

# Professional Tennis Players' perceptions of spectator behaviour

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Note: This study is derived from Arif Satici's Master's thesis.

## **ABSTRACT**

This study aims to examine how professional tennis players perceive spectator behaviours. For this purpose, a questionnaire with the title "Perceptions of Tennis Players Regarding Spectator Behaviours", developed by the researchers was administered to 165 athletes, and statistical analyses were conducted using independent t-tests, one-way ANOVA, and LSD tests. Results showed that male players scored significantly higher regarding contexts involving large crowds, vocal spectator reactions, and perceived impact of the spectator on match outcomes, and consideration of receiving support from the opposite gender (p<0.05, p<0.001). Female players were found to be significantly more affected than male players by negative vocal reactions from the spectator, disputes among spectators, perceived pressure from the crowd, and situations in which their opponent received applause (p<0.05, p<0.001). Players who had national team experience showed significantly higher scores in terms of positive effects of spectator behaviour (p<0.05). As a conclusion; the findings indicate that tennis players' perceptions of spectator behaviour vary significantly depending on variables such as gender and being in the national team. Specifically, male players were found to be more responsive to positive stimuli, while female players were more sensitive to negative spectator behaviours. To enhance athletes' psychological resilience during tennis matches, psychological skills training aimed at managing the influence of spectators should be implemented. Furthermore, to improve spectator culture, awareness-raising seminars targeting various age groups and social segments should be organized.

**KEYWORDS**: Tennis player, Spectator, Behaviour, Motivation.

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## INTRODUCTION

Today, sport has evolved beyond being merely a physical activity, becoming a global phenomenon that encompasses social, psychological, and economic dimensions. Sport contributes to individuals' socialization processes, it has the power to unite large groups, and plays a reinforcing role in cultural identity, making it an indispensable element of modern societies (Arıkan & Yıldıran, 2003; Hulteen et al., 2017). Tennis, which has rapidly gained global popularity, is also receiving increasing attention in Türkiye, both in schools and sports clubs. Beyond offering physical benefits, tennis provides individuals with various motivations such as social interaction, recognition, and economic gain (Yıldırım & Sunay, 2009). As a sport that has attained international status, tennis is no longer seen merely as a game, but rather as a serious professional field (Kermen, 2002; ITF, 2005).

Achieving high-level performance in tennis requires not only motor skills but also psychological, tactical, and strategic competencies (Kruger, 1991; Pollany, 1983). Especially in highly competitive environments, an athlete's level of motivation and psychological resilience can be as critical as their physical abilities. Motivation directly influences not only tactical skills of athletes, but also their in-game decision-making, emotional state, and responses to external stimuli (Brich et al., 2024). The sports psychology literature emphasizes the significant impact of external environmental factors—particularly spectator behavior—on athletic performance. Spectator actions during a match can influence an athlete's emotional state and concentration either positively or negatively (Hulteen et al., 2017). In individual sports, where a high level of focus is required, audience reactions can directly affect performance. Eniseler (1995) noted that for elite athletes, the impact of spectators can yield notable consequences on strategy development and game control. Various studies in this field have demonstrated that while audience support can motivate athletes positively, negative reactions, pressure, or support for the opponent can affect performance adversely. Arslan et al. (2004) reported that both professional and amateur football players are positively influenced by their supporters, yet their performance declines in the face of negative cheering. Similarly, İmamoğlu et al. (2015) found that athletes' and coaching staff's body language and emotional expressions during matches can influence the flow of the game.

In tennis, the nature of spectator influence differs. While noisy environments are common in team sports, silence and courtesy are typically expected in individual sports such as tennis. Nonetheless, players can still be directly affected by gestures, reactions, applause, and cheering. How male and female athletes perceive these influences is closely related to their level of psychological resilience and social sensitivity. Recent studies indicate that the level of social support perceived by athletes plays a decisive role in their motivation and performance (Allen, Jones & Sheffield, 2010; Freeman & Rees, 2010; Uzun & İmamoğlu, 2020). In Yüceant's (2022) study, tennis players were found to exhibit moderate levels of stress, anxiety, worry, depression, and concentration difficulties. In another study, Sezan and Eskiyecek (2024) stated that racket sport athletes tend to act by focusing on the positive effects of mental energy, while also showing a dual orientation in competition—striving to win and simultaneously

appreciating the opponent. Among tennis spectators, the primary motivations have been identified as entertainment, valuing the sport, escapism from routine, and affection for the players (Farrag, Althawadi, & Ali, 2024).

Understanding how professional tennis players perceive spectator behavior and the influence of these perceptions on their performance is of significant importance. The aim of this research is to explore how spectator behavior in tennis matches is perceived by professional tennis players in Türkiye, and how these perceptions vary according to factors such as gender, age, ranking, and national team experience. Additionally, the study seeks to offer recommendations for improving spectator culture. One of the primary goals is also to identify the ethical behavioral norms that spectators should observe and to explain the oncourt impact of these behaviours.

## **METHODS**

#### **Participants**

A total of 165 professional Turkish tennis players, 76 women and 89 men, who have international scores and who continue their active sports life, participated in the study voluntarily.

#### **Data Collection**

In the study, data were collected using the questionnaire titled 'Perceptions of Tennis Players Regarding Spectator Behaviours', which was developed by the researcher.

Questionnaire on 'Perceptions of Tennis Players Regarding Spectator Behaviours: The instrument, the validity and reliability of which have been established, consists of 27 Likert-type items: 11 positive affect questions, 11 negative affect questions, and 5 expectation questions. Confirmatory factor analysis demonstrated acceptable overall model fit ( $\chi^2 = 685.401$ , df = 231, p < .001; KMO = 0.70). The scale explains 62 % of the variance in the construct being measured. Responses are scored on a five-point scale: 5 = Strongly agree, 4 = Agree, 3 = Partially agree, 2 = Disagree, 1 = Strongly disagree. The maximum attainable score on each of the positive and negative subscales is 55.

#### **Statistical Analyses**

SPSS 25.00 programme was used for data analysis. One-way analysis of variance, t-test and one-way anova LSD tests were used in statistical procedures. When interpreting the results, 0.05 was accepted as the level of significance.

**Ethics approval:** The study was approved by Ondokuz Mayıs University Clinical Research Ethics Committee with the decision numbered 2015/426 on 20.11.2015.

## **RESULTS**

Table 1. Comparison of the scores of answers given to the positive affect questions in terms of gender

<b>Positive Affect Questions</b>	Gender	Mean	Sd	t	р
	Male	2.98	1.34		
I'm more motivated in matches with a lot of spectators.	Female	2.51	1.32	2.59	0.025*
I am impressed by positive cheering in a loud and lively	Male	3.74	1.14		0.382
voice when the game stops.	Female	3.58	1.24	0.87	
Negative cheering directed at a rival athlete has a motivating effect on me.	Male	2.53	1.26		
	Female	2.88	1.39	-1.74	0.088
The vocal reaction of the spectators after scoring a good point increases my concentration on the match.	Male	4.11	1.05		
	Female	3.70	1.25	2.31	0.022*
I think that women spectators have a better spectator culture than men.	Male	2.35	1.24		0.007*
	Female	2.95	1.57	-2.73	
For me, the upbeat applause increases the feeling that I	Male	4.12	0.97		0.679
should hold on to the match.	Female	4.18	0.89	-0.41	
When I catch up with my opponent in the game, I think	Male	4.16	1.03		0.739
that the support of the spectator increases.	Female	4.11	0.96	0.33	
	Male	3.71	1.10		0.004*
In tennis, the spectator has an effect on winning the match.	Female	3.20	1.17	2.89	
I don't find it right for the spectators to cheer positively when the athletes play well and negatively when they play badly.	Male	4.07	1.16		0.451
	Female	4.20	1.03	-0.76	
	Male	3.03	1.17	4.42	0.001**

I think I get the support of the opposite gender spectators the most.	Female	2.20	1.25		
I believe my cheerful gestures help me receive support	Male	3.24	1.10	0.00	0.330
from the spectator.	Female	3.07	1.14	0.98	
T . 10	Male	38.03	6.56	1.60	0.106
Total Score	Female	36.53	5.11	1.63	0.106

<sup>\*</sup>p<0.05 and \*\*p<0.001

It was found that male players scored significantly higher regarding contexts involving large crowds, vocal spectator reactions, and perceived impact of the spectator on match outcomes, and consideration of receiving support from the opposite gender (p>0.05) and p<0.001). Female players were found to score significantly higher than male players regarding the state of thinking that women spectators have a better spectator culture than men (p<0.05). No significant difference was found between positive evaluation scores according to gender (p>0.05).

Table 2. Comparison of the scores of answers given to the negative affect questions in terms of gender

Negative Affect Questions	Gender	Mean	Sd	t	р
Negative cheering by the spectator has a negative effect	Male	2.96	1.45	1.54	0.125
on me.	Female	3.29	1.30	-1.54	0.125
Negative vocal reactions from the spectators after I make	Male	2.87	1.12	2.17	0.021*
an unforced error create a sense of pressure on me.	Female	3.28	1.31	-2.17	0.031*
When my serve is disrupted by a sound coming from the	Male	2.94	1.29		
spectators, I start to think that I will make an error on that serve.	Female	3.30	1.33	-1.75	0.081
I believe that my concentration decreases during matches	Male	2.78	1.17		
in which the umpire repeatedly warns the spectators to remain silent.	Female	2.93	1.28	-0.83	0.409
	Male	2.62	1.27	-3.63	
Verbal disputes among spectators affect me negatively.	Female	3.34	1.28		<0.001**
When there is a large number of spectators, it puts	Male	2.49	1.28	-2.45	0.015%
pressure on me.	Female	3.00	1.37		0.015*
I think that the negative behaviour of the rival athlete	Male	3.15	1.25	0.007	0.005
against the umpire provoke the spectators.	Female	3.14	1.24		0.995
When the opponent scores a point as a result of my	Male	2.66	1.23	1.00	0.040%
unforced error and is applauded, my motivation decreases.	Female	3.05	1.27	-1.99	0.048*
Spectators walking and moving during the match disturb	Male	3.18	1.36	0.17	0.067
me a lot.	Female	3.14	1.30	0.17	0.867
I find it disturbing when spectators take photo with flash	Male	3.66	1.31	0.05	0.242
during the match.	Female	3.46	1.42	0.95	0.342
I think that I will lose the support of the spectator by	Male	3.34	1.26		
showing anger (hand-arm gestures, hitting the racket on the ground, shouting).	Female	3.07	1.24	0.88	0.166
Total Sagra	Male	32.64	7.06	)6	0.026*
Total Score	Female	35.01	7.31	-2.12	0.036*

<sup>\*</sup>p<0.05 and \*\*p<0.001\*p<0.05 and \*\*p<0.001

According to gender, it was found significant that female tennis players were more affected than male tennis players in cases of negative sounds from the spectator, quarrels between spectators, pressure from spectators and applause for the opponent (p<0.05 and p<0.001). Again, a significant difference was found between the negative total scores (p<0.05).

Table 3. Comparison of the scores of answers given to expectation questions in terms of gender

<b>Expectation Questions</b>	Gender	Mean	Sd	t	р
Spectators should not engage in bad or abusive cheering	Male	4.56	0.99		
and outrageous behaviour regardless of the result of the match.	Female	4.51	1.01	0.31	0.756
I think that the spectator culture of tennis spectators differs	Male	4.03	1.14	1.20	0.224
according to the regions.	Female	3.82	1.20	1.20	0.234
I think that seminars on spectator culture and programmes	Male	3.85	1.12		0.54
promoting this sport should be held for tennis spectators.	Female	3.91	1.15	-0.30	0.761
I think that the socio-cultural level of the spectators at	Male	3.34	1.25	0.40	0.500
matches with high ticket prices is high.	Female	3.26	1.09	0.40	0.689
I think the physical characteristics of female tennis players	Male	3.62	1.27	0.05	0.244
have an effect on the number of spectators.	Female	3.41	1.55	0.96	0.341

No significant difference was found between the scores given to the expectation questions in terms of gender (p>0.05).

Table 4. Evaluation of spectator behaviour by tennis players in terms of age category

Perceptions of spectator behaviour	Age	N	Mean	Sd	F	p
	12-15	93	37.00	6.05	_	
Positive evaluation	16-19	58	37.84	5.89	0.36	0.697
Positive evaluation	20 +	14	37.50	6.16	0.30	0.097
	Total	165	37.30	5.98		
Negative evaluation	12-15	93	34.21	7.76	_	
	16-19	58	33.36	6.67	0.65	0.526
	20 +	14	32.07	6.16	0.03	0.320
	Total	165	32.27	7.26	-	

No significant difference was found in the positive and negative evaluation scores of the perceptions of spectator behaviours in terms of age (p>0.05).

Table 5. Tennis players' evaluation of spectator behaviours in terms of being a national or non-national athlete

Perceptions of spectator behaviour	Level	N	Mean	Sd	t	p
Positive evaluation –	National	46	38.97	5.26	2.22	0.028*
	Non-national	119	36.71	6.11	2.22	0.028
Negative evaluation -	National	46	32.86	6.50	-0.95	0.343
	Non-national	119	34.06	7.53	-0.93	0.343

<sup>\*</sup>p<0.05 and \*\*p<0.001

While there was a significant difference in the perceptions of tennis players regarding spectator behaviours in terms of the status of being a national team athlete in positive affect scores (p<0.05), there was no significant difference in negative evaluation (p>0.05).

Table 6. The status of being affected positively or negatively in terms of the presence of a special person among the spectators

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Special person	N	Mean	Sd	F/LSD	p
A family member (1)	48	37.27	5.44		
Friend (2)	45	38.36	5.43	10.41	
Someone to whom the player is emotionally attached (3)	34	40.74	5.28	12.41 1<3 4<1.2.3	<0.001
None (4)	38	33.18	5.52		
Total	165	37.34	5.96	-	
A family member (1)	48	34.23	6.97		
Friend (2)	45	34.71	7.92	-	
Someone to whom the player is emotionally attached (3)	34	32.97	6.21	0.76	0.517
None (4)	38	32.63	7.71	_	
Total	165	33.73	7.26	='	
	Special person  A family member (1) Friend (2) Someone to whom the player is emotionally attached (3) None (4) Total A family member (1) Friend (2) Someone to whom the player is emotionally attached (3) None (4)	A family member (1) 48  Friend (2) 45  Someone to whom the player is emotionally attached (3)  None (4) 38  Total 165  A family member (1) 48  Friend (2) 45  Someone to whom the player is emotionally attached (3)  None (4) 38	Special person         N         Mean           A family member (1)         48         37.27           Friend (2)         45         38.36           Someone to whom the player is emotionally attached (3)         34         40.74           None (4)         38         33.18           Total         165         37.34           A family member (1)         48         34.23           Friend (2)         45         34.71           Someone to whom the player is emotionally attached (3)         34         32.97           None (4)         38         32.63	Special person         N         Mean         Sd           A family member (1)         48         37.27         5.44           Friend (2)         45         38.36         5.43           Someone to whom the player is emotionally attached (3)         34         40.74         5.28           None (4)         38         33.18         5.52           Total         165         37.34         5.96           A family member (1)         48         34.23         6.97           Friend (2)         45         34.71         7.92           Someone to whom the player is emotionally attached (3)         34         32.97         6.21           None (4)         38         32.63         7.71	Special person         N         Mean         Sd         F/LSD           A family member (1)         48         37.27         5.44           Friend (2)         45         38.36         5.43           Someone to whom the player is emotionally attached (3)         34         40.74         5.28         1<3

There was no significant difference in tennis players' perceptions of spectator behaviours in terms of the presence of a special

person among the spectators in negative evaluation (p>0.05), while a significant difference was found in positive evaluation (p<0.001).

## **DISCUSSION**

The present study aims to examine how professional tennis players perceive spectator behaviours. For this purpose, a questionnaire which included 11 positive affect questions, 11 negative affect questions, and 5 expectation questions was used. The maximum positive evaluation score can be 55 points. The average score of the tennis players' answers was 38.03 points for men (69.15% of the maximum score that can be obtained for positive evaluation from the scale) and 36.53 points for women (66.42% of the maximum score that can be obtained for positive evaluation from the scale). According to these mean scores, the positive evaluation levels of tennis players can be considered moderate. In this study, the maximum negative evaluation score can be 55 points. The answers given by the tennis players were 32.64 points (59.35% of the highest score that can be obtained from the scale for positive evaluation or score per question=2.97) for men and 35.01 points (63.65% of the highest score that can be obtained from the scale for positive evaluation or score per question=3.18) for women. When these means and the scores per question are analysed, it can be seen that the negative evaluation levels of tennis players are at the level of partially agree. Kızıldağ and Tiryaki (2012) stated in their study that when athletes win, seeing that they are congratulated when they perform well, feelings such as pride in winning increase their motivation. Spectator cheering can motivate athletes in a positive way, but it can also cause them to completely disconnect from the game by negatively affecting their emotional state (Çepikkurt & Erkuş, 2004). In the study of Arslan and Yıldırım (2009), it was determined that amateur and professional football players were negatively affected by the cheering for the rival team. These studies clearly show the influence of spectator behaviour on the psychological state of athletes.

In the present study, it was found that in matches with a large number of spectators, the scores of male tennis players were significantly higher than female tennis players in situations such as vocal reactions of the spectators, the effect of the spectators on the result of the match and receiving support from the opposite gender spectators (p<0.05 and p<0.001). This finding suggests that male athletes may be more sensitive to spectator influence or may be more motivated by such extrinsic stimuli. When this situation is evaluated in the context of Deci and Ryan's (2013) self-determination theory, it can be said that extrinsic motivation sources can also increase an individual's intrinsic motivation. It can be thought that especially male athletes attach more importance to extrinsic praise and approval in competitive environments. The fact that male athletes received higher scores for the support of opposite gender spectators requires the evaluation of athlete-spectator interaction in the context of gender roles. This shows that athletes' need for social approval (Leary & Kowalski, 1990) may differ according to gender roles and male athletes may find the support of the opposite gender more meaningful. On the other hand, it was observed that the scores of female tennis players who thought that female spectators had better spectator culture than men were significantly higher than men (p<0.05). This finding reveals that female athletes observe spectator behaviours more and make more sensitive evaluations in this context. According to Tajfel's Social Identity Theory (1981), individuals tend to make positive attributions towards their own group. Female tennis players' more positive attitude towards the cultural competence of female spectators can be evaluated in the context of social identity. However, the fact that there was no significant difference between the positive spectator evaluation scores according to gender (p>0.05) shows that both genders valued the positive reactions of the spectator at a similar level in general. This supports the universal effect of the positive behaviour of the spectators on the motivation of the athlete. As a matter of fact, Vallerand and Losier (1999) found that positive external feedback increases self-confidence and performance in athletes. When these findings are evaluated in general, it can be said that the effect of spectator behaviours on the psychology of the athlete may differ according to gender, but behaviours such as positive cheering and support are similarly important for both genders. In addition, these results support the view that in individual sports such as tennis, both the psychological and performance-oriented effects of spectators are more pronounced (Wann et al., 2001).

The results of the present study revealed that negative vocals from the spectator, bickering among spectators, pressure from spectators and applause for the opponent had a higher negative effect on female tennis players than male tennis players (p<0.05 and p<0.001). In addition, a significant difference was found between the negative total scores in terms of gender (p<0.05) and it was determined that women were generally more affected by the negative behaviours of the spectator than men. These findings suggest that emotion regulation, coping with stress and sensitivity to external stimuli may vary in terms of gender in athletes. The literature, which draws attention to the positive and negative consequences of spectator influence on an individual's performance, supports these findings. Çepikkurt and Erkuş (2004) stated that negative spectator cheering may decrease the motivation of some athletes and hinder their performance. In this context, the tendency of female athletes to develop more sensitive and emotional reactions may cause these negative effects to be more pronounced. Similarly, Kızıldağ and Tiryaki (2012) stated that negative emotions and external pressure can negatively affect athlete motivation. These gender-based differences can be explained by some theoretical frameworks in the sport psychology literature. The social anxiety theory put forward by Leary and Kowalski (1990) suggests that individuals' sensitivity to how they are evaluated by others, especially the fear of creating negative impressions, may put pressure on performance. In the context of this theory, it is possible that female athletes perceive spectator reactions more personally and this may increase their anxiety levels. In addition, the fact that female athletes tend to express their emotions instead of suppressing them in the context of gender roles may also explain this situation. The fact that female athletes care more about the negative behaviours of the spectators or develop more emotional reactions to these behaviours may be a result of social learning shaped in line with gender stereotypes (Tajfel, 1981). In addition to this, the fact that female athletes are more affected by situations such as spectators applauding the opponent than male athletes may be related to psychological variables such as self-confidence, self-esteem and achievement orientation. Vallerand and Losier (1999) emphasised that external feedback in sport has strong effects on athletes and that these effects can be positive or demotivating. The fact that female athletes were more affected by the support towards the opponent suggests that their self-worth perception and internal balance may be more easily shaken by such external feedback. Overall, these findings suggest that female athletes may be more sensitive to

negative stimuli from spectators, which may have significant consequences on both emotional and performance levels. Therefore, it can be said that more specific support should be provided for female athletes in areas such as psychological resilience, coping with stress and attention control.

In the study, when the answers given to statements such as spectators' not cheering with swearing, changes in the spectator culture according to regions, the necessity of seminars and introductory programmes on spectator culture, the effect of high ticket prices on socio-cultural level, and the effect of physical characteristics of female tennis players on spectator interest, no significant difference was found in terms of gender variable (p>0.05). This shows that male and female tennis players have similar views on spectator culture, ethical behaviours and spectator profile. This finding reveals that universal ethical principles and cultural sensitivity in sport are accepted regardless of gender. Indeed, Simon, Torres, and Hager (2015) emphasised that ethical behaviours in modern sports should be internalised by all athletes and that sport is not only physical achievement but also values education. In individual and gentlemanly sports branches such as tennis, the decrease in gender-based differences in the expectations of athletes regarding spectator behaviour can be interpreted as an indicator of the institutionalisation of sports culture. In particular, the common attitude towards bad/abusive cheering shows that the understanding of 'fair play' in sports and healthy spectatorfield relations are valued by all athletes. According to Parry (2006), one of the social functions of sport is to model ethical behaviour for the spectators. In this context, the fact that male and female tennis players showed the same level of sensitivity indicates that this function was successfully transferred. In addition, the fact that there was no difference between the genders in the perception that the spectator culture differed according to the regions shows that the athletes are similar in their ability to observe and interpret socio-cultural structures. Bourdieu (1984) argues that sport is a kind of cultural capital and the way individuals perceive sport culture is shaped according to their social position. In this respect, the fact that male and female athletes share similar experiences within the same socio-cultural structures may lead to similar views. On the other hand, the fact that there was no significant difference according to gender in a more controversial statement such as the effect of physical characteristics of female tennis players on spectator interest shows that male and female tennis players have a similar point of view on this issue. This suggests that athletes may have developed similar sensitivity to sexist attitudes towards both themselves and sport. Research on this issue has revealed that gender roles in sport are gradually changing and female athletes are uncomfortable with their bodies being turned into "objects of spectacle" (Kane, LaVoi & Fink, 2013). Finally, the fact that there was no gender difference in the opinions that spectator culture training and promotional programmes should be carried out shows that all athletes have a common sense of responsibility for the development and dissemination of tennis. This shows a high level of awareness that sport is not only an individual value but also a social one. Spectators who possess knowledge of the sport may be more likely to critically evaluate athletes' performances; become immersed in the action taking place; and know/admire particular athletes participating in the competition (Derom et al., 2025).

In the present study, when tennis players' perceptions of spectator behaviour in terms of their ages were examined in terms of both positive and negative evaluation scores, no significant difference was found (p > 0.05). This finding shows that age variable is not a determining factor on athletes' general perceptions of spectator effect. This shows that athletes' sensitivity to spectator behaviour develops independently of age, especially in sports such as tennis where individual and mental endurance is at the forefront. Gould and Dieffenbach (2002) reported that elite level athletes' responses to environmental stressors, such as spectator pressure, were related to their athletic experience and psychological preparation level rather than age. Similarly, Weinberg and Gould (2019) emphasised that stress coping skills in athletes may differ in terms of age, but this difference can be balanced with experience. The findings suggest that tennis players in all age groups interpret spectator behaviours in a similar way and that the psychological strategies they develop against these effects are common. This situation can also be related to the structural characteristics of tennis. Since tennis players are usually involved in professional training processes at an early age, they can develop similar mental endurance skills even if they are in different age groups. This may explain the fact that there is no difference between the perceptions of spectator effects despite the age difference. In addition, it is also observed that there is no direct and consistent relationship between the age factor and the reactions to spectator influence in the sport psychology literature. For example, Nicholls et al. (2009) found no significant difference in stress coping strategies between elite youth and adult athletes. This finding shows that age alone is not a determinant variable and should be evaluated together with factors such as individual differences, training history and competition level.

According to the findings obtained in the present study, a significant difference was found in the positive affect scores of tennis players towards spectator behaviours in terms of the status of being in the national team (p<0.05). On the other hand, there was no significant difference between national and non-national athletes in negative evaluation scores (p>0.05). This shows that national athletes are more responsive and motivated to positive reactions from spectators, but they may be more resistant or unresponsive to negative spectator behaviours. National athletes may be more motivated by positive feedback, as they usually have more competition experience, they are in more challenging competitive environments and they perform more often under spectator pressure. This is in line with Deci and Ryan's (2013) self-determination theory that extrinsic motivation sources (such as applause, support, cheering) can also reinforce intrinsic motivation, especially in advanced athletes. In addition, another reason why national athletes find positive spectator behaviours more meaningful may be the strong social ties they have connected with the country or society they represent. In this context, Tajfel's Social Identity Theory (1981) suggests that individuals develop a greater sense of identification and belonging in response to the achievements or social support of the groups to which they belong (e.g. national identity). National athletes may interpret positive feedback from the spectators as support not only on an individual but also on a national level, which may result in a more positive psychological impact. On the other hand, the fact that there was no significant difference (p>0.05) in the evaluation scores of negative spectator behaviours between national and non-national tennis players indicates that such negative behaviours were perceived at a similar level in both groups of athletes. This finding suggests that after reaching a certain level, athletes can react to negative external stimuli in a more neutral or controlled manner. Indeed, Gould and Maynard (2009) emphasised that elite athletes have more developed psychological coping strategies against external stressors such as performance anxiety and spectator pressure. In addition, Vallerand and Losier (1999) stated that positive

extrinsic feedback increases athletes' motivation and self-confidence levels, but the effect of negative extrinsic reactions depends more on the individual's personality traits and psychological resilience. In this context, the fact that the effect of negative behaviours does not change based on being a national athlete or not reveals that individual differences are determinant. In general, these findings suggest that national athletes benefit more from positive spectator behaviours, but are more resistant to negative behaviours. It also suggests that reactions to spectator behaviour are not only related to the athlete's performance level, but more to individual psychological factors. Although Gould and Dieffenbach (2002) stated that there may be differences between elite and developing athletes in terms of psychological pressure management, they emphasised that these differences may not be directly reflected in perceptions of bystander influence. Similarly, Weinberg and Gould (2019) stated that the stress coping skills of the athlete, rather than the athlete's level, determine the sensitivity to bystander influence.

According to the research findings, the positive affect scores of tennis players who had a special person (friend, family member or someone with whom they had an emotional bond) in the spectator were significantly higher (p<0.001). On the other hand, no significant difference was found in the level of negative affect (p>0.05). This suggests that the presence of people with whom tennis players are emotionally close in the stands during the match has a positive effect in terms of motivation and psychological support, but does not increase negative interactions. According to Deci and Ryan's (2013) self-determination theory, the social support and approval that an individual receives from his/her environment play an important role in strengthening intrinsic motivation. The presence of a special person in the stands can provide a sense of emotional security for the athlete, which can have a supportive effect on their performance. The presence of special people as spectators can positively affect the performance of athletes by increasing the level of social support perceived by the athlete. This is considered as a broader form of the social facilitation effect and contributes to the increase of support, psychological trust and intrinsic motivation, especially from emotionally significant people (Allen, Jones & Sheffield, 2010; Freeman & Rees, 2010). Carron, Hausenblas, and Eys (2005) stated that social support elements positively affect athlete performance, especially in individual sports, and that the presence of family members and close friends both increases psychological resilience and reduces stress levels. This finding suggests that the presence of emotionally significant individuals in the spectator stands has a positive impact on tennis players. On the other hand, the fact that there was no significant difference in the level of negative affect shows that athletes evaluate negative spectator behaviour as a more general and external factor, even if a special person is in the stands. This suggests that the emotional bonds of athletes serve as a defence or balancing function against negative environmental stimuli. Rees and Hardy (2000) state that social support buffers the effect of negative stress factors and helps the individual to behave more resilient in stressful situations. In conclusion, these findings suggest that tennis players consider the presence of people with whom they have positive emotional ties in the stands as a motivational enhancer during the match, but this does not significantly protect them from negative spectator reactions. This emphasises the protective and motivating role of social support elements on performance, especially in individual

Limitations of this study include that the limited number of participants restricts the generalizability of the findings. Additionally, the study was conducted only in tournaments held in Turkey, which excludes the potential influence of cultural differences. The age distribution of the participants was also relatively low; including more adult or senior-level tennis players could have provided broader insights.

## **CONCLUSIONS**

Tennis players' perception of positive and negative behaviours from the spectators generally included moderate positive and partially agree negative evaluation scores. Male tennis players scored significantly higher than female tennis players in matches with a large number of spectators and when they received support from opposite gender spectators, indicating that male athletes may be more sensitive or motivated to spectator influence. Female tennis players were more negatively affected by negative voices, bickering, pressure and applause from the spectator than male tennis players and this difference was found to be significant. This suggests that emotional reactions and stress coping mechanisms of female athletes may differ. No significant difference was found between genders in ethical and cultural expectations regarding spectator behaviour and spectator profile perceptions, and both genders had similar views on these issues. It was determined that the age variable was not determinant on spectator perceptions, while national athletes were more affected by positive spectator behaviours, but did not show a significant difference in negative behaviours. It was observed that the presence of special people with whom athletes had an emotional bond in the stands provides a significant increase in positive affect. In the light of social support theories, it was determined that the presence of emotionally connected people as spectators had supportive effects on motivation and performance, but did not create a protective effect against negative spectator reactions. Special psychological support programmes should be organised for female tennis players to improve their stress management, emotion regulation and coping skills against spectator pressure. Psychological support and motivation can be increased by encouraging the presence of tennis players' relatives with whom they have an emotional bond at the matches. Considering the effect of gender roles in athlete- spectator interactions, gender-sensitive traning programmes can be developed for both athletes and spectators. The results of the study suggest that spectator behaviour has an effect on the performance of tennis players. This research is of great importance in terms of reducing the behaviours that will negatively affect the game and the player, and improving the integration of tennis and spectators. It is thought that raising awareness of the spectators about the culture of watching tennis will have positive results.

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