ORIGINAL ARTICLE

Examination of Decision-Making Levels of Individual Sports Persons (Table Tennis Example)

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ABSTRACT

Aim: This study is to determine how the decision-making levels of individuals who play table tennis in Kyrgyzstan are shaped.

Material and Methods: Scanning method was used in this study. This study has a descriptive and inferential nature. The study group of this research consists of 369 participants, 168 women and 201 men, who played table tennis in Kyrgyzstan in 2020. The study was shaped on the basis of voluntary participation criteria. In this study, a personal information form prepared by the researcher and a Decision Making Scale were used to collect data. Personal information form; Gender, age, education level, how many years have you been a licensed athlete, monthly income level, place of residence, profession and do you have any harmful habits? In addition, in order to determine the decision-making levels of the participants; The decision making scale (MDMS I-II) prepared by Mann et al. (1998) and adapted into Turkish by Deniz (2004) was used. The obtained data were transferred to the computer environment and evaluated with the SPSS 21.0 statistical program.

Results: There is no significant difference in the decision-making levels of the table tennis players participating in the study in terms of gender, year of sport, education level, monthly income level and profession, but it was concluded that there was a significant difference in the do you have any harmful habits? variable.

Conclusion: It has been concluded that the variables of gender, year of sport, education level, monthly income level and profession are not the determining factors of the decision-making levels of table tennis players.

Keywords: Table tennis, Sports, Decision making.

INTRODUCTION

Decision making is one of the important life skills. While appropriate and timely decisions cause positive changes in the life of the individual, erroneous decisions can affect life negatively. Decision-making skills include both making choices and taking responsibility at the end of this choice. Because a person has to face the consequences of his decision. Decision-making is affected by both emotional and cognitive features^{1,2,3}.

Decision making; It is the whole of resources, opportunities, tools, techniques and methods that can enable institutions or individuals to reach their goals and objectives. In summary, it expresses a preference and decision-making process³. The choice made by the administrators or a person who is not an administrator in a matter is expressed as a decision. Therefore, it is seen that the concept of decision is closely related to adopting, taking a stand, preference, and choosing. As a result of the decision maker's thinking about the issue, the way he sees as a solution or remedy is his decision. Right or wrong, good or bad, making a decision means making a choice. Indecision means not being able to make a choice, not being able to decide. But management is a decisionmaking job. Therefore, a person who cannot make a decision will not be able to act as a manager³.

Every person reacts differently to a decision-making situation. Decision-making style is different for each individual, and it is a situation that includes the habits of the individual, his approach and the action in which he exhibits his reactions. In the decision-making situation, the individual is based on their decision-making styles⁴.

It is possible to count the qualifications of the decision makers, the information about the decision to be made by the decision makers, and the purpose of the decision among the factors that affect the decision-making action. In general, it is possible to count two groups in which there are instant decisions and the decisions made at the end of the processes. Decisions made in daily pursuits that are not even aware of are instantaneous. While there is mostly stress and time pressure when making instant decisions, it is possible to say that there is less stress in the decisions made as a result of the decision-making process. In the right and wise decisions, the best among different options is chosen⁵.

The concept of decision making is explored by many scientific fields. According to Glovich, the sports field is the most appropriate field for the examination of decision-making studies⁶.

Today, the games played in many sports, the exercises, the warm-up methods applied before the competition have taken a rapid shape based on tactics^{7,8,9,10}. In sports, the decisions made by the referees and trainers as well as the athletes can affect the course of the game. For this reason, the decision of the athlete in critical situations changes the game.

It is also of great importance which style the athlete applies during the decision making during the competition. Which of the decision-making styles is used, the results of the decisions and the result of the competition are concrete indications that only the physical characteristics or capacity of the athlete will reach a certain point in the branch¹¹.

The aim of this study is to determine how the decision-making levels of individuals who play table tennis are shaped.

MATERIAL AND METHODS

Research Design: The research is descriptive in nature and the decision-making levels of table tennis players were

examined. In this study, the model of the research was created by considering the "screening model". Screening models are research models that aim to identify a condition that has existed in the past or present in the way that it has. The event, person, or object that is the subject of the research is tried to be depicted in its own conditions and as it is. There is no purpose to change or affect these conditions in any way¹².

Study Group: The study group of this research consists of 369 participants, 168 women and 201 men, who played table tennis in Kyrgyzstan in 2020.

Data Collection Tools: In order to determine the demographic characteristics of the university students participating in the study, the "Personal Information Form" developed by the researcher was used. This form; gender, education level, how many years have you been a licensed athlete, monthly income level, profession and do you have any harmful habits? consists of questions.

The 'decision-making scale' used in the research; It was prepared by Mann, Burnett, Radford, and Ford with reference to the Flinders Decision-Making Scale I-II. Mann et al. (1998) comparatively examined six countries in terms of MDMS I-II13. Adaptation of MDMS I-II into Turkish, validity and reliability analyzes were carried out by Deniz¹⁴. The aim of the MDMS-I is to determine the self-esteem (self-confidence) levels of the participants in the decisionmaking stages. There are 6 items in total in the scale, and the statements are 3-point Likert type. Also, 2nd-4th-6th items were coded in reverse. In determining the scores obtained from the scale, the "Correct" answer given to the statements is 2 (two), the "Sometimes True" answer is 1 (one), and the "Not True" answer is 0 (zero). The highest score that can be obtained from this scale is 12 (twelve), and high scores mean that the individual's self-esteem level in decision making is high. The MDMS-II consists of 22 items in total and is used to determine the decision-making styles of individuals. In determining the scores obtained from the scale, the "Correct" answer given to the statements is 2 (two), the "Sometimes True" answer is 1 (one), the answer "Not True" is 0 (zero), and the expressions are 3-point Likert type statements. This scale consists of 4 sub-dimensions14:

1 Careful Decision-Making Style: It is the state of making the decision after the person tries to find what is necessary before reaching a decision and considers the situations that can create another alternative. This subdimension consists of 6 items, item numbers; It is 2-4-6-8-12-16. There is no reverse item in the sub-dimension.

2 Avoidant Decision-Making Style: It covers issues such as individuals exhibit avoidant behaviors during a decisionmaking phase and refrain from making decisions, leaving the decision-making processes to someone else, and not taking responsibility. This sub-dimension consists of 6 items, item numbers; It is 3-9-11-14-17-19.

3 Postponing Decision-Making Style: It is the continuous postponement, procrastination and delay of a decision that should be taken without giving an excuse. This sub-dimension consists of 5 items and item numbers are 5-7-10-18-21.

4 Panic Decision Making Style: It is the effort to reach a solution as soon as possible by making hasty actions due to the feeling of pressure in various ways (time, space, etc.) when the person remains in a decision-making position. This sub-dimension consists of 5 items and item numbers are 1-13-15-20-22.

The reliability study of MDMS I-II was done with the contribution of Deniz¹⁴, and the reliability of the scale was investigated with internal consistency and test-retest methods. As a result of the test-retest measurement of the scale, the Cronbach Alpha reliability coefficient of the scale was found to be r=0.760 and it was determined to be reliable.

Analysis of the Data: In order to provide descriptive information about the individuals participating in the study, the data of the study were evaluated in the SPSS 21 program. In order to determine the type of analysis suitable for the analysis of the data, first of all, the normality test (Kolmogorov-Smirnov test) was performed and it was determined whether they were homogeneous or not. Since the data of the study showed a normal distribution enough to apply parametric test, t-test (independent sample) for pairwise comparisons and one-way analysis of variance (ANOVA) for multiple comparisons were used. In statistical analysis, the level of significance was chosen as p<0.05.

Results

The data obtained from the research group were analyzed and presented in tables below.

		Gender	Ν	Mean	SS	sd	t	Р
	Careful Decision Making	Female	168	8,6254	2,46168	267	1,383	0.16
		Male	201	8,6546	2,13553	307		0,10
	Avoidant Decision Making	Female	168	8,7224	2,22368	267	1,281	0,27
		Male	201	8,6876	2,31753	307		
_	Postponing Decision Making	Female	168	9,6131	2,20214	267	-,449	0,65
لم. الم		Male	201	9,7214	2,39416	307		
N	Panic Decision Making	Female	167	9,4790	2,39939	267	-,281	0.77
μ		Male	201	9,5522	2,56291	307		0,77
		Female	168	10,7440	1,75778	267	2 276	0.01
	INIDINIS-I	Male	201	10,3085	1,75054	307	2,370	0,01

Table 1: The results of the analysis conducted to compare the scores of the participants from the MDMS-I and MDMS-II scales according to the gender variable.

P<0.05, MDMS-I/II; Melbourne Decision Making Scale-I/II

When the table is examined, there is no significant difference between the sub-dimensions of the MDMS-II

scale and the gender variable (p>0.05). However, there is a significant difference between the MDMS-I scale and the

gender variable (p<0.05). This difference is in favor of female participants. In other words, the self-esteem (self-

confidence) of the women participating in the study was higher than that of the men.

Table 2: The results of the analysis conducted to compare the scores of the participants from the MDMS-I and MDMS-II scales according to the education level variable.

		Education Level	Ν	Mean	SS	df	F	Р	Group Difference
		Middle School ¹	114	8,4474	2,30080				
	Careful Decision Making	High school ²	62	9,6129	2,80137	2	6,376	0,00	3>2,1
	_	University ³	193	10,4404	2,22388				
		Middle School	114	12,1140	2,43048				
	Avoidant Decision Making	High School	62	11,8871	2,92028	2	0,652	0,52	
MDMS		University	193	12,3057	2,59904				
11	Postponing Decision Making	Middle School	114	9,5263	2,59411				
		High School	62	9,6613	2,41541	2	0,373	0,68	
		University	193	9,7617	2,08796				
	Panic Decision Making	Middle School	114	9,1667	2,58969				
		High School	61	9,4590	2,46017	2	1,977	0,14	
	_	University	193	9,7461	2,42014				
		Middle School ¹	114	10,6316	1,72572				
	MDMS-I	High School ²	62	10,9194	1,79524	2	3,339	0,03	3>2,1
		University ³	193	11,3005	1,75679				

P<0.05, MDMS-I/II; Melbourne Decision Making Scale-I/II

Table 3: The results of the analysis made to compare the scores of the participants from the MDMS-I and MDMS-II scales according to the income level variable

		Income	Ν	Mean	SS	df	F	Р
	Careful Decision Making	Low	106	8,4057	2,25422			
		Middle	146	8,8630	2,47367	2	1,196	,304
	-	Good	117	8,5726	2,39005			
		Low	106	12,0755	2,50978			
	Avoidant Decision Making	Middle	146	12,1301	2,45023	2	,292	,747
		Good	117	12,3248	2,87327			
	Postponing Decision Making	Low	106	9,6792	2,30340			
		Middle	146	9,7329	2,34091	2	,125	,882
_		Good	117	9,5897	2,28244			
<u>г</u>		Low	106	9,7358	2,50448			
Ŵ	Panic Decision Making	Middle	146	9,3288	2,55183	2	,845	,430
M		Good	116	9,5603	2,38943			
		Low	106	10,6604	1,64974			
	MDMS- I	Middle	146	10,4726	1,80496	2	,602	,548
		Good	117	10,4103	1,82016			

P>0.05, MDMS-I/II; Melbourne Decision Making Scale-I/II

Table 4: The results of the analysis conducted to compare the scores of the participants from the MDMS-I and MDMS-II scales according to the LSY variable.

		LYS	N	Mean	SS	df	F	Р
		1-3	169	8,4675	2,36551		,807	,490
II-SMOM	Careful Decision Making	4-6	96	8,8646	2,47352	2		
	_	7-9	50	8,9000	2,16889	3		
		10 +	54	8,5370	2,50066			
		1-3	169	12,4201	2,36186			
	Avaidant Decision Making	4-6	96	12,0625	2,63903			
II-SMDM	Avoidant Decision Making	7-9	50	12,2200	2,83772	3	1,530	,206
		10 +	54	11,5741	2,97538			
	Postponing Decision Making	1-3	169	9,7811	2,04255			
		4-6	96	9,2917	2,39700	3	2,356	,072
		7-9	50	10,2800	2,77040			
		10 +	54	9,4444	2,36856			
_		1-3	169	9,4911	2,52162			
<u>'</u>	Dania Dagigian Making	4-6	95	9,2000	2,26255	3	1,222	,301
II-SMDM	Panic Decision Making	7-9	50	9,9600	2,70268			
ШШ		10 +	54	9,7593	2,53232			
		1-3	169	10,4260	1,66427			
		4-6	96	10,5104	1,80055		,373	,772
MD		7-9	50	10,7200	1,99018			
		10 +	54	10,5556	1,81884			

P>0.05, MDMS-I/II; Melbourne Decision Making Scale-I/II, LSY; Licensed sports year

When the table is examined, there is a significant difference between the MDMS-II scale sub-dimensions and the education level variable (p<0.05). This difference is only in favor of the participants with careful decision making sub-dimension and university level education. In other words, individuals with university-level education have the ability to make more careful decisions than individuals with secondary and high school education. In addition, there is a significant difference between the MDMS-I scale and the education level variable (p<0.05). This difference is in favor of the participants with a university education level. In other words, the self-esteem (self-confidence) of the individuals participating in the study was higher in participants with

university education.

When the table is examined, there is no significant difference between the sub-dimensions of the MDMS-I scale and MDMS-II scale and the income variable (p>0.05). In other words, the income level is not an important phenomenon in the self-esteem and decision-making processes of the participants.

When the table is examined, there is no significant difference between MDMS-I scale and MDMS-II scale subdimensions and LSY variable (p>0.05). In other words, LSY does not reveal a significant effect on influencing participants self-esteem and decision-making processes.

Table 5: The results of the analysis conducted to compare the scores of the participants from the MDMS-I and MDMS-II scales according to the profession variable.

		Profession	Ν	Mean	SS	df	F	Р
	Careful Decision Making	Public Employee	65	8,4462	2,37849			
		Self Employment	244	8,7459	2,44128	2	,716	,489
		Private Sector	60	8,4167	2,17296			
	Avoidant Decision Making	Public Employee	65	12,5077	2,40522			
		Self Employment	244	12,0902	2,53374	2	,660	,518
		Private Sector	60	12,1667	3,06520			
	Postponing Decision Making	Public Employee	65	9,6154	2,64984			
		Self Employment	244	9,6967	2,19760	2	,042	,959
_		Private Sector	60	9,6333	2,37905			
لم. الم	Panic Decision Making	Public Employee	65	9,9538	2,63053			
No.		Self Employment	244	9,4139	2,46222	2	1,222	,296
W		Private Sector	59	9,4746	2,41658			
		Public Employee	65	10,1846	1,77564			
	MDMS- I	Self Employment	244	10,5902	1,79048	2	1,359	,258
		Private Sector	60	10,5167	1,63118			

P>0.05, MDMS-I/II; Melbourne Decision Making Scale-I/II

When the table is examined, there is no significant difference between the sub-dimensions of the MDMS-I scale and the MDMS-II scale and the variable of occupation (p>0.05). In other words, the professions of the participants do not have a significant effect on influencing their self-esteem and decision-making processes.

Table 6: The results of the analysis conducted to compare the scores of the participants from the MDMS-I and MDMS-II scales according to the variable of using harmful habits.

		Bad Habits	Ν	Mean	SS	df	t	Р
	Careful Decision Making	Yes	131	8,9084	2,38085		1 507	100
		No	238	8,4916	2,38268		1,567	,109
	Avoidant Decision Making	Yes	131	12,0382	2,48505		570	451
		No	238	12,2521	2,66789		-,570	,451
_	Postponing Decision Making	Yes	131	9,6947	1,98026		120	000
<u>-</u> '		No	238	9,6597	2,47130		,139	,009
N	Panic Decision Making	Yes	131	9,2901	2,26847		1 2 2 7	100
W		No	237	9,6456	2,59581		1,327	,190
		Yes	131	10,7710	1,86286		2 507	022
	MDM3-1	No	238	10,3613	1,69502		2,597	,033

P>0.05, MDMS-I/II; Melbourne Decision Making Scale-I/II

When the table is examined, there is no significant difference between the MDMS-II scale sub-dimensions and the variable of using harmful habits (p>0.05). However, there is a significant difference between the MDMS-I scale and the harmful habit variable (p<0.05). This difference is in favor of the participants who answered yes to the question "Do you have any harmful habits?" In other words, the selfesteem of the individuals who participated in the study and stated that they used harmful habits was higher than those who did not.

DISCUSSION

The research conducted is evaluated in the light of the literature information according to the variables taken into consideration.

It was concluded that there was a significant difference in the research group according to the gender variable, and this difference was in favor of the female participants. As a matter of fact, Taşgit¹⁵ found that there was a significant difference between the level of self-

esteem and gender in decision-making in his research titled "Examination of self-esteem and decision-making levels of university students". Köse¹⁶ stated that individuals sense of self-esteem stems from their self-confidence. Accordingly, the fact that female students' self-esteem levels are higher than male students can be explained by the fact that women feel free when making decisions, and that they feel confident in expressing what they think to the other party in a comfortable way.

It was concluded that there was a significant difference according to the education level variable of the research group, and this difference was in favor of the participants with a university level education level and in the decision-making sub-dimension. Aksu^{17,23,24}, in his study with referees, found no difference with the education level in the careful and impressive decision-making subgroups, while a significant difference was found in the avoidant and panic decision-making sub-dimensions. When the decision-making scale scores are examined in terms of educational status; It was conducted in studies that concluded that there was no significant difference in the rational-systematic, impulsive, dependent, unstable subscales^{18,19,20,25,26}

It was concluded that there was no significant difference according to the income level variable of the research group. When the literature is examined, it has been determined that there is a difference in the avoidant and panic decision-making styles, and it has been revealed that the decision-making scores increase as the income level increases^{17,21}. Although these results are in parallel with our study, there is a difference in the intuitive decision making sub-dimension. It has been observed that different findings have been found in the studies carried out. In terms of economic income; only in the impulsive decision making subscale, studies that reached significant findings in favor of those with low income were also found in the literature²⁰.

There is no significant difference according to the licensed sporting variable of the research group. When the literature is examined, it has been reported that there is no significant relationship between the years of refereeing and decision-making styles^{17,20}. In some studies; Although there are differences in decision-making levels, it has been stated that there is a significant difference in sub-dimensions²².

CONCLUSION

It was concluded that there was no significant difference between the profession variable of the research group. However, Uzunoğlu²¹, unlike the result of our research, in his study on football referees, according to occupational groups in terms of self-esteem in decision making; It has been determined that there is a significant difference between worker referees and self-employed, civil servants, teachers and other professional referees.

It was concluded that there was no significant difference between the variable of using harmful habits of the research group. However, it was concluded that there was a significant difference between the MDMS-I scale and the harmful habit variable, and this difference was in favor of the participants who answered yes to the question "Do you have any harmful habits?" In other words, the selfesteem of the individuals who participated in the study and stated that they used harmful habits was higher than those who did not.

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