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Review of the decision-making and self-confidence levels of futsal referees

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Abstract

Referees' decision making and confidence are influenced by factors such as audience pressure, player pressure, immediate events, and psychological situations. The aim of this research is to analyze the relationship between the decision-making styles and self-confidence of futsal referees in relation to different variables. The research uses relational screening patterns from quantitative research methods. To collect data in the study, the personal information form is used as "Decision Style Scale (DSS)" and "Confidence Scale" adapted by Tasdelen (2002). Skewness and Kurtosis values (± 1.5) were accepted for normality analysis Accordingly, frequency, arithmetic mean, standard deviation, Pearson correlation coefficients were determined for the analysis of the data, and t-test for paired groups and ANOVA -test for more than two groups were used to test the relationships between them. Gender (rational, dependent, intuitive, evasive, and spontaneous), educational level (evasive and spontaneous), occupation (evasive and spontaneous), difference in work experience (rational), no difference in marital status, and age variability; when looking at the self-confidence scale, it was found that there was a difference in educational level (internal confidence) and that there was no statistical difference in gender, marital status, occupation, age, and work experience. Thus, a non-negative relationship was found between the decision-making style of futsal referees and the level of self-confidence.

Keywords: Futsal referees, decision-making styles, self-confidence, sport

Introduction

It is a competitive, solidarity and cultural phenomenon that develops the socialization, the spirit and the physics, mediating or mediating, liberating or grouping, taking time or all the time under certain rules that improve the skills of the athlete to make the subject environment the environment the environment the environment (İnal, 1998) [38].

In general, the elements that make up the phenomenon of sports today can be discussed in terms of three main themes in the form of athletes, spectators and referees. First and foremost, the referees, who stand on the field with the athletes and direct the destiny of these competitions, are the most fundamental element of sports (Pepe *et al.*, 1992). Durna (1997) [46, 28] defined the referee as the person who manages sports competitions, whose job is to determine the winning numbers, apply the rules, and punish those who do not follow the rules of the sports competition. In other words, they are the officials who manage and are responsible for sports organizations, who officiate sports events that have already been officially established by the rules, who impose and report penalties against misconduct, who process the scores of teams on the competition line, who participate in sports organizations, who compete on the field with athletes, who announce the results of sports competitions (Cengiz and Pular, 2004) [18].

The activity of an arbitrator requires knowledge, experience, training, competence, personality, fitness and concentration. The referee: he is the person who understands the human psychology and social sociology with his real life, an honest personality who can interpret the individual and social behaviors of the human being and should be a role model with his movements on and off the field (Orta, 2000; Orta, 2002) [45]. The referee should demonstrate his authority on the field by earning the respect of the athletes (Baser, 1998) [11].

Referees are required to perform many different tasks, such as managing the competition, evaluating and judging actions during the competition, making quick decisions, watching over several people, maintaining order, and resolving disputes (Tuero *et al.*, 2002) ^[55]. The referee's role is to apply the rules correctly and consistently without compromising the competitiveness of the game (Gaoua *et al.*, 2017) ^[32].

Before, during and after the competition; it has been found that referees' limits are pushed by many external factors such as spectators, players, security forces, press, referee appointments (Tuero *et al.*, 2002) ^[55]. It has been noted that there are many psychological factors related to the competition and that the referee must apply the rules of the game intelligently (Sellin, 1992; Vautrot 1999) ^[51, 56]. Decision-making involves the effort to achieve the goal with the available options. Decision making means solving problems in their simple form (Eskicioglu *et al.*, 2012). Decision making is unique to a human being who is endowed with reason, thinking, consciousness and will (Coban ve Hamamci, 2006). Decision-making behavior refers to the creation of options and the selection of the most appropriate option to obtain preliminary information about the decision to be made and to achieve the goal (Guecray, 2001) ^[36]. In general, there are three main situations in which a decision must be made. These situations are: In the literature, it is referred to as decision making under certain conditions, decision making under risk, and decision making under uncertainty (Kurt, 2003) ^[41]. The type and amount of decisions made varies depending on the developmental stage of the individual, the characteristics of the situation, and the options that require a decision (Tasgit, 2012) ^[53]. Those who can make decisions strive to meet the needs of their inner world and the needs of their environment. In this way, individuals should effectively and positively benefit from their personal and environmental resources (Marco *et al.*, 2003) ^[43]. In order for the individual to make the right and appropriate decisions, he/she must perceive the options correctly and establish the relationship between his/her own needs and options very well (Bakircioğlu, 2000) ^[10]. As a process, it is emphasized that knowledge is required in the decision-making process and attention is a source (Bouyssou *et al.*, 2009) ^[16]. The classical approach in the decision-making process includes determining the purpose, gathering the necessary information, developing appropriate options to achieve the outcome, making the decision, implementing the decision, and evaluating the outcome. The conscious application of these stages helps the person to recognize his or her mistakes in the decision-making process (Adair, 2000) ^[2]. One of the most important decision-making mechanisms in sports is the referee. The referee is a sports judge when a simulation is conducted. He makes a quick decision, separates the right person from the right or mistakes within seconds, interprets and finalizes what he sees in a very short moment, and most importantly makes irreversible decisions (Atakan, 2017) ^[7]. The judges who have such an influence on the outcome are sometimes praised for their decisions, but sometimes they are strongly criticized (Yenigun, 1997) ^[42]. The only person who is empowered in making a decision in the case of the competition is the referee. Since the decision of the referee was made by the athletes, it is a decision to take it (Tiryaki 2000) ^[54]. The decision of a referee should be made at the moment of movement or as soon as possible (Brotmacher, 2011). The referee must have a very good physical fitness and physiological capacity. Nowadays, the referee must run like an athlete (Collina, 2004) ^[19] in order

not to miss any moment of the game, to be in the right place, to make the right decision and to control the field at the highest level. Judges' ability to use their authority with courage and determination, leadership skills, self-confidence, decisiveness, quick and accurate decision making under pressure shows their personal management skills; their ability to recognize and combat attention, aggression, anxiety and stress shows their mental competence. (Dogan and Morali, 1996) ^[26], referees need to keep up with the speed of the game and follow the game closely by taking the right position to determine whether players are following the rules (Schenk *et al.*, 2018) ^[50].

Judges must be consistent in their decisions. The responsibility of social pressure on the referee is to display an objective, firm, sovereign form of leadership in every aspect of fair play that enables the sport, enhances the enjoyment of driving, and does not allow unethical behavior (Çelik, 2004) ^[20]. In arbitration decision making, it is found that about 85% of the information is absorbed through the visual sense and judges who recognize it in this way have to make decisions in a very short time (Ce, 1994) ^[17]. Audience, experience, knowledge of rules, motivation, which are believed to affect judges' decisions, 8 factors, such as biases, environmental factors, arbitration mechanics, and internal fertilizer reaction, were grouped into two main rubrics, and these were generalized as conditioning factors and individual factors (Aktaş *et al.*, 2011) ^[3]. Judges need to have confidence in themselves because confidence is a very important characteristic for successful referees (Weinberg and Richardson, 1990). The stressful side of errors and refereeing can also lead to loss of confidence, increased anxiety and stress levels (Anshel and Weinberg, 1995; Rainey, 1995). Feltz (1988) ^[6, 47] defined self-confidence as "the belief that individuals will perform a particular activity successfully, rather than just a general trait." He also explained this definition with this example: a person can be confident in playing golf but insecure in general. So Feltz has lower self-esteem than the others. Inner self-confidence can be defined as the image we project to the outside world with the feeling of inner self-confidence, the correct perception of the individual's existing personality, satisfaction with it, and inner self-confidence (Lindenfield, 1997) ^[42].

An umpire is expected to be "competent" in terms of physicality, mental, and self-confidence. Confident referees respond to many of the pressures they face in a game within the official rules of the game. Therefore, the healthy progress of the competition depends on good referee management (Simmons, 2011) ^[52]. A referee with low self-esteem who is discouraged may not act effectively, especially when critical decisions must be made during the competition, and therefore may have difficulty making the correct decision (Satman, 2017) ^[49].

The purpose of this study is to study gender, education, marital status, age, it is the study of decision making and confidence levels based on the variables of professional and active arbitration period.

Materials and methods

This part includes the research model, research group, data collection instruments, and data analysis.

Model of the Research

This study uses a scanning model from quantitative research methods. The aim of screening is to reveal the current situation through the representation of the studied object,

which is why research in education often uses screening. (Bueyuekoeztuerk *et al.*, 2014). This type of research is usually used in social sciences and is intended to reveal the basic topics of research to an audience with supernumerary samples (gender, age, education level, work experience) (Can, 2020).

Araştırma Grubu

The working group of this study consisted of 84 futsal referees serving on the Central Referees Committee during the 2021-2022 season. The demographic data of the participants in the study are shown in Table 1.

Table 1: Frequency and percentage distributions related to the demographics of indoor referees.

Features	Categories	f	%
Gender	Male	48	57.1
	Female	36	42.9
Marital Status	Married	22	26.2
	Single	62	73.8
Educational Level	High School	17	20.2
	Licence and more	67	79.8
Age	18-27 age	48	57.1
	28-36 age	26	31
	37 age and more	10	11.9
Profession	Officer	12	14.3
	Student	32	38.1
	Lecturer	17	20.2
	Other	23	27.4
Active Refereeing Time	1-4 Year	60	71.4
	5-8 Year	14	16.7
	9-12 Year	10	11.9
Total		84	100

Of the salon arbitrators surveyed, 48 (57.1%) were male and 36 (42.9%) were female. Twenty-two (26.2%) of the marital status were married and 62 (73.8%) were single, while 17 (20.2%) of the university graduates and 67 (79.8%) of the graduates of undergraduate studies and higher were referees. 48 (57.1%) of the speakers are between 18 and 27 years old, 26 (31%) are between 28 and 36 years old, and 10 (11.9%) are 37 years old or older. 12 (14.3%) are civil servants, 32 (38.1%) are students, 17 (20.2%) are lecturers and 23 (27.4%) belong to other professional groups. There are 60 (71.4%) referees with a background between 1-4 years, 14 (16.7%) referees with a background between 5-8 years, and 10 (11.9%) referees with a history between 9-12 years.

Data Collection Tools

Personal Information Form: This form was developed by the researchers to collect information about the athletes participating in the study. In this regard, information about the age, gender, education level, athletic age, and sports of the participants were collected in the personal information form.

Decision Making Styles Scale (KVSÖe): the "Decision Making Styles Scale" developed by Scott and Bruce (1995) and translated into Turkish by Tashdelen (2002) was used to identify the decision making styles of athletes. The original 24-item form of the BCSE; it consists of five subdivisions in the form of rational, intuitive, dependent, spontaneous, and avoidant decision-making styles. Rational decision-making style, in which alternatives are evaluated and researched rationally; Intuitive decision-making style, in which there is a premonition and reliance on emotions; Dependent decision-

making style, in which recommendations and guidelines from others are evaluated; Spontaneous decision-making style, in which work is done quickly without evaluating immediate, impulsive alternatives; Avoidant decision-making style; approaches that tend to avoid decisions. Internal consistency of the scale, Rational decision-making style size: .76, Intuitive decision-making style size: .78, Dependent decision-making style size: .76, Avoidant decision-making style size: .79, Self-referential decision-making style size: .79, and internal consistency alpha found for the total scale score: .74. Scale items; Likert-type listed as "I disagree at all"

- 1) "I disagree"
- 2) "I am undecided"
- 3) "I agree"
- 4) "I fully agree"
- 5) Is scored as a 5 and there is no inverse substance on the scale.

Confidence Scale; The Self-Confidence Scale developed by Akin (2007) is a 5-point Likert self-assessment scale consisting of 33 items and 2 sub-dimensions. The item factor loadings of the 17-item subdimension internal self-confidence ranged from 0.31 to 0.74 and described 26.4% of the total variance. The item factor loadings of the 16-item subdivision of external self-confidence range from 32 to 75 and describe 17.2% of the total variance.

Data Analysis

The SPSS 26.0 program was used to analyze the data obtained during the study. First, the data were processed and transferred to the SPSS program. Then, the reversal substances found on the scales are converted. Another process carried out before the analysis is to make the necessary extractions related to outliers on single variables and multivariate data. The results of the Kolmogorov-Smirnov test were taken into account because the number of subjects in the subcategories generally exceeded 30. In addition, the values for pressure and bias were evaluated, and as a result, it was discussed that the data were normally distributed. In addition to the normality hypothesis, the homogeneity assumption was also tested and Levene's test was performed. As a result, it was found that the homogeneity assumption is also given. Based on all this information, it was considered appropriate to use parametric tests in the analysis of the data from both surveys. In this regard, the independent samples t-test was used to test two variables; one-way analysis of variance (ANOVA) was used to test three or more variables. The LSD test from post hoc tests was used to find the source of the difference when a significant difference was found as a result of one-way analysis of variance. Pearson Moments Multiplication Correlation Coefficient (r) was used to test the relationship between decision-making style and self-esteem of futsal referees.

The data obtained by applying the decision-making style and self-esteem scale to futsal referees were recorded in the database and analyzed. Descriptive statistics were obtained by calculating percentage, frequency, average, and standard deviations for each lower dimension of decision-making style and self-confidence of the futsal referees who participated in the study.

The descriptive characteristics of the scores achieved by the futsal referees on the decision-making style and self-confidence scales, as well as the distribution of normality by bias and pressure levels, are presented in Table 2.

Table 2: Descriptive statistics on the overall results of the decision-making style and self-confidence scale.

Scale Score	Minimum	Maximum	Distortion	Plasticity
Decision-Making Styles Total	2.42	5.00	.715	.872
Self-esteem Total	2.52	5.00	-.1.190	.980

Findings

Findings from the research are presented in tables in this section.

Findings for Decision-Making Style

Table 3: Umpires' Decision-Making Style and Self-Confidence Scale t-Test by Gender

Factors	Gender	N	M	S	SD	T	P
Rational	Male	48	4.13	.68	84	-2.195	.031*
	Female	36	4.42	.44			
Intuitive	Male	48	4.05	.56	84	2.229	.029*
	Female	36	3.72	.77			
Dependent	Male	48	3.61	.66	84	2.967	.004*
	Female	36	3.14	.77			
Avoidance	Male	48	2.59	1.06	84	2.606	.011*
	Female	36	2.04	.77			
Spontaneous	Male	48	3.29	.74	84	2.499	.014*
	Female	36	2.88	.75			
Total of Scale	Male	48	3.54	.49	84	2.795	.006*
	Female	36	3.26	.44			
Inner Self-Confidence	Male	48	4.29	.56	84	-1.629	.107
	Female	36	4.67	.38			
External Self-esteem	Male	48	4.24	.61	84	-1.806	.075
	Female	36	4.45	.44			
Total of Scale	Male	48	4.27	.57	84	-1.773	.080
	Female	36	4.46	.38			

Table 3 shows that the scores from both the scale-wide and rational [t(84)=-2.195; p < .05], the intuitive [t(84)=2.229; p < .05], the dependent [t(84)=2.967; p < .05], the avoidant [t(84)=2.606; p < .05], the spontaneous [t(84)=2.499; p < .05], and the total scale [t(84)=2.795; p < .05] differ with respect to gender dimensions. For males, the rational sub-dimension (xaland=4.42) of female judges is higher than that of males

(xaland=4.05), male referees are intuitive (xkid=3.61), addictive (xkid=2.59), spontaneous (xkid=3.29) and the larger scale (xkid=3.54). On the confidence scale, there was no difference in scale scores between male referees and female referees in terms of gender.

Table 4: Umpires' Decision-Making Style and Self-Confidence Scale t-Test by Marital Status

Factors	Marital Status	N	M	S	SD	T	P
Rational	Married	22	4.18	.78	84	-.632	.529
	Single	62	4.28	.54			
Intuitive	Married	22	4.00	.73	84	.750	.455
	Single	62	3.87	.66			
Dependent	Married	22	3.28	.62	84	-.939	.350
	Single	62	3.45	.78			
Avoidance	Married	22	2.10	.85	84	-1.434	.155
	Single	62	2.45	1.01			
Spontaneous	Married	22	2.93	.56	84	-1.318	.191
	Single	62	3.18	.82			
Total of Scale	Married	22	3.31	.43	84	1.203	.233
	Single	62	3.45	.50			
Inner Self-Confidence	Married	22	4.43	.50	84	.683	.496
	Single	62	4.35	.50			
External Self-esteem	Married	22	4.45	.56	84	1.168	.246
	Single	62	4.29	.54			
Total of Scale	Married	22	4.44	.51	84	.958	.341
	Single	62	4.32	.50			

According to Table 4, the lower size and total dimensions of the decision-making style of the salon arbitrators participating in the study [t(84)=-.632; p >.05]; the total size of the confidence scale and the lower dimensions [t(84) =.958; p >.05] could not account for a significant difference in relation to the variable marital situation.

Table 5: Referees' Decision-Making Style and Self-Confidence Scale t-Test by Training Status

Factors	Education Level	N	M	S	SD	T	P
Rational	High School	17	4.16	.93	84	-.664	.509
	Licence and more	67	4.27	.50			
Intuitive	High School	17	3.86	.59	84	-.329	.473
	Licence and more	67	3.92	.70			
Dependent	High School	17	3.52	.66	84	.671	.504
	Licence and more	67	3.38	.76			
Avoidance	High School	17	2.84	1.02	84	2.298	.024*
	Licence and more	67	2.24	.95			
Spontaneous	High School	17	3.47	.53	84	2.182	.032*
	Licence and more	67	3.03	.79			
Total of Scale	High School	17	3.57	.53	84	1.470	.145
	Licence and more	67	3.38	.47			
Inner Self-Confidence	High School	17	4.07	.48	84	-2.951	.004*
	Licence and more	67	4.45	.47			
External Self-esteem	High School	17	4.14	.53	84	-1.603	.113
	Licence and more	67	4.38	.55			
Total of Scale	High School	17	4.10	.48	84	-2.318	.023*
	Licence and more	67	4.41	.50			

According to Table 5, the scores of the lower dimension of the scale for the decision-making styles of the court arbitrators differ in relation to the level of education in the

dimensions avoiding [t(84)=2.298; p < .05] and self-referring [t(84)=2.182; p < .05]. The referees with high school diplomas have higher scores than those who have university degrees

and above on the avoiding scale ($\bar{x}=2.84$) and on the self scale ($x_{mektedir}=3.47$). When examining the confidence scale, the total internal confidence [$t(84)=-2.951$; $p < .05$] and confidence scale [$t(84)=-2.318$; $p < .05$] differ in relation to

the training situation. It can be seen that the graduates of an undergraduate degree and higher have higher scores than the judges who have internal confidence ($\bar{x}=4.45$) and a high school degree from the total size of the scale ($\bar{x}=4.41$).

Table 6: Referees' Decision-Making Style and Self-Confidence Scale ANOVA Results by Age

Factors	Age	N	\bar{X}	S	Source of variance	Squares total	SD	Squares average	F	P
Rational	18-27 Age	48	4.31	.55	Intergroup	.375	3	.188	.502	.607
	28-36 Age	26	4.16	.59	Intergroups	30.724	81	.374		
	37 age and more	10	4.22	.91	Total	30.650	84			
Intuitive	18-27 Age	48	4.25	.66	Intergroup	2.518	3	1.259	2.897	.061
	28-36 Age	26	3.92	.70	Intergroups	35.198	81	.435		
	37 age and more	10	4.32	.51	Total	37.716	84			
Dependent	18-27 Age	48	3.47	.76	Intergroup	.595	3	.298	.535	.588
	28-36 Age	26	3.28	.70	Intergroups	45.077	81	.557		
	37 age and more	10	3.44	.78	Total	45.672	84			
Avoidance	18-27 Age	48	2.39	1.09	Intergroup	1.673	3	.836	.859	.428
	28-36 Age	26	2.45	.91	Intergroups	78.893	81	.974		
	37 age and more	10	1.98	.46	Total	80.566	84			
Spontaneous	18-27 Age	48	3.24	.77	Intergroup	2.584	3	1.292	2.264	.110
	28-36 Age	26	3.05	.74	Intergroups	46.222	81	.571		
	37 age and more	10	2.70	.71	Total	48.806	84			
Total of Scale	18-27 Age	48	3.47	.53	Intergroup	.320	3	.160	.678	.510
	28-36 Age	26	3.35	.47	Intergroups	19.085	81	.236		
	37 age and more	10	3.36	.25	Total	19.405	84			
Inner Self-Confidence	18-27 Age	48	4.31	.51	Intergroup	.464	3	.232	.946	.392
	28-36 Age	26	4.47	.44	Intergroups	19.869	81	.245		
	37 age and more	10	4.42	.54	Total	20.333	84			
External Self-Confidence	18-27 Age	48	4.26	.57	Intergroup	.614	3	.307	1.022	.364
	28-36 Age	26	4.43	.52	Intergroups	24.316	81	.300		
	37 age and more	10	4.31	.50	Total	24.930	84			
Total of Scale	18-27 Age	48	4.28	.52	Intergroup	.529	3	.265	1.037	.359
	28-36 Age	26	4.45	.47	Intergroups	20.665	81	.255		
	37 age and more	10	4.42	.52	Total	21.194	84			

As shown in Table 6, the decision-making style of the salon judges participating in the study was not significantly different from the age group variable on all subdimensions,

including the scores they received on the scale [$F(3.84) = .678$; $p > .05$] and the self-confidence scale [$F(3.84) = 1.037$; $p > .05$].

Table 7: ANOVA Results by Referees' Decision-Making Style and Self-Confidence Scale Occupation Group

Factors	Profession	N	\bar{X}	S	Source of Variance	Squares Total	SD	Squares Average	F	P	Fark
Rational	Officer	12	3.82	.66	Intergroup	3.198	3	1.066	3.107	.031*	1-3
	Student	32	4.26	.58	Intergroups	27.451	81	.343			
	Lecturer	17	4.47	.52	Total	30.650	84				
	Other	23	4.32	.60							
Intuitive	Officer	12	4.02	.61	Intergroup	1.146	3	.382	.836	.478	
	Student	32	4.02	.93	Intergroups	36.570	81	.457			
	Lecturer	17	3.80	.67	Total	37.716	84				
	Other	23	3.77	.67							
Dependent	Officer	12	3.32	.43	Intergroup	4.168	3	1.389	2.678	.053	
	Student	32	3.54	.74	Intergroups	41.550	81	.519			
	Lecturer	17	3.00	.77	Total	45.672	84				
	Other	23	3.58	.76							
Avoidance	Officer	12	2.42	.64	Intergroup	7.611	3	2.537	2.782	.046*	2-3
	Student	32	2.59	1.22	Intergroups	72.954	81	.519			
	Lecturer	17	1.78	.34	Total	80.566	84				
	Other	23	2.43	.96							
Spontaneous	Officer	12	3.10	.74	Intergroup	4.847	3	1.616	2.940	.038*	2-3
	Student	32	3.35	.80	Intergroups	43.959	81	.549			
	Lecturer	17	2.69	.75	Total	48.806	84				
	Other	23	3.10	.65							
Total of Scale	Officer	12	3.34	.27	Intergroup	1.798	3	.599	2.723	.050	
	Student	32	3.56	.57	Intergroups	17.607	81	.220			
	Lecturer	17	3.17	.34	Total	19.405	84				
	Other	23	3.46	.48							
Inner Self-Confidence	Officer	12	4.34	.31	Intergroup	1.048	3	.349	1.450	.235	
	Student	32	4.28	.51	Intergroups	19.285	81	.241			

	Lecturer	17	4.58	.45	Total	20.333	84			
	Other	23	4.34	.56						
External Self-Confidence	Officer	12	4.35	.35	Intergroup	1.503	3	.501	1.711	.171
	Student	32	4.24	.56	Intergroups	23.426	81	.293		
	Lecturer	17	4.59	.46	Total	24.930	84			
	Other	23	4.26	.64						
Total of Scale	Officer	12	4.35	.32	Intergroup	1.246	3	.415	1.665	.181
	Student	32	4.26	.51	Intergroups	19.948	81	.249		
	Lecturer	17	4.59	.45	Total	21.194	84			
	Other	23	4.30	.58						

As shown in Table 7, the analysis of the lower dimensions of the decision-making style scale showed that court arbitrators differed significantly from their smaller professional group: rational [F(3.84)=3.107;p <.05], avoidant [F(3.84 3.84)=2.782 2.940;p <.05 05]. The result of Tukey's test shows that the

differences between students' and faculty's evaluations are the largest in the lounge. Based on the confidence scale, there was no significant difference between the gym judges in the scale scores compared to the professional group.

Table 8: ANOVA Results by Referees' Decision-Making Style and Self-Confidence Level of Professional Experience

Faktörler	Active Refereeing Time	N	M	S	Source of Variance	Squares Total	SD	Squares Average	F	P	Fark
Factors Rational	1-4 Year	60	4.34	.54	Intergroup	3.021	3	1.510	4.428	.015*	1-2
	5-8 Year	14	3.83	.77	Intergroups	27.629	81	.341			
	9-12 Year	10	4.32	.55	Total	30.650	84				
Intuitive	1-4 Year	60	3.87	.67	Intergroup	.241	3	.121	.261	.771	
	5-8 Year	14	3.99	.60	Intergroups	37.474	81	.463			
	9-12 Year	10	4.00	.81	Total	37.716	84				
Dependent	1-4 Year	60	3.46	.75	Intergroup	.540	3	.270	.484	.618	
	5-8 Year	14	3.27	.71	Intergroups	45.133	81	.557			
	9-12 Year	10	3.30	.76	Total	45.672	84				
Avoidance	1-4 Year	60	2.40	1.05	Intergroup	1.622	3	.811	.832	.439	
	5-8 Year	14	2.42	.95	Intergroups	78.944	81	.975			
	9-12 Year	10	1.98	.48	Total	80.566	84				
Spontaneous	1-4 Year	60	3.19	.81	Intergroup	1.302	3	.651	1.110	.335	
	5-8 Year	14	2.98	.54	Intergroups	47.504	81	.586			
	9-12 Year	10	2.85	.71	Total	48.806	84				
Total of Scale	1-4 Year	60	3.46	.51	Intergroup	.406	3	.203	.865	.425	
	5-8 Year	14	3.31	.46	Intergroups	18.999	81	.235			
	9-12 Year	10	3.30	.34	Total	19.405	84				
Inner Self-Confidence	1-4 Year	60	4.31	.51	Intergroup	.594	3	.297	1.218	.301	
	5-8 Year	14	4.47	.44	Intergroups	19.739	81	.244			
	9-12 Year	10	4.54	.54	Total	20.333	84				
External Self-Confidence	1-4 Year	60	4.27	.57	Intergroup	1.039	3	.520	1.762	.178	
	5-8 Year	14	4.43	.52	Intergroups	23.890	81	.295			
	9-12 Year	10	4.59	.50	Total	24.930	84				
Total of Scale	1-4 Year	60	4.29	.52	Intergroup	.790	3	.395	1.568	.215	
	5-8 Year	14	4.45	.47	Intergroups	20.404	81	.252			
	9-12 Year	10	4.35	.52	Total	21.194	84				

As shown in Table 8, the analysis based on the lower size of the decision style scale showed that saloon umpires differed significantly in their lower dimensions, rationality [F(3.84)=4.428;p <.05], according to active umpiring time. Examining the results of Tukey's test, the scores of the 1-4

year old to 5-8 year old saloon umpires were found to be intermediate in the rationality sub-dimension. On the confidence scale, there was no significant difference between the gym judges in the scale scores compared to the active referee period.

Table 9: Correlation Values for the Relationship between Decision-Making Style and Self-Confidence Scale

Scale	Lower Factors	M	S	1	2	3	4	5	6	7	8	9
Decision Style	1.Rational	4.25	.61	1.00	.36**	.19	-.07	-.01	.42**	.32**	.39**	.37**
	2.Intuitive	3.91	.67		1.00	.36**	.19	.18	.63**	.22**	.13	.17
	3.Dependent	3.41	.74			1.00	.51**	.12	.72**	-.17	-.14	-.16
	4.Avoidance	3.36	.99				1.00	.50**	.77**	-.25*	-.26*	-.27*
	5.Spontaneous	3.12	.77					1.00	.57**	-.09	-.14	-.12
	6.Total of scale	3.42	.48						1.00	-.04	.05	-.05
Self-confidence	7.Inner	4.37	.49							1.00	.88**	.97**
	8.External	4.33	.55								1.00	.97**
	9.Total of scale	4.35	.51									1.00

** p < .01; * p < .05

A look at the data in Table 9 shows that there is a non-negative relationship between decision-making style and salon judges' self-confidence ($r = -.12, p < .05$). Examining the sub-factors, the relationship between intuitive ($r = .36, p < .01$), intrinsic self-confidence ($r = .32, p < .01$) and external self-confidence ($r = .39, p < .01$); between intuitive ($r = .36, p < .01$) and internal self-esteem ($r = .22, p < .01$) under the dependent sub-dimension Avoidant ($r = .51, p < .01$); in the sub-dimension Avoidant, there is a significant relationship between spontaneous ($r = .50, p < .01$) and positive. It was found that there is a significant relationship between the Avoidant sub-internal self-confidence ($r = -.25, p < .05$) and the external self-confidence ($r = -.26, p < .05$) in the negative direction.

Discussion and Result

This study investigated the critical relationships between decision-making and self-confidence levels of salon sports referees, gender, marital status, educational level, age, occupation, and active refereeing time variables.

When examining the decision-making styles of futsal referees based on gender variability, it was found that the rational undersize of female referees was higher than that of male referees; in the sum of heuristic, dependent, evasive, self-support, and scaled scores, male referees performed better than female referees. As for the analysis of the study, it can be said that men who are more determined and play a dominant role in society differ from these characteristics. The study for teachers by Dilmac and Bozgeyikli (2009) [24] found that there is a difference in rational decision-making style. Enterprise and Tukul (2019) concluded that male referees scored higher than female referees in the lower dimension of referee flight in the referee survey. In Yerebatan's (2019) study of basketball referees' decision-making and confidence levels, Dincer (2013) examined sports managers' decision-making levels and found no differences in gender variability. Hansson and Andersen (2007), Vural (2013), Tekkursun-Demir and Arc. (2018) [37, 57, 23] there were no differences in their studies regarding the gender variable.

There was no statistical difference when examining the decision-making style of futsal referees as a function of the marital status variable. Ghareeb and Kaya (2022) concluded that there was no difference when examining the decision-making styles of football players as a function of marital status.

When the decision-making styles of futsal referees were examined according to the variable of educational status, it was found that the evasive and spontaneous referees with lower educational attainment scored higher than the referees with higher educational attainment. Iron-Monothest's (2018) study found that high school students scored higher than university students on rational and dependent decision-making styles. Enterprise and Buryel (2019) concluded that arbitrators with a careful subdimensional degree scored higher than judges with a bachelor's degree in education in research on arbitrators' decision-making characteristics. Ghareeb and Kaya (2022) concluded that there was no difference in the decision-making methods of football players and their study of Moon's (2018) ice hockey athletes based on education status.

No statistical differences were found when the decision-making styles of futsal referees were examined based on the age variable. Rule (2013) In his study of the decision-making styles of climbers, in his study of the decision-making style in Monochrome-Iron (2018) athletes, in his study of the

decision-making styles of Uzunoglu *et al.* (2009) football referees, no differences were found.

When the decision-making styles of futsal referees were examined according to the occupational variable, higher values were found for the rational undersized than for the officers, abstainers, and self undersized.

When the decision-making styles of futsal referees were examined at the rational sublevel using the active referee experience variable, those who had been active referees for 1-4 years were found to have higher scores than those who had refereed for 5-8 years. Enterprise and Tukul (2019) concluded that referees who had been active for less than 5 years had higher scores than those who had been active for more than 6 years and took refuge in examining the decision-making characteristics of referees. Sky *et al.* (2016) concluded in their study of leisure time evaluation that football referees can make clear decisions with increasing length of time in refereeing. Rainey and Hardy's (1999) stress research concluded that young referees had elevated levels of anxiety prior to competition and had difficulty making decisions.

When the self-confidence of futsal referees was examined based on the gender variable, there was no statistical difference. Bostanci *et al.* (2016) in their study on PE students, Bash- *et al.* (2016) in their study on self-esteem of football referees, Right (2017) in their study on self-esteem of PE students, and Bostanci *et al.* (2018) in their study of mountaineers' self-esteem concluded that there was no difference in gender variability. In their study of the self-esteem of individuals who do and do not participate in sports, Vascar and Flying (2021) concluded that men scored higher than women. In their (2018) study of individuals who participate in sports, they concluded that men score higher than women.

When the self-confidence of futsal referees was examined as a function of the variable marital status, there was no statistical difference. Vascular and Flying (2021) concluded that married individuals scored higher than single individuals when they examined the self-esteem of individuals who participate in sports and those who do not. Cetinkaya (2015), in his study on the identity of athletes in team sports, concluded that the scores of married athletes were higher. Kaya and Tuncel (2021), in their study on team sports referees, concluded that married referees scored higher on average and lower on scale dimensions than single referees. In Aksoy's (2019) and Yerebatan's (2019) studies, they also concluded that married individuals scored higher on average than single individuals.

When examining the self-esteem of futsal referees based on the variable of educational status, it was found that referees who graduated from the internal lower level of the scale and the overall scale scored higher than those who graduated from high school. Kaya and Tuncel's (2021) study of team sports referees concluded that the mean scores of self-esteem and external self-esteem were lower than those of associate and undergraduate graduates. Aksu (2017) concluded that there was a significant difference when examining self-esteem of football referees.

When the self-esteem of futsal referees was examined according to the age variable, there was no statistical difference. When examining the self-esteem of individuals who do and do not participate in sports, Vascar and Flying (2021) concluded that individuals aged 21-29 scored higher than individuals aged 30-41. Goekkaya and Harvester (2017) concluded that there was no difference in self-esteem of elite boxers by age group. Bostanci *et al.* (2018) concluded that

there was no difference in climbers' self-esteem work. Acuner (2012) concluded in his study of dance athletes that individuals in the younger age group scored higher than individuals in the 45-50 age group.

When the self-confidence of futsal referees was examined according to the occupational variable, there was no statistical difference.

When the self-confidence of futsal referees was examined by the active referee time variable, there was no statistical difference. Kaya and Tuncel's (2021) study on team sports referees concluded that the self-confidence of C and A category referees was higher than that of provincial referees on average. Yerebatan (2019) concluded in her study that there were no differences based on professional experience among basketball referees.

In the study, the decision-making styles of futsal referees differed according to gender, educational status, profession, professional experience, and there was no difference in marital status and age. When looking at the self-confidence scale, it was found that there was a difference in education and there was no statistical difference in gender, marital status, occupation, age, and work experience. The result is that futsal referees have a relationship that is not meaningful in a negative direction. It was found that the relationship was positive in the study of self-confidence and decision-making level of football referees in Bairo, Duman, Akcakoyun & Black Sea (2016), while Caspian *et al.* (2018) found a meaningful relationship in the study of decision-making level and mental level of individual and team athletes.

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