

## Investigation of the Relationship between Leisure Involvement and Affect of Individuals Participating in Fitness Exercises

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### Abstract

The purpose of this study was to examine whether the leisure involvement of adults who participate in fitness activities has an effect on positive and negative affect. The relational screening model, one of the quantitative research methods, was used. In this study, the “*Leisure Involvement Scale*” and the “*Positive and Negative Affect State Scale*” were used. Descriptive statistics, parametric tests such as Pearson's correlation test and simple regression analysis were used to analyse the data. In addition, validity and reliability analyses were carried out to determine the validity and reliability coefficients of the scales. It was found that leisure involvement and its sub-dimensions have an effect on positive and negative affect states. As a result, it was concluded that positive emotional states increased, and negative emotional states decreased in adult individuals who participated in leisure-time fitness exercise. Therefore, it shows that it can help adults cope with the negative emotions they encounter in their daily lives (stress, anxiety, burnout, depression, lack of self-esteem, social appearance anxiety, etc.).

**Keywords:** Leisure time, Involvement, Positive affect, Negative affect, Fitness

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## INTRODUCTION

Individuals who want to get away from the stress and intense workload of modern life try to turn to various leisure activities in order to spend their leisure time in an enjoyable and entertaining way (Aktop & Göksel, 2023). Leisure activities; it can be expressed as the freedom to do what you want in a time period that belongs to you, whose limits and structure we determine for individual satisfaction (Tekin, 2016). Studies have shown that participation in leisure activities provides many benefits, such as physical (coronary heart disease, obesity), mental health (increased self-esteem, reduced stress and anxiety), increased social participation and self-improvement (Li et al., 2021). It has been reported that leisure-time physical activity can have an effect on psychological variables (Chen et al., 2013). Since physical exercise increases the levels of certain neurotransmitters such as serotonin, dopamine and norepinephrine, it plays an important role in improving psychological state, increasing attention, concentration and focus, reducing stress, anxiety and depression symptoms (Civan et al., 2018; Matta Mello Portugal et al., 2013; Pahlavani, 2023). According to the results of a recent meta-analysis research; it was found that individuals who participated in physical exercise had improvements in positive emotions compared to those who did not participate (Li et al., 2022). Accordingly, children and adolescents between the ages of 6-17 are recommended to participate in moderate or vigorous intensity physical activity for at least 60 minutes a day. For adults, at least 150-300 minutes of moderate intensity or 75-150 minutes of vigorous intensity is recommended per week (Heckel et al. 2023).

The concept of involvement reflects an individual's interest in an activity or related product. In this case, it is considered to be enduring because of the level of importance the individual attaches to it (Kyle & Chick, 2004). When participation in leisure activities is at a low level, the issue of "*involvement*" a significant impact on participation and continuation of activities (Gürbüz et al., 2018). Leisure involvement is defined as "*an unobservable state of motivation, arousal, or interest in a leisure activity or related product*" (Havitz & Dimanche, 1997). In particular, leisure involvement indicates that interest or motivation in leisure activities is not a short-term or temporary process but is always an important process for the individual (Kyle & Chick, 2004). Therefore, leisure involvement has an important function in clarifying the underlying reasons for leisure behaviour (Kyle & Mowen, 2005). Individuals who engage in leisure activities can develop new socialisation networks and gain knowledge, skills and experience. In this regard, it can be said that leisure involvement is a behaviour that improves the health of individuals and increases their psychological well-being (Li et al., 2019). Therefore, it also affects the level of interest in leisure activities as a result of the formation of positive and negative affect (Kocaer & Yasartürk, 2022). In the literature, emotional states are divided into two groups: *positive and negative*. *Positive affect* is expressed as enjoyment, sympathy, satisfaction, gratitude, hope, interest, joy, love, pride and desire. *Negative affect* is described as anger, contempt, disgust, shame, fear, guilt, sadness and embarrassment (Han & Patterson, 2007).

As a result of planning in such a way that individuals who participate in fitness activities will enjoy it; by keeping their leisure interest level alive, they can spend more time in fitness centres and get

continuous pleasure and enjoyment, so that benefits can be obtained from this interest (Öztürk & Alpulu, 2023). It can be said that benefits such as pleasure and enjoyment obtained from leisure activities positively affect the emotional states of individuals (Aydın, 2022). It has been found that there is an increase in the interest level of individuals who participate in fitness activities 4 to 6 days a week (Serdar, 2021). It has been reported that the weekly frequency of leisure-time exercise participation has a direct or indirect effect on positive affect (Cihan, 2022). The opportunities provided by health and fitness life centres to exercise participants and customer satisfaction are important behaviours that increase exercise participation (Dogan & Ünal, 2024). Fitness exercise can have positive effects on positive affect states such as reducing social appearance anxiety, increasing psychological well-being, self-confidence and respect, and improving social relationships. It has an important function in reducing negative affect states such as stress, anxiety, burnout and depression (Hrusova et al., 2017).

In particular, it has been suggested that positive affect plays an important role in protecting against negative responses to stress through the release of endogenous opioids (Kim & McKenzie, 2014). Participation in activities that increase positive affect is known to have an important effect on improving psychosocial health (Carruthers & Hood, 2004). It is argued that the essence of leisure experience is in the subjective sense rather than the activity. This is because experiencing leisure time is characterised by living this moment as a free choice, participating in activities that the individual enjoys and finds meaningful, since the intrinsic motivation of the individual is an important and determining factor (Iso-Ahola & Baumeister, 2023). This situation has led to the definition of hedonic (subjective well-being) and eudaimonic (psychological well-being) as basic characteristics of well-being: *Hedonic* is the attempt to achieve happiness and pleasure as the main purpose of life, striving for perfection or mobilising existing energy resources. *Eudaimonic* is the development of individual capacities in accordance with social values (Al Ashqar, 2018). A review of the literature shows that an increase in the enjoyment and pleasure derived from leisure-time physical activity leads to positive affect, whereas the opposite situation leads to negative affect and the abandonment of sporting activity (Mutz et al., 2021; Wienke & Jekauc, 2016). While a high level of involvement in leisure activities can have a positive impact on an individual's psychological well-being, it can also cause negative affect (Newman et al., 2014). Therefore, it is important to understand the processes that lead to positive and negative affect states in leisure involvement and to investigate the factors that influence psychological health.

In particular, the leisure involvement variable has been addressed with variables such as life satisfaction (Aydın, 2022; Cevik et al., 2021), leisure satisfaction (Öztürk & Alpulu, 2023), leisure barriers (Serdar, 2021), job satisfaction (Yasartürk et al., 2023), recreational flow experiences and benefits (Cihan, 2022; Demirel et al., 2022), behavioural intentions (Eskiler & Karakas, 2017), and leisure literacy (Emir, 2024). Most of the studies have focused on the frequency or variety of activities rather than the affect associated with participation in activities. Accordingly, it has been observed in the literature that there are studies examining regular exercise (Cokluk-Filazoglu, 2022), university students who are athletes and sedentary (Bozdag & Kaplan, 2021), physical

activity levels (Sahin, 2022; Yerlisu-Lapa & Haşıl-Korkmaz, 2017), and positive and negative affect.

However, when reviewing the literature, there are no studies on the positive and negative emotional states of time interests of individuals participating in leisure fitness exercise. In particular, it is important to examine the role it plays on the emotional states of adult individuals participating in leisure fitness exercise. It is believed that this will contribute to a better explanation of the relationship between leisure interest and psychological health. The aim of this study is to examine whether it has an effect on the positive and negative emotional states of adult individuals participating in fitness activities. Therefore, the following hypotheses were developed for this purpose:

- H<sub>1</sub>: There is a positive significant relationship between leisure involvement and positive affect.
- H<sub>2</sub>: There is a negative significant relationship between leisure involvement and negative affect.
- H<sub>3</sub> : Leisure involvement has a positive and significant effect on positive affect.
- H<sub>4</sub> : Leisure involvement has a negative and significant effect on negative affect.

## METHOD

### Research Model

This research was conducted using a quantitative research method, the relational screening design. The main purpose of this design is to examine the existence and degree of relationship between two or more variables (Karasar, 2009). Figure 1 shows the research model developed in accordance with our research hypotheses.

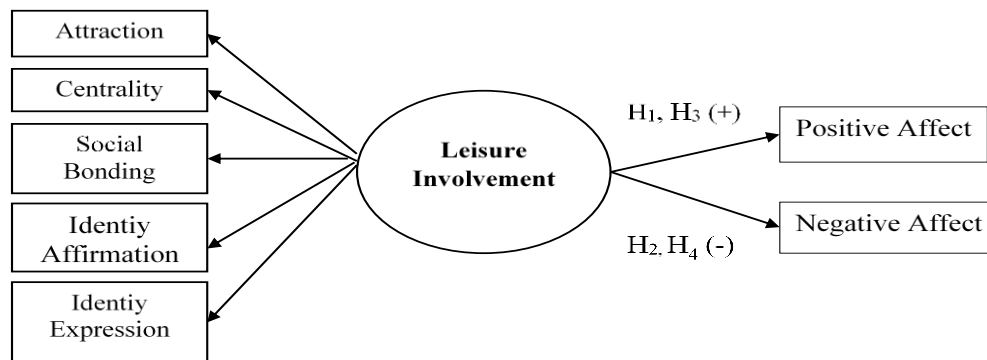


Figure 1: Research model

## **Research Group**

Initially, this study used data collection tools on 258 people who regularly participated in fitness activities at least 3 days a week. However, during the process of testing whether the data were normally distributed, 5 data were removed from the data set due to their extreme outlier characteristics. Therefore, the sample of this study consists of a total of 253 people, 112 male and 141 female, who participate in fitness activities in Malatya.

## **Data Collection Tools**

***Leisure Involvement:*** This scale has been used to measure individuals' interest in leisure activities. The original version of this scale was published by Kyle et al. (2007). The adaptation study to the Turkish culture was conducted by Gürbüz et al. (2018). The scale is a 5-point Likert scale, scored between (1 - strongly disagree) and (5 - strongly agree). The scale consists of 15 items and 5 subscales. The reliability coefficient calculated in this study is 0.930 for the total scale.

***Positive-Negative Affect:*** It was developed by Watson, Clark and Tellegen (1988) to measure positive and negative affect states of individuals. This scale has been adapted to Turkish culture by Gencöz (2000). This scale has a total of 20 items and 2 sub-dimensions. 10 of these items cover positive affect and the other 10 items cover negative affect. The scale is scored on a 5-point Likert scale ranging from (1-very little or not at all) to 5 (very much). In this study, the reliability coefficient of the positive scale is 0.894; the reliability coefficient of the negative scale is 0.868.

## **Ethical Approval**

Ethics Committee approval (2024/12) has been obtained for the research from Inonu University Social and Human Sciences Ethics Committee.

## **Data Collection Procedures**

The data were completed and collected face-to-face in a training environment after brief information about the research was given to the participants who had at least one year of fitness experience and accepted the study at two private fitness centres in Malatya. The collected data were processed in Excel form and then transferred to the statistical program.

## **Statistical Analyses**

Normality analyses were first carried out to determine whether the data obtained were normally distributed. Once it was determined that the data were normally distributed, descriptive statistics, parametric tests such as correlation test and simple regression analysis were carried out. Validity and reliability analyses were also carried out to determine the validity and reliability coefficients of the scales.

## Results

The arithmetic mean, standard deviation values, and kurtosis and skewness normality analyses of the variables are presented in Table 1.

**Table 1.** Mean, standard deviation, kurtosis and skewness normality analysis results of the variables

Variables		N	X	S	Skewness	Kurtosis
<b>Leisure Involvement Scale</b>	Attraction	253	11.08	2.61	-.442	-.129
	Centrality	253	9.70	3.01	-.067	-.753
	Social bonding	253	10,21	2.67	-.387	-.264
	Identity affirmation	253	10.80	2.56	-.605	.506
	Identity expression	253	10.39	2.77	-.566	-.108
	Leisure involvement	253	52.21	11.26	-.178	-.144
<b>Affect Status Scale</b>	Positive Affect	253	34.60	8.13	-.280	-.201
	Negative Affect	253	19.60	7.60	.883	.537

According to the normality analysis, the data were found to have a normal distribution as the skewness and kurtosis values were assumed to meet the normality criteria of -1.5 and +1.5 (Tabachnick et al., 2013) (Table 1).

The results of the descriptive statistics are presented in Table 2.

**Table 2.** Descriptive statistics

Variables		f	%
<b>Gender</b>	Male	112	44.3
	Female	141	55.7
	<b>Total</b>	253	100.0
<b>Marital status</b>	Married	101	39.9
	Single	152	60.1
	<b>Total</b>	253	100.0
<b>Age</b>	18-23 years old	57	22.5
	24-29 years old	102	40.3
	30-35 years old	50	19.8
	36 years and above	44	17.4
	<b>Total</b>	253	100.0
<b>Education</b>	High School	57	22.5
	Graduate	157	62.1
	Postgraduate	39	15.4
	<b>Total</b>	253	100.0
<b>Profession</b>	Public sector	129	51.0
	Private sector	52	20.6
	Housewife	30	11.9
	Student	42	16.6
	<b>Total</b>	253	100.0

**Table 2 (Continue).** Descriptive statistics

Variables		f	%
<b>Income</b>	25000 TL and below	57	22.5
	25001-35000 TL	45	17.8
	35001-40000 TL	34	13.4
	40001 TL and above	117	46.2
	<b>Total</b>	253	100.0
<b>Weekly Exercise Frequency</b>	At least 3 days	180	71.1
	4-5 days	51	20.2
	6-7 days	22	8.7
	<b>Total</b>	253	100.0
<b>Daily Exercise Frequency</b>	At least 30 min	127	50.2
	30-60 min	59	23.3
	60-90 min	45	17.8
	90-120 min	15	5.9
	120 minutes and above	7	2.8
<b>Total</b>	253	100.0	
<b>Fitness Experience</b>	1-2 years	97	38.3
	3-4 years	50	19.8
	5-6 years	29	11.5
	7-8 years	19	7.5
	9 years and above	58	22.9
<b>Total</b>	253	100.0	

According to Table 2, there are a total of 253 people taking part in fitness activities, of whom 112 (44.3%) are male and 141 (55.7%) are female. Most of the participants in the fitness activity are single (60.1%), 40.3% are between 24 and 29 years old, 62.1% have a university degree, 51% work in the public sector, 46.2% are 40001. It was observed that they have an income of TL or more. It was also found that 71.1% of them exercised at least three days a week, 50.2% exercised at least 30 minutes a day, and 38.3% had 1-2 years of experience in exercising.

### Validity and Reliability Analysis for Scales

In this section, a confirmatory factor analysis was conducted to determine the structural validity of the leisure involvement scale and the positive and negative affect scales. Reliability coefficients were also computed (Table 3).

**Table 3.** Results of the validity and reliability of the scales

Variables	X <sup>2</sup>	df	CMIN/DF ≤5	CFI ≥.90	TLI ≥.90	NFI ≥.90	RMSEA ≤.10	Cronbach Alpha
1 <b>Leisure Involvement</b>	198,794	81	2,454	.937	.918	.900	.079	0.930
2 <b>Positive Affect</b>	71,994	33	2,182	.965	.952	.938	.068	0.894
3 <b>Negative Affect</b>	95,201	28	3,400	.935	.895	.911	0.88	0.868

*Note:* The “acceptable” fit index is arranged in accordance with value ranges (Karadag & Gültekin, 2019; Meydan & Sesen, 2011).



According to the analysis results, the  $X^2/df$  values of the scales and the values of other indices have an acceptable fit (Karadag & Gültekin, 2019; Meydan & Sesen, 2011). The Cronbach's alpha coefficients of the leisure involvement and affect scales were found to be highly reliable (Bursal, 2017) (Table 3).

**Table 4.** Results of correlation analysis

Variables	1	2	3	4	5	6	7	8
<b>1. Attraction</b>	1							
<b>2. Centrality</b>	.703 **	1						
<b>3. Social bonding</b>	.556 **	.612 **	1					
<b>4. Identity affirmation</b>	.613 **	.659 **	.680 **	1				
<b>5. Identity expression</b>	.432 **	.529 **	.605 **	.623 **	1			
<b>6. Leisure involvement</b>	.799 **	.857 **	.834 **	.862 **	.774 **	1		
<b>7. Positive Affect</b>	.410 **	.360 **	.347 **	.378 **	.276 **	.428 **	1	
<b>8. Negative Affect</b>	-.246 **	-.124 *	-.132 *	-.158 *	-0.099	-.182 **	-.218 **	1

\* $p < 0.05$  \*\* $p < 0.01$

According to the results of the analyses, there is a moderate relationship between positive affect and the attraction sub-dimension ( $r = 0.410$ ;  $p < 0.01$ ), centrality sub-dimension ( $r = 0.360$ ;  $p < 0.01$ ), social bonding sub-dimension ( $r = 0.347$ ;  $p < 0.01$ ), identity affirmation sub-dimension ( $r = 0.378$ ;  $p < 0.01$ ) and leisure involvement sub-dimension ( $r = 0.428$ ;  $p < 0.01$ ). A low level positive significant relationship was found with the identity expression sub-dimension ( $r = 0.276$ ;  $p < 0.01$ ).

According to the results of the analyses, there is a weak relationship between negative affect and the sub-dimensions of attraction ( $r = -0.246$ ;  $p < 0.01$ ), centrality ( $r = -0.124$ ;  $p < 0.01$ ), social bonding ( $r = -0.132$ ;  $p < 0.01$ ), identity affirmation ( $r = -0.158$ ;  $p < 0.01$ ) and leisure involvement ( $r = -0.182$ ;  $p < 0.01$ ).

### Regression Analysis

From the regression analyses, it was determined that the model examining only the effect of the Identity Expression sub-dimension on negative affect was not significant (model(p)=  $p > 0.05$ ) (Table 9). It was found that the models built on the positive and negative affect of other independent variables were significant (model(p)=  $p < 0.001$ ;  $p < 0.05$ ) and had a significant effect ( $p < 0.001$ ;  $p < 0.05$ ). In addition, it was found that the Durbin Watson scores did not have any autocorrelation problems as they were between 1.5 and 2.5. The results of the relevant analyses are presented in Table 5, Table 6, Table 7, Table 8, Table 9 and Table 10.



**Table 5.** Results of regression analysis between attraction and positive-negative affect

Dependent variable	Independent variable	$\beta$	SE	Beta	t	p	F	Model (p)	R <sup>2</sup>	D.W.
Positive Affect	Attraction	1,275	0.179	0.410	7,115	<b>0.000*</b>	50,623	<b>0.000*</b>	0.165	2,114
Negative Affect		-0.716	0.178	-0.246	-4.022	<b>0.000*</b>	16,175	0.000*	0.057	1,697

\* $p < 0.001$ ; DW = Durbin Watson

According to Table 5, the attraction sub-dimension explained 16.5% of the change in positive affect (*adjusted R*<sup>2</sup> = 0.165). In this situation, a 1 unit increase in the attractiveness sub-dimension results in a 1.275 unit increase in positive affect ( $\beta = 1.275$ ). In addition, the attraction sub-dimension explains 5.7% of the change in negative affect (*adjusted R*<sup>2</sup> = 0.057). In this case, a 1 unit increase in the Attraction sub-dimension causes a -0.716 decrease in negative affect ( $\beta = -0.716$ ).

**Table 6.** Results of regression analysis between centrality and positive-negative affect

Dependent variable	Independent variable	$\beta$	SE	Beta	t	p	F	Model (p)	R <sup>2</sup>	D.W.
Positive Affect	Centrality	0.974	0.159	0.360	6,121	<b>0.000*</b>	37,466	<b>0.000*</b>	0.130	2,116
Negative Affect		-0.314	0.158	-0.124	-1.986	<b>0.048**</b>	3,945	<b>0.048**</b>	0.015	1,725

\* $p < 0.001$ ; \*\*  $p < 0.05$ ; DW = Durbin Watson

Examining Table 6, we see that centrality explains 13% of the change in positive affect (*Adjusted R*<sup>2</sup> = 0.130). Accordingly, a 1 unit increase in the centrality sub-dimension produces a 0.974 unit increase in positive affect ( $\beta = 0.974$ ). It also shows that the importance sub-dimension explains 1.5% of the change in negative affect. Accordingly, a 1 unit increase in the centrality sub-dimension causes a -0.314 decrease in negative affect ( $\beta = -0.314$ ).

**Table 7.** Results of regression analysis between social bonding and positive-negative affect

Dependent variable	Independent variable	$\beta$	SE	Beta	t	p	F	Model (p)	R <sup>2</sup>	D.W.
Positive Affect	Social Bonding	1,056	0.180	0.347	5,867	<b>0.000*</b>	34,427	<b>0.000*</b>	0.121	2,099
Negative Affect		-0.374	0.178	-0.132	-2.102	<b>0.037**</b>	4,419	<b>0.037**</b>	0.017	1,714

\* $p < 0.001$ ; \*\*  $p < 0.05$ ; DW = Durbin Watson

According to Table 7, the social bonding sub-dimension explained 12.1% of the change in positive affect (*Adjusted R*<sup>2</sup> = 0.121). In this case, a 1 unit increase in the social bonding sub-dimension provides a 1.056 increase in positive mood ( $\beta = 1.056$ ). It also shows that the social bonding sub-dimension explains 1.5% of the change in negative affect. Accordingly, a 1 unit increase in the social relations sub-dimension causes a -0.374 decrease in negative affect ( $\beta = -0.374$ ).

**Table 8.** Results of regression analysis between identity affirmation and positive-negative affect

Dependent variable	Independent variable	$\beta$	SE	Beta	t	p	F	Model (p)	R2	D.W.
Positive Affect	Identity affirmation	1,197	0.185	0.378	6,466	<b>0.000*</b>	41,810	<b>0.000*</b>	0.143	2,139
Negative Affect		-0.467	0.185	-0.158	-2,531	<b>0.012**</b>	6,408	<b>0.012**</b>	0.025	1,741

\* $p < 0.001$ ; \*\*  $p < 0.05$ ; DW = Durbin Watson

If we look at Table 8, we can see that the sub-dimension of identity affirmation explains 14.3% of the change in positive affect ( $Adjusted R^2 = 0.143$ ). In this case, a 1 unit increase in the identity affirmation sub-dimension results in a 1.197 increase in positive affect ( $\beta = 1.197$ ). It also shows that the identity affirmation sub-dimension explains 2.5% of the change in negative affect. Accordingly, a 1 unit increase in the Identity Affirmation sub-dimension causes a -0.467 decrease in negative affect ( $\beta = -0.467$ ).

**Table 9.** Results of regression analysis between identity expression and positive-negative affect

Dependent variable	Independent variable	$\beta$	SE	Beta	t	p	F	Model (p)	R2	D.W.
Positive Affect	Identity expression	0.809	0.178	0.276	4,552	<b>0.000*</b>	20,716	<b>0.000*</b>	0.076	2,028
Negative Affect		-0.270	0.172	-0.099	-1.572	0.117	2,470	0.117	0.010	1,694

\* $p < 0.001$ ; DW = Durbin Watson

Of the models constructed according to Table 9, only the simple regression model indicating positive affect is significant ( $F=20.716$ ;  $p < 0.001$ ). It was noted that the simple regression model for negative affect was not significant ( $F=0.117$ ;  $p > 0.05$ ). It was observed that the self-expression subscale explained 7.6% of the change in positive affect ( $Adjusted R^2 = 0.076$ ). In this case, a 1 unit increase in the self-expression subscale results in a 0.809 increase in positive affect ( $\beta = 0.809$ ).

**Table 10.** Results of regression analysis between leisure involvement and positive-negative affect

Dependent variable	Independent variable	$\beta$	SE	Beta	t	p	F	Model (p)	R2	D.W.
Positive Affect	Leisure Involvement	0.309	0.041	0.428	7,507	<b>0.000*</b>	56,358	<b>0.000*</b>	0.180	2,129
Negative Affect		-0.123	0.042	-0.182	-2.931	<b>0.004*</b>	8,593	<b>0.004*</b>	0.033	1,717

\* $p < 0.001$ ; DW = Durbin Watson

If we look at Table 10, we can see that the involvement in leisure activities explains 18% of the change in positive affect ( $Adjusted R^2 = 0.180$ ). In this case, a 1 unit increase in leisure involvement results in a 0.309 increase in positive affect ( $\beta = 0.309$ ). It also shows that leisure involvement explains 3.3% of the change in negative affect. Accordingly, a 1 unit increase in leisure involvement causes a -0.123 decrease in negative affect ( $\beta = -0.123$ ).

## DISCUSSION AND CONCLUSION

The purpose of this study is to determine the relationship between the leisure engagement of individuals who participate in fitness exercise and their emotional states. It is seen that leisure involvement and its sub-dimensions have an effect on positive and negative affect. It is thought that fitness centres will increase positive affect states because they are environments where they can develop new social networks and demonstrate the development of their social skills, allowing them to express themselves.

It can be hypothesised that adult individuals, in particular, identify more with fitness because they are trying to achieve an attractive physique that will make them feel better and improve their self-image. Individuals who participate in fitness activities may increase their participation in fitness activities if they receive positive feedback from their environment about a physical appearance that makes them feel good (Esentas et al., 2020). In a study conducted by Nathan, Victor and Pei Kian (2022), it was found that those who participated in fitness exercises identified with the fitness instructors because they tried to look as attractive as the fitness instructors, and their motivation to improve their social appearance and control their body weight increased their intention to participate in fitness exercises.

Establishing new social relationships, especially in the fitness exercise environment, is considered an important factor in maintaining exercise behaviour, increasing exercise engagement and enjoying exercise (Unger & Johnson, 1995). People join fitness centres not only to relax and reduce daily stressors. They also participate in fitness activities for fun and enjoyment (Heckel et al., 2023). Studies have found that individuals who participate in enjoyable activities experience more positive emotions on a daily basis and can regulate their emotions better than individuals who do not participate (Chen et al., 2022; Freire & Teixeira, 2018). According to Fredrickson's (2001) expansion and construction theory, adults who frequently participate in pleasurable activities and experience positive affect will expand their immediate thought-action skills and build their psychological resources over time. According to the theory, engaging in activities that produce positive affect eliminates the effect of negative affect, and although positive affect is generally short-lived, it leaves deep and lasting effects on individuals. It is clear that the subjective experience of positive affect states has significant implications for physical, mental and psychological health (Carruthers & Hood, 2004). It has been found that individuals who participate in leisure activities increase positive affect by strengthening their multiple psychological resources

such as autonomy, mastery, and engagement (Chen et al., 2022). Regular exercise, especially as its duration, frequency and intensity increase, has been found to have a positive effect on positive affect (Pressman et al., 2020).

It has been found that individuals' positive emotions increase as a result of their increased interest in leisure activities (Aydın, 2016). Studies have shown that participation in fitness activities increases motivation (Güzel et al., 2020) and leisure satisfaction (Dokuzoglu et al., 2023; İpekci, 2024), provides emotional and social benefits (Emir, 2020), improves self-esteem and self-compassion (Thakur & Joshi, 2016), reduces social appearance anxiety (Ayhan & Alanoglu, 2023; Duyan et al., 2022), increases psychological well-being (Ayyildiz et al., 2019; Iwon et al., 2021), and positively affects social and psychological well-being (Heckel et al., 2023). It can be said that the aforementioned research findings are parallel to our research. It has been observed that there is a consensus among studies that participation in leisure/fitness activities has a positive impact on psychological and social well-being, in addition to physical benefits. Individuals need to give importance to leisure activities in order to improve their physical and psychological processes.

It has also been stated that sports and physical activity centres should focus on high service quality in order to increase the satisfaction of individuals participating in fitness activities and maintain their continued participation (Athanasopoulou & Mylonakis, 2009; Günel & Duyan, 2020; Yildiz & Duyan, 2019; Yıldız et al., 2018). It is likely that the attractiveness of the fitness centre has an impact on the intrinsic motivation of fitness participants.

In conclusion; it can be said that the positive affect states of adult individuals who participate in fitness exercises in their leisure time increase and their negative affect states decrease. This shows that it can help adult individuals cope with the negative affect (stress, anxiety, burnout, depression, lack of self-esteem, social appearance anxiety, etc.) they encounter in their daily lives. In addition, it is seen that adult individuals who are interested in fitness activity as a leisure time activity have an important function in obtaining and increasing positive affect gains (happiness, self-confidence, psychological well-being, feeling good, etc.). Therefore, it can be said that increasing the leisure involvement levels of adult individuals plays an important role in improving their physical, mental and spiritual health against psychological symptoms such as stress, anxiety and burnout that they encounter in their daily lives.

In order to protect the health of adult individuals in later ages, it is recommended that local governments and non-governmental organizations disseminate policies and programs that will encourage leisure activities. Leisure time activities can be diversified according to the interests of children, adolescents, adults and the elderly.

The collection of data from two private fitness centres in Malatya is considered to be one of the important limitations of this research. The second important limitation is that this study on emotional states is not supported by qualitative (mixed) method in addition to quantitative method. The third important limitation is that this study, which focuses on private fitness centres, does not compare them with fitness centres operated by local governments. Therefore, this study cannot be

Duyan, M., & Selçuk, E. (2024). Investigation of the relationship between leisure involvement and affect of individuals participating in fitness exercises. *Eurasia Journal of Sports Sciences and Education*, 6 (2), 286-303.

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generalised to the whole universe. Future studies can be conducted using mixed methods, larger samples and different types of activities. In particular, it is recommended to compare indoor and outdoor leisure experiences and to investigate their effects on affect states.

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**Ethical Approval**

**Ethics Committee:** Inonu University Social and Humanities Research Ethics Committee

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Duyan, M., & Selçuk, E. (2024). Investigation of the relationship between leisure involvement and affect of individuals participating in fitness exercises. *Eurasia Journal of Sports Sciences and Education*, 6 (2), 286-303.

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