-45	1 or 2	211	3,82	0,56	0,120	0,649
		>2	102	3,81	0,54		
	Perception and Understanding	1 or 2	211	3,80	0,57	0,404	0,489
		>2	102	3,77	0,54		
	Display and Naming	1 or 2	211	3,88	0,56	-	0,868
		>2	102	3,92	0,55	0,599	
	Regulation	1 or 2	211	3,77	0,64	0,510	0,875
		>2	102	3,73	0,62		
	Life Orientation Test (LOT)	1 or 2	211	2,06	0,73	2,185	0,011*
		>2	102	1,87	0,58		

Significant differences were found between the number of treatments per day and only the LOT scale for participants who did not participate in therapeutic recreational activities between participants who were treated less than 2 times per day and participants who were treated more than 2 times per day in favor of participants who were treated more than 2 times per day. It is possible to mention that the average scores of the participants who received less treatment were more optimistic in the life orientation test.

**Table 8.** Examining the relationship between variables with Pearson product-moment correlation

	ESCQ-45	Perception and U.	Display and Naming	Regulation	LOT
ESCQ-45	1				
Perception and Understanding	0,970**	1			
Display and Naming	0,941**	0,886**	1		
Regulation	0,930**	0,861**	0,791**	1	
LOT	-0,486**	-0,464**	-0,524**	-0,394**	1

There were moderate negative relationships between emotional skills and competence and its sub-dimensions and life orientation. It can be stated that there are relationships at the level of  $r=-0,486$  for emotional skills and competence,  $r=-0,464$  for perception and understanding,  $r=-0,524$  for display and naming, and  $r=-0,394$  for regulation.

**Table 9.** Results of multiple linear regression analysis to predict life orientation according to emotional skills and competence

	B	Std. Error	$\beta$	t	p	R	R <sup>2</sup>	F	p
<b>Perception and Understanding</b>	-0,070	0,155	-0,057	-0,448	0,655	0,525	0,276	39,223	0,000*
<b>Display and Naming</b>	-0,658	0,129	-0,535	-5,085	0,000*				
<b>Regulation</b>	0,084	0,105	0,077	0,807	0,420				

According to the results of the multiple linear regression analysis conducted to predict life orientation according to emotional skills and competence, emotional skills and competence is a significant predictor of life orientation ( $F=39,223$ ;  $p<0,001$ ). Together, the three variables explain approximately 27 percent of the variance in life orientation. Only display and naming alone predicted life orientation ( $p<0,05$ ). The level of prediction of life orientation by displaying and naming is  $\beta=-0,535$ .

### Discussion and Conclusion

The study investigated the effects of patients' participation in therapeutic recreational activities on their emotional skills and competence and life orientation. Negative and moderate relationships were found between emotional skills and competence and its sub-dimensions and life orientation, and emotional skills and competence was found to be a significant predictor of life orientation. The findings of the study suggest that participation in therapeutic recreation activities makes a relatively limited difference on emotional skills and competence and life orientation.

Statistically significant differences were found between the status of participation in therapeutic recreation activities and the display and naming sub-dimension of the Emotional Skills and Competence Scale. It was concluded that these significant differences were in favor of individuals participating in therapeutic recreation activities. Within the framework of the findings obtained, it can be said that participation in therapeutic recreation activities increases the emotional skills and competence of individuals. When the literature is examined, it is determined that recreation therapy and leisure activities positively affect physical rehabilitation, recovery and well-being and promote an active lifestyle for individuals with injury, illness or disability (Kang, et. al., 2014). In this respect, therapeutic recreation activities can effectively improve and maintain functional ability and health through regular recreational exercise for individuals with disabilities and chronic conditions (Mobily, 2009), as well as providing a supportive and stimulating environment for disadvantaged individuals, helping to improve mental health (Dobransky-Fasiska, et al., 2010) and helping patients cope with stress. Therapeutic recreation activities therefore significantly improve health outcomes and should be considered as an integral part of a holistic care approach in healthcare (Botner, 2014). Therefore, it is expected that the health outcomes of individuals participating in therapeutic recreation activities will be positive and improvements in psychometric parameters will be observed in parallel. The findings obtained support this assumption.

It was determined that gender did not significantly differentiate life orientation and emotional skills and competence. It has also been revealed by different studies that life orientation does not differ according to gender (Hjelle, Belongia, & Nesser, 1996; Steca et al., 2014). On the other hand, in addition to the studies stating that emotional skills and competence are higher in women (Aithal et al., 2016; David, Lukács, Capatina, 2014; Şiţoiu & Pânişoară, 2021), studies that obtain findings parallel to the current study are also frequently found in the literature (Martin, 2017; Šćepović, 2017; Sk & Halder, 2020; Uniyal & Rawat, 2020). The fact that participation in therapeutic recreation activities offers the opportunity to participate without gender discrimination and that the programs are carried out with an egalitarian understanding for both genders may form the basis for gender not to differentiate emotional skills and competence, as well as life orientation.

It was determined with the findings of the study that age differentiates life orientation as well as emotional skills and competence. There are studies that obtained findings parallel to the findings obtained (Awan, Anwar, & Farooq, 2021). It has been stated that emotional competence, which includes expressing and regulating emotions in children and adolescents, contributes to their social success (Denham, 2019; Wijayanti, 2021). Therefore, it can be said that emotional skills and competence play an important role in the maturation processes of individuals under the age of 30. It can be said that life orientation is more positive especially with age (Fagerström, 2010; Pitkala et al., 2004). When the current study group in need of therapeutic support is evaluated, it can be thought that the higher life orientation of the group under the age of 30 is based on the possibility that the treatment processes are based on the possibility that the healing processes are earlier in young people.

It was determined that marital status did not significantly differentiate life orientation and emotional skills and competence levels. Although emotional skills and competence are predicted to positively affect the lives of married individuals (Fashiya & Jayan, 2015; Mirgain & Córdova, 2007; Ortese & Tor-Anyiin, 2008). It can be thought that the quality of social support received through marital status is important, and therefore, in line with negative experiences, marriage does not positively affect life orientation or parameters such as emotional skills and competence as expected.

The variable of education level significantly differentiates the emotional skills and competence scale in the sub-dimensions of perceiving and understanding and displaying and naming. Accordingly, as the level of education increases, significant differences emerge in perceiving and understanding and displaying and naming emotions. Although significant differences were not detected for the YYT-R scale, it is seen that participants who do not participate in tr activities have higher averages than those who participate. Therefore, it can be said that as the level of education increases, both life orientation and emotional skills and competence increase in parallel.

When the findings of the study that the perceived income level of individuals does not significantly differentiate their life orientations and emotional skills and competence levels are examined, it is observed that although there is no significant difference, participants who describe their income group as medium exhibit higher life orientation and emotional skills and competence. Although it is stated that perceived financial status and control over life increase life satisfaction (Johnson & Krueger, 2006), it is seen that the fact that optimal income level creates positive outcomes is also supported by the findings of the study.

It was determined that decreasing the duration of hospitalization significantly differentiated life orientation and emotional skills and competence. In this respect, it can be said that the factors of shortening the duration of treatment and accelerating the return to living standards

positively change life orientation and emotional skills and competence. In addition, no significant differences were found between the measurement tools and the status of staying individually or with others in the room where the patient stayed during the treatment process. It is evaluated that the relevant situation, which can be attributed different meanings according to individual differences, is not an effective parameter for the sample group participating in the study.

As a result, when the research findings were examined, it was concluded that the participants' age, education level, daily treatment frequency, unit of treatment, and length of stay in the hospital significantly differentiated the measurement tools, while the variables of gender, marital status, perceived income, and the number of patients in the room during the treatment process did not differ significantly. The related findings show that various variables of individuals participating in therapeutic recreation activities significantly change their life orientation and emotional skills, as well as their emotional competence. It is recommended to conduct extended research to determine life orientation and emotional skills with different sample groups. It is evaluated that more research on examining the effect of therapeutic recreation practices on the lives of individuals in recovery processes should be added to the national literature.

It is predicted that increasing the frequency of therapeutic recreation practices and presenting them in a formal scheme will make a significant difference on different psychometric characteristics of individuals. Considering the quantity of the sample group in the study, it is recommended that more therapeutic recreation practices be carried out in a wider framework and compared with similar control groups. It is considered that therapeutic recreation planning, which is thought to contribute to the revitalization and recovery processes of individuals, should be more visible in public spaces, physical therapy centers and hospitals.

### **Conflict of interest**

There is no conflict of interest between the authors.

### **Funding**

This study is not supported by any institution or organization.

### **Authors' contributions**

Concept:T.A.D, Fk.. Design: T.A.D., F.K. Data Collection or Processing: E.T., F.K. Analysis or Interpretation: T.A.D., F.K. Literature Search: B.M.A., F.K. Writing: T.A.D., F.K., E.T.

### **Acknowledgments**

We would like to thank all the participants of our survey and wish them a speedy recovery.

### **Ethical Statement**

This study was discussed by the Ethics Commission of Gazi University Rectorate at its meeting dated 05.09.2023 and numbered 15 and was found ethically appropriate with the number E-77082166-604.01.02-764486.

*This research was previously presented as an oral presentation at the 9th International Science Culture and Sports Congress, September 11-14, 2023 in Prague, Czech Republic.*

## REFERENCES

- Aithal A, Kumar N, Gunasegeran P, Sundaram S, Rong L, Prabhu S. (2016). A survey-based study of emotional intelligence as it relates to gender and academic performance of medical students. *Education for Health*, 29, 255-258. <https://doi.org/10.4103/1357-6283.204227>
- Andrew N, Wolfe R, Cameron P, Richardson M, Page R, Bucknill A, Gabbe B. (2014). The impact of sport and active recreation injuries on physical activity levels at 12 months post-injury. *Scandinavian Journal of Medicine & Science in Sports*, 24(2), 377-385. <https://doi.org/10.1111/j.1600-0838.2012.01523.x>
- Anwar MN, Farooq S. (2021). The role of elementary teachers' emotional intelligence competencies in improving students' motivation and student-teacher relationship. *SJESR*, 4(2), 492-499. [https://doi.org/10.36902/sjesr-vol4-iss2-2021\(492-499\)](https://doi.org/10.36902/sjesr-vol4-iss2-2021(492-499))
- Botner E. (2014). Imagine the poss-ABILITIES! therapeutic recreation: An integral aspect of whole-person health care. *International Journal of Whole Person Care*, 1(1). <https://doi.org/10.26443/IJWPC.V1I1.78>
- Buckley R. (2016). Aww: The emotion of perceiving cuteness. *Frontiers in Psychology*, 7(1740), 1-3. <https://doi.org/10.3389/fpsyg.2016.01740>
- Cakırlar A, Yaman Ç. (2022). Pozitif psikoloji bağlamında terapötik rekreasyon ve iyi oluş ilişkisi: bir literatür taraması. *The Online Journal of Recreation and Sports*, 11(4), 47-58. <https://doi.org/10.22282/ojrs.2022.108>
- David S, Lukács E, Capatina A. (2014). Influence of gender on emotional intelligence: The case of Romanian software development companies. *Risk in Contemporary Economy*, 237-243.
- Demirbaş N. (2010). *Meaning in life and ego-resiliency* [dissertation]. Hacettepe University.
- Denham S. (2019). Emotional competence during childhood and adolescence. In: LoBue V, Pérez-Edgar K, Buss KA, editors. *Handbook of Emotional Development*. Springer; p. 493-541. [https://doi.org/10.1007/978-3-030-17332-6\\_20](https://doi.org/10.1007/978-3-030-17332-6_20)
- Dobransky-Fasiska D, Nowalk M, Pincus H, Castillo E, Lee B, Walnoha A, Reynolds C, Brown C. (2010). Public-academic partnerships: Improving depression care for disadvantaged adults by partnering with non-mental health agencies. *Psychiatric Services*, 61(2), 110-112. <https://doi.org/10.1176/ps.2010.61.2.110>
- Fagerström L. (2010). Positive life orientation--an inner health resource among older people. *Scandinavian Journal of Caring Sciences*, 24(2), 349-356. <https://doi.org/10.1111/j.1471-6712.2009.00728.x>
- Faria L, Lima Santos N, Takšic V, Rätty H, Molander B, Holmström S, et al. (2006). Cross-cultural validation of the Emotional Skills and Competence Questionnaire (ESCQ). *Psicologia*, 20(2), 95-127.
- Fashiya P, Jayan C. (2015). Role of emotional competence on marital well-being. *ZENITH International Journal of Multidisciplinary Research*, 5, 157-166.
- Gassaway J, Dijkers M, Rider C, Edens K, Cahow C, Joyce J. (2011). Therapeutic recreation treatment time during inpatient rehabilitation. *The Journal of Spinal Cord Medicine*, 34, 176-185. <https://doi.org/10.1179/107902611X12971826988138>
- Groff D, Zoerink D. (2012). Demonstrating how collaborative efforts positively impact consumer health. *Therapeutic Recreation Journal*, 46(3), 165-167.

- Gündoğdu M, Korkmaz S, Karakuş K. (2013). Üniversite öğrencilerinde yaşam yönelimi. *Marmara Üniversitesi Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi*, 22(22), 151-160.
- Heo MR, Son BY, Yoo-soon B. (2019). Effects of client-centered leisure activities on the physical function, self-efficacy and life satisfaction of stroke patients. *Korean Journal of Occupational Therapy*, 27(3), 15-31. <https://doi.org/10.14519/kjot.2019.27.3.02>
- Hirsch JK, Britton PC, Conner KR. (2010). Psychometric evaluation of the Life Orientation Test—Revised in treated opiate dependent individuals. *International Journal of Mental Health and Addiction*, 8(3), 423-431.
- Hjelle L, Belongia C, Nesser J. (1996). Psychometric properties of the Life Orientation Test and Attributional Style Questionnaire. *Psychological Reports*, 78, 507-515. <https://doi.org/10.2466/pr0.1996.78.2.507>
- Johnson W, Krueger R. (2006). How money buys happiness: Genetic and environmental processes linking finances and life satisfaction. *Journal of Personality and Social Psychology*, 90(4), 680-691. <https://doi.org/10.1037/0022-3514.90.4.680>
- Kahleoğulları G. (2010). *Validity, reliability and factor structure of the revised Turkish version of the purpose in life scale, meaning in life questionnaire and life orientation test* [dissertation]. Hasan Kalyoncu University.
- Kang L, Palisano R, King G, Chiarello L. (2014). A multidimensional model of optimal participation of children with physical disabilities. *Disability and Rehabilitation*, 36(20), 1735-1741. <https://doi.org/10.3109/09638288.2013.863392>
- Lall M. (2010). Physiological understanding of human emotions for effective management. *Global Business and Management Research: An International Journal*, 1(3), 117.
- Le Hénaff Y, Héas S. (2020). Engagement in leisure and physical activities: Analysing the biographical disruptions of a rare chronic disease in France. *Sociology of Health & Illness*, 42(1), 65-79. <https://doi.org/10.1111/1467-9566.12987>
- Martín J. (2017). Inteligencia emocional en estudiantes venezolanos de educación media y universitaria. *REDU*, 20, 28-54. <https://doi.org/10.46498/REDUIPB.V20I2.85>
- McKnight PE, Kashdan TB. (2009). Purpose in life as a system that creates and sustains health and well-being: An integrative, testable theory. *Review of General Psychology*, 13(3), 242-251. <https://doi.org/10.1037/a0017152>
- Mevlana CA, Karaaziz M. (2021). Sosyal izolasyon, karantina ve psikolojik etkileri. *YDÜ Mimarlık Fakültesi Dergisi*, 3(2), 158-170.
- Mirgain S, Córdova J. (2007). Emotion skills and marital health: The association between observed and self-reported emotion skills, intimacy, and marital satisfaction. *Journal of Social and Clinical Psychology*, 26(9), 983-1009. <https://doi.org/10.1521/JSCP.2007.26.9.983>
- Mobily KE. (2009). Role of exercise and physical activity in therapeutic recreation services. *Therapeutic Recreation Journal*, 43(2), 9-26.
- Ortese P, Tor-Anyiin S. (2008). Effects of emotional intelligence on marital adjustment of couples in Nigeria. *African Journal Online*, 16(2), 101-112. <https://doi.org/10.4314/ifep.v16i2.23804>
- Papoutsis C, Drigas A, Skianis C. (2021). Virtual and augmented reality for developing emotional intelligence skills. *International Journal of Recent Contributions from Engineering Science & IT*, 9(3), 35-53. <https://doi.org/10.3991/ijes.v9i3.23939>

- Pitkala K, Laakkonen M, Strandberg T, Tilvis R. (2004). Positive life orientation as a predictor of 10-year outcome in an aged population. *Journal of Clinical Epidemiology*, 57(4), 409-414. <https://doi.org/10.1016/J.JCLINEPI.2003.07.013>
- Reza MP. (2021). The role of recreation in rehabilitation: A systematic review. *Medicine*, 1, 52-56.
- Šćepović D. (2017). Functionality of family and children in relation to gender, age and emotional abilities of children and family structure. *European Journal of Social Science Education and Research*, 4(4), 75-88. <https://doi.org/10.26417/ejser.v10i2.p101-114>
- Sk S, Halder S. (2020). Critical thinking disposition of undergraduate students in relation to emotional intelligence: Gender as a moderator. *Heliyon*, 6(11), 1-10. <https://doi.org/10.1016/j.heliyon.2020.e05477>
- Steca P, Monzani D, Greco A, Chiesi F, Primi C. (2014). Item response theory analysis of the life orientation test-revised. *Assessment*, 22(3), 341-350. <https://doi.org/10.1177/1073191114544471>
- Șitoiu A, Pânișoară G. (2021). The relationship between the emotional intelligence of a 21st century adult and his or her parental competence. *Educatia 21 Journal*, 20(3), 25-31. <https://doi.org/10.24193/ed21.2021.20.03>
- Tasiemski T, Kennedy P, Gardner BP, Taylor N. (2005). The association of sports and physical recreation with life satisfaction in a community sample of people with spinal cord injuries. *NeuroRehabilitation*, 20(4), 253-265.
- Uniyal D, Rawat S. (2020). Exploring emotional intelligence in school and college teachers. *International Journal of Scientific and Research Publications*, 10(6), 510-520. <https://doi.org/10.29322/ijsrp.10.06.2020.p10260>
- Wijayanti N. (2020). Kompetensi emosi pada remaja. *Psychological Journal Science and Practice*, 1(1), 16-22. <https://doi.org/10.22219/PJSP.V1I1.15828>
- Witkiewitz K, Montes KS, Schwebel FJ, Tucker JA. (2020). What is recovery? *Alcohol Research: Current Reviews*, 40(3). <https://doi.org/10.35946/arcr.v40.3.01>