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AN INVESTIGATION INTO THE OPENINGS USED BY TOP 100 CHESS PLAYERS

ABSTRACT

The aim of study is an investigation into the openings used by top 100 chess players. The chess games (n=2046) that 70 players, who took part in Top 100 list, played during January-April 2006 period were examined. The frequencies and percentages of the openings used were calculated. Separating the chess players into five different age groups, the frequency values and percentages of the openings they used, and the winning, defeating, and drawing were calculated using the Chi-Square Test and evaluated statistically. In conclusion, it can be claimed that Top 100 players prefer Semi-Open Games most; the winning, defeating, and drawing percentages change depending on the increasing age and the kinds of openings played; and the best opening is Caro-Kann for Whites, French Defence for Blacks, and Petrof's Defence for a draw.

Keywords: Chess Players, Opening, Sports, Tactics

TOP 100'DE YER ALAN SATRANÇ OYUNCULARININ AÇILIŞLARININ İNCELENMESİ

ÖZET

Çalışmanın amacı, top 100'de yeralan satranç oyuncularının uygulamış oldukları açılışları incelemektir. Top 100'de yer alan 70 satranç oyuncusunun oynamış oldukları Ocak-Nisan 2006 tarihleri arasındaki satranç maçları incelendi. Satranç oyuncularının ortalama yaş ve ELO hesaplandı, ülkelere göre sporcu sayısı ve uygulanan açılışların frekansları ve % değerleri çıkartıldı. Satranç oyuncuları 5 farklı yaş grubuna ayrılarak, uygulamış oldukları açılaş türleri ile galibiyet, mağlübiyet ve beraberliklerin frekansları ve % değerleri çıkartılarak istatistiksel olarak Chi-Square Testi ile değerlendirildi. Sonuç olarak, Top 100'de yer alan satranç oyuncularını açılış türlerinden en fazla "Yarı Açık Oyunlar" tercih ettiklerini, yaşla ve oynanan açılış türlerine göre, galibiyet, mağlübiyet ve beraberlik yüzdeleri değiştiğini, beyazlar için en iyi açılış "Caro-Kann", siyahlar için en iyi açılış Fransız Savunması, beraberlik için ise en iyi "Petrof Savunması" olduğunu söyleyebiliriz.

Anahtar Kelimeler: Satranç Oyuncuları, Açılışlar, Spor, Taktik

1. INTRODUCTION (GİRİŞ)

Chess is an ancient game that is popular all over the world. Chess requires high-level thinking skills (e.g., strategy building, problem solving, and spatial thinking) and improves the ability to concentrate. In addition, it provides motivation, independent critical thinking, an increased understanding of cause-effect relationships, patience, and self-reliance [1, 2, 3, 4, 5, and 6]. For example, Frank and D'Hondt [7] found a statistically significant correlation between the ability to play chess well and spatial, numerical, administrative-directional, and paperwork abilities. Frank and D'Hondt [7] also found that learning chess had a positive influence on the development of both numerical and verbal aptitudes.

The first moves of a chess game are termed the "opening" or "opening moves". A good opening will provide better protection of the King, control over an area of the board (particularly the center), greater mobility for pieces, and possibly opportunities to capture opposing pawns and pieces. The possible opening moves of chess have been extensively studied for hundreds of years, and many of these sequences have been given names to simplify discussion of a game [8]. In Chess, knowledge of the moves and how to play under certain given conditions is equivalent to acquiring a vocabulary in a language, and the syntax may be said to be the study and analysis of the Openings, which we have therefore reserved for a later stage, by which time the student will be better equipped for the task of making himself conversant with the subtleties and beauties of the many and complex variations in the different Chess Openings [9].

Aims of the Opening: Although a wide variety of moves are played in the opening, the aims behind tem are, broadly speaking, the same. First and foremost, the aim is to avoid being checkmated and avoid losing material, as in other phases of the game. However, assuming neither played makes a blunder in the opening, the main aims include;

- Development,
- Control of the center,
- Kings safety,
- Pawn weakness.

Apart from these ideas, other strategic plans used in the middlegame may also be carried out in the opening. These include preparing pawn breaks to create counterplay, creating weaknesses in the opponent's pawn structure, seizing control of key squares, making favourable exchanges of minor pieces (e.g. gaining the bishop pair), or gaining a space advantage, whether in the centre or on the flanks. In more general terms, many writers [10] have commented that it is White's task in the opening to preserve and increase the advantage conferred by moving first, while Black's task is to equalize the game. Many openings, however, give Black a chance to play aggressively for advantage from the very start. According to IM Jeremy Silman [11], the purpose of the openings is to create dynamic imbalances between the two sides, which will determine the character of the middlegame and the strategic plans chosen by both sides. For example, in the Winawer Variation of the French, White will try to use his bishop pair and space advantage to mount an attack on Black's kingside, while Black will seek simplifying exchanges (in particular, trading off one of White's bishops to blunt this advantage) an counterattack against the weakened pawns on White's queenside.

Classification of Chess Openings;

- Open Games: 1.e4 e5,
- Semi-Open Games: 1.e4, Black plays something other than 1..e5,
- Closed Games: 1.d4 d5,

- Indian Systems: 1.d4 Nf6,
- Other Black responses to 1.d4,
- Flank Openings: including English, Reti, Bird's, and White fianchettoes [12, 13, 14, 15, and 16]

The aim of the our study is an investigation into the openings used by top 100 chess players.

2. RESEARCH SIGNIFICATION (ARAŞTIRMANIN ÖNEMİ)

Since the beginning of the sixteenth century, Chess theory has been the subject of intense investigation. The majority of these studies have been dedicated to the Chess Openings. Since these opening moves will eventually determine the course of the game, it is understood that the first moves are those of greater importance. By playing through the moves of famous Openings, you can see how the plans and action of the middlegame are shaped by decisions taken in the early stages of the game. In chess, a winning game plan starts with the first move. The objective in the opening of a chess game is to reach a good position. Although a wide variety of moves can be played in the opening, the aims behind tem are, broadly speaking, the same. First and foremost, the aim is to avoid being checkmated and avoid losing material, as in other phase of the game. However, assuming neither player makes a blunder in the opening, the main aims include: development, control of the center, king safety, pawn weaknesses. Statistics in this study show the percentages of games won by white and black and the amount of games drawn from 2046 matches played by top 100 Chess Players for 42 of the Chess openings. This study should give you a good idea of what openings and variations are the most successful for white and black. There is also a written summary below the table that summaries all the best and worst variations for the openings in the table. As well as that there are lists of the top 10 best and worst openings for white and black and the most and least drawish openings. This is a summary of what the best and worst variations and moves to play are from the table above. Both the best chess players and young chess players should use result from this study.

3. METHOD (YÖNTEM)

The sample of our study was composed of the chess games that Top 100 Players, who took part in April 2006 rating list, played during the year 2006. April Top 100 list was obtained at http://www.fide.com [17] web page, and from http://www.chesslive.de/ searchplayer.htm [18] web site, the chess games that 70 players, who took part in Top 100 list, played during January-April 2006 period were examined. The average ages and ELOs of both the players, who took part in Top 100 list, and the ones, who were included in the scope of the present study, the number of the players according to the countries, and the frequencies and percentages of the openings used were calculated. Separating the chess players into five different age groups, the frequency values and percentages of the openings they used, and the winning, defeating, and drawing were calculated using the Chi-Square Test and evaluated statistically. $p < 0.05$ was taken as the significance level. The best 10 openings (Based on White Win % minus White Defeat %, Based on White Win % minus Black Win %) were determined for Whites and Blacks, and the best 10 openings were found, which take the most frequent drawing.

4. FINDINGS AN DISCUSSION (BULGULAR VE TARTIŞMA)

Means, frequency, percentage and inter-group differences regarding the data obtained from the 2046 chess games which played by Top 100 Chess Players are presented in Table 1-11.

Table 1. The mean, minimum and maximum age and
ELO of the chess players
(Tablo 1. Satranç oyuncularının ortalama, minimum, maximum
ELO ve yaş değerleri)

Parameter	Statistics	Players, the openings used by whom were investigated (n=70)	Top 100 (n=101*)
ELO	Mean	2667	2664
	SD	38,2	39,3
	Min	2618	2616
	Max	2804	2804
	Skewness	1,2	1,3
AGE	Mean	28,9	31
	SD	6,9	9,1
	Min	16	16
	Max	46	58
	Skewness	0,4	0,8

*: Because 100. and 101. Chess Plaers there are equal ELO in the Top 100 List there are 101 Chess Players

According to Table 1, the average age and ELO of players taking part in TOP 100 and players, the openings used by whom were investigated in the present study, taking part in Top 100 respectively 31 years and 28,9 years, 2664 ELO, 2667 ELO.

Table 2. The chess players distribution according age groups
(Tablo 2. Satranç oyuncularının yaş gruplarına göre dağılım oranları)

AGE GROUP	Players, the openings used by whom were investigated (n=70)		Top 100 (n=101*)	
	F	%	F	%
<20	8	11,4	9	8,9
21-30	34	48,6	46	45,5
31-40	24	34,3	31	30,7
41-50	4	5,7	15	14,9
Total	70	100,0	101	100,0

According to Table 2, The age groups percentile of the players taking part in Top 100 Players April 2006 rating like this; 8,9% of them are below 20, 45,5% of them are 21-30 years old, 30,7% of them are 31-40 years old, and 14,9% of them are 41-50 years old. The age groups percentile of the players, the openings used by whom were investigated in the present study like thus 11,4% of them are below 20, 48,6% of them are 21-30 years old, 34,3% of them are 31-40 years old and 5,7% of them are 41-50 years old.

Table 3. Countries and player distribution according continents
(top 100 list)
(Tablo 3: Top 100'de yeralan oyuncularının ve ülkeleri kıtalara göre
dağılımları)

Parameter	N	Europe	Asia	North America	South America	Total
	%					
Countries	N	22	9	2	2	35
	%	62%	26%	6%	6%	100%
Player	N	67	24	8	2	101
	%	66%	24%	8%	2%	100

According to Table 3, the players taking part in Top 100 Players April 2006 rating according to continent like thus, 66% of Europe, 24 of Asia, 8% of North America and 2% of South America. The countries distribution According to continents like thus 62% Europe, 26% Asia, 6% North America and South America.

Table 4. Chess players distribution according countries
(Tablo 4. Satranç oyncularının ülkelerine göre dağılımları)

No	Countries TOP 100	F	%	No	Countries N=70	F	%
1	Russia	22	21,8	1	Russia	18	25,7
2	Ukraine	8	7,9	2	Ukraine	8	11,4
3	France	6	6,0	3	France	6	8,6
4	USA	6	5,9	4	USA	4	5,7
5	Bulgaria	4	4,0	5	Bulgaria	4	4
6	Armenia	4	4,0	6	Armenia	3	4,3
7	Israel	4	4,0	7	Israel	3	4,3
8	Netherlands	4	4,0	8	Hungary	3	4,3
9	Azerbaijan	3	3,0	9	Georgia	3	4,3
10	Hungary	3	3,0	10	Azerbaijan	2	2,9
11	India	3	3,0	11	India	2	2,9
12	Georgia	3	3,0	12	Moldova	1	1,4
13	China	3	3,0	13	Germany	1	1,4
14	England	2	2,0	14	Czech Rep.	1	1,4
15	Spain	2	2,0	15	Cuba	1	1,4
16	Cuba	2	2,0	16	Poland	1	1,4
17	Poland	2	2,0	17	Turkey	1	1,4
18	Turkey	2	2,0	18	Belarus	1	1,4
19	Romania	2	2,0	19	Switzerland	1	1,4
20	Kazakhstan	2	2,0	20	Romania	1	1,4
21	Uzbekistan	1	1,0	21	Kazakhstan	1	1,4
22	Moldova	1	1,0	22	Slovakia	1	1,4
23	Belarus	1	1,0	23	Denmark	1	1,4
24	Germany	1	1,0	24	Netherlands	1	1,4
25	Slovenia	1	1,0	25	Uzbekistan	1	1,4
26	Switzerland	1	1,0				
27	Brazil	1	1,0				
28	Germany	1	1,0				
29	Czech Rep.	1	1,0				
30	Iceland	1	1,0				
31	Slovakia	1	1,0				
32	Philippines	1	1,0				
33	Norway	1	1,0				
34	Peru	1	1,0				
35	Denmark	1	1,0				
Total		101	100,0		Total	70	100

According to Table 4, there are total 35 countries in Top 100 list. Russia, Ukraine, France and USA are the countries having most players in number in this list with 22, 8, 6, and 6 players respectively. Players (n=70), the openings used by whom were investigated are from 25 countries. Russia, Ukraine, France are the countries having most players in number in this list with 22, 8, and 6 players respectively.

Table 5. The openings used by top 100 chess players (N=70)
(Tablo 5. Top 100'de yeralan satranç oyuncularının oynamış oldukları açılışlar)

No	Opening	F	%	No	Opening	F	%
1	Sicilian defence	476	23,3	22	Torre, London and Colle System	14	,7
2	Queen's Gambit	326	15,9	23	Philidor's Defence	12	,6
3	Ruy Lopez/Spanish Game	252	12,3	24	Four Knight's defence	12	,6
4	Queen's Indian Defence	124	6,1	25	King's Indian Attack	11	,5
5	French Defence	114	5,6	26	Trompovsky Attack	9	,4
6	English Opening	108	5,3	27	Pirc Defence	8	,4
7	Nimzo Indian	82	4,0	28	Ponzianni's Opening	6	,3
8	Petrof's Defence	74	3,6	29	Queen's Indian / Nimzo Indian hybrid	5	,2
9	King's Indian	72	3,5	30	Bishop's Opening	5	,2
10	Caro-Kann	59	2,9	31	Rety's Opening	4	,2
11	Grunfeld Defence	53	2,6	32	Alekhine Defence	3	,1
12	Benoni defenci	50	2,4	33	Benko Gambit	3	,1
13	Catalon	26	1,3	34	Old Indian Attack	2	,1
14	Dutch Defence	19	,9	35	Alpin Counter Cambit	2	,1
15	Bird's Opening	18	,9	36	Vienne Game	2	,1
16	Irregular Openings	16	,8	37	Versov Opening	1	,0
17	Scandinavian Defence	15	,7	38	Budepest Gambit	1	,0
18	Scotch Game	15	,7	39	Colle System	1	,0
19	Giucco Piano/Italian Game	15	,7	40	Hungarian defence	1	,0
20	Modern Defence	14	,7	41	Larsen Opening	1	,0
21	Bogo Indian defence	14	,7	42	Blumenfeld Gambit	1	,0
Total (N)				2046			

According to Table 5, From among the 2046 games investigated in this study, the most frequently played 10 openings were as follows respectively: Sicilian defence (n=476; 23,3%), Queen's Gambit (n=326; 1,9%), Ruy Lopez/Spanish Game (n=252; 12,3%), Queen's Indian Defence (n=124; 10,1%), French Defence (n=114; 5,6%), English Opening (n=108; 5,3%), Nimzo Indian (n=82; 4%), Petrof's Defence (n=74; 3,6%), King's Indian (n=72; 3,5%), and Caro-Kann (n=52; 2,9%). But, the least frequently played openings were Versov Opening, Budepest Gambit, Colle System, Hungarian defence, Larsen Opening, and Blumenfeld Gambit (n=1) respectively.

Table 6. Drawısh, win and defeat chess game distribution
according age group
(Tablo 6. Yaş gruplarına göre kazanılan, kaybedilen ve berabere
kalınan satranç maçları)

AGE GROUP	N	DRAWISH	WIN	DEFEAT	TOTAL	Chi Square
	%					
<20	N	102	83	52	237	
	%	43,0%	35,0%	22%	100,0%	
21-30	N	483	380	177	1040	
	%	46,4%	36,5%	17,0%	100,0%	13,987* P<0.05
31-40	N	313	220	109	642	
	%	48,8%	34,3%	17,0%	100,0%	
41-50	N	49	62	16	127	
	%	38,6%	48,8%	12,6%	100,0%	
Toplam	N	947	745	354	2046	
	%	46,3%	36,4%	17,3%	100,0%	

*: There is a statistically significant difference (p<0.05).

According to Table 6, when we compared the winning, defeating, and drawing rates according to age groups, it appeared that players who were 20 years old or younger completed 43 percent of the games they played with a draw, won 35 percent of them, and lost 22 percent of them; the players who were 21 to 30 years old completed 46,4 percent of the games they played with a draw, won 36,5 percent of them, and lost 17 percent of them; the players who were 31 to 40 years old completed 48,8 percent of the games they played with a draw, won 34,3 percent of them, and lost 17 percent of them; the players who were 41 to 50 years old completed 38,6 percent of the games they played with a draw, won 48,8 percent of them, and lost 12,6 percent of them (p<0.05).

Table 7. Applied chess opening type according age group of chess
players
(Tablo 7. Satranç oyuncularının yaş gruplarına göre uygulamış
oldukları açılış türleri)

AGE GROUP	N	CLASSİFİCATİON OF CHESS OPENİNGS						Total
	%	OPEN GAMES	SEMI-OPEN GAMES	CLOSED GAMES	INDIAN SYSTEMS	OTHER BLACK RESPONSE TO d4	FLANK OPENINGS	
<20	N	54	96	23	32	3	29	237
	%	22,8%	40,5%	9,7%	13,5%	1,3%	12,2%	100,0%
21-30	N	210	371	136	199	46	78	1040
	%	20,2%	35,7%	13,1%	19,1%	4,4%	7,5%	100,0%
31-40	N	104	188	140	137	26	47	642
	%	16,2%	29,3%	21,8%	21,3%	4,0%	7,3%	100,0%
41-50	N	25	21	30	39	8	4	127
	%	19,7%	16,5%	23,6%	30,7%	6,3%	3,1%	100,0%
TOTAL	N	393	676	329	407	83	158	2046
	%	19,2%	33,0%	16,1%	19,9%	4,1%	7,7%	100,0%
Chi Square		83.619*				P<0.05		

*: There is a statistically significant difference (p<0.05)

According to Table 7, when we investigate to the kinds of openings, we see that Semi-Open Games (33%) are the most frequent, Indian Systems (19,9%) place the second, and Open Games (19,2%) place the third, and Other Black Response To d4 (4,1%) is the least

frequently played. When we compare the kinds of openings played according to age groups, while Semi-Open Games are preferred most in the 20 years old or younger, 21 to 30 years old, and 31 to 40 years old age groups, Indian Systems are preferred most in the 41 to 50 years old age group. While Other Black Response To d4 is preferred least in the 20 years old or younger, 21 to 30 years old, and 31 to 40 years old age groups, Flank Openings are preferred least in the 41 to 50 years old age group (p<0.05).

Table 8. Drawısh, wın and defeat chess game distribution according chess opening type
(Tablo 8. Satrançta açılış türlerine göre elde edilen beraberlik, galibiyet ve mağlübiyet dağılımları)

CLASSİFİCATİON OF CHESS OPENİNGS	N	DRAWISH	WIN	DEFEAT	TOTAL	Chi Square
	%	DRAWISH	WIN	DEFEAT	TOTAL	Square
OPEN GAME	N	206	124	63	393	
	%	52,4%	31,6%	16,0%	100,0%	
SEMI-OPEN GAMES	N	278	271	127	676	
	%	41,1%	40,1%	18,8%	100,0%	
CLOSED GAMES	N	159	118	52	329	19,993*
	%	48,3%	35,9%	15,8%	100,0%	
INDIAN SYSTEMS	N	205	137	65	407	P<0.05
	%	50,4%	33,7%	16,0%	100,0%	
OTHER BLACK RESPONSE TO d4	%	33	35	15	83	
	N	39,8%	42,2%	18,1%	100,0%	
FLANK OPENINGS	%	66	60	32	158	
	N	41,8%	38,0%	20,3%	100,0%	
Total	%	947	745	354	2046	
	N	46,3%	36,4%	17,3%	100,0%	

*: There is a statistically significant difference (p<0.05)

According to Table 8, when we compared the kinds of openings, it was obtained that drawing was most frequent in OPEN GAMES (52,4%) and least frequent in Other Black Response To d4 (39,8%); winning was most frequent in Other Black Response To d4 (42,2%), and in SEMI-OPEN GAMES (40,1%), and least frequent in Open Games (31,6%); defeating was most frequent in Flank Openings (20,3%), and least frequent in Closed Games (%15,8). According to the kinds of openings, there are statistically significant differences between the drawings, winnings and defeatings obtained (p<0.05).

According to Table 9, white's best openings respectively Car-Kann (39,3%), Queen's Gambit (34,6%) and King's Indian (33,3%). According to Table 10 black's best opening respectively French Defence (33,3%), Grunfeld Defence (31%), Ruy Lopez/spanish Game (29,6%). According to Table 11 most drawish openings respectively Petrof's Defence (60,8%), Queen's Indian Defence (54%), Ruy Lopez/Spanish Games (51,2%).

Table 9. White's best 10 openings (based on white win
% minus white defeat %)*
(Tablo 9. Beyazların en iyi 10 açılışı beyazların galibiyet
% eksi mağlübiyet %)

Position	Opening	Difference (%)
1	Caro-Kann	39,3
2	Queen's Gambit	34,6
3	King's Indian	33,3
4	Petrof's Defence	29,2
5	Sicilian defence	28,4
6	Ruy Lopez/Spanish Game	29,0
7	English Opening	26,7
8	Queen's Indian Defence	25,4
9	French Defence	20,0
10	Nimzo Indian	19,1
11	Grunfeld Defence	18,8
12	Benoni defenci	0

*: Examining the opening played in only 50 games or over

Table 10. Black's best 10 openings
(based on black win % minus black defeat %)
(Tablo 10. Siyahların en iyi 10 açılışı
Beyazların galibiyet % eksi mağlübiyet %)

Position	Opening	Difference (%)
1	French Defence	33,3
2	Grunfeld Defence	31,0
3	Ruy Lopez/Spanish Game	29,6
4	King's Indian	28,4
5	Benoni defence	22,0
6	Sicilian defence	19,1
7	Caro-Kann	12,9
8	English Opening	9,5
9	Queen's Gambit	5,8
10	Nşmzo Indian	2,6
11	Queen's Indian Defence	1,9
12	Petrof's Defence	−15,1

*: Examining the opening played in only 50 games or over

Table 11. 10 most drawish openings
(Tablo 11. Berabere en fazla kalan 10 açılış)

Position	Opening	Difference (%)
1	Petrof's Defence	60,8
2	Queen's Indian Defence	54,0
3	Ruy Lopez/Spanish Game	51,2
4	Queen's Gambit	48,2
5	Nşmzo Indian	47,6
6	King's Indian	45,8
7	Grunfeld Defence	43,4
8	Caro-Kann	40,7
9	Sicilian defence	40,1
10	French Defence	38,6
11	English Opening	37,0
12	Benoni defenci	34,0

*: Examining the opening played in only 50 games or over

DISCUSSION: As far as we know this is the first study investigating into the openings used by top 100 chess players. There are total 101 players from 35 countries from four continents, namely Europe, Asia, North America and South America in Top 100 Players April 2006 rating list. Among these, Europe places the first with 67 chess players (n=67, %66). When we examine the distribution of the countries according to the continents, we see that Europe places the first again with most countries in number (n=22, %62). Moreover, Russia, Ukraine, France and USA are the countries having most players in number in this list with 22, 8, 6, and 6 players respectively. The average age of the players taking part in Top 100 Players April 2006 rating list is 31 years old, and 8,9 percent of them are below 20, 45,5 percent of them are 21-30 years old, 30,7 percent of them are 31-40 years old, and 14,9 percent of them are 41- 50 years old. The average age of the players, the openings used by whom were investigated in the present study, taking part in Top 100 Players April 2006 rating list, (n=70) is 28,9 years old, and 11,4 percent of them are below 20, 48,6 percent of them are 21-30 years old, 34,3 percent of them are 31-40 years old and 5,7 percent of them are 41-50 years old. Today chess is accepted as a sports branch, but, as understood from the distribution of the above age groups, chess players can maintain their upper level performance despite their increasing ages and place among the best.

When we compared the winning, defeating, and drawing rates according to age groups, it appeared that players who were 20 years old or younger completed 43 percent of the games they played with a draw, won 35 percent of them, and lost 22 percent of them; the players who were 21 to 30 years old completed 46,4 percent of the games they played with a draw, won 36,5 percent of them, and lost 17 percent of them; the players who were 31 to 40 years old completed 48,8 percent of the games they played with a draw, won 34,3 percent of them, and lost 17 percent of them; the players who were 41 to 50 years old completed 38,6 percent of the games they played with a draw, won 48,8 percent of them, and lost 12,6 percent of them ($p<0.05$). When we examined these percentages, it appeared that the drawing and winning rates were the highest in the 41-50 age group while the defeating rates were the lowest. We can explain this fact with the claim that chess players become more experienced with increasing age and play more carefully.

When we pay attention to the kinds of openings, we see that Semi-Open Games (33%) are the most frequent, Indian Systems (19,9%) place the second, and Open Games (19,2%) place the third, and Other Black Response To d4 (4,1%) is the least frequently played. When we compare the kinds of openings played according to age groups, while Semi-Open Games are preferred most in the 20 years old or younger, 21 to 30 years old, and 31 to 40 years old age groups, Indian Systems are preferred most in the 41 to 50 years old age group. While Other Black Response To d4 is preferred least in the 20 years old or younger, 21 to 30 years old, and 31 to 40 years old age groups, Flank Openings are preferred least in the 41 to 50 years old age group ($p<0.05$).

In the present study, according to the kinds of openings, it was obtained that drawing was most frequent in OPEN GAMES (52,4%) and least frequent in Other Black Response To d4 (39,8%); winning was most frequent in Other Black Response To d4 (42,2%), and in SEMI-OPEN GAMES (40,1%), and least frequent in Open Games (31,6%); defeating was most frequent in Flank Openings (20,3%), and least frequent in Closed Games (%15,8). According to the kinds of openings, there are statistically significant differences between the drawings, winnings and defeatings obtained ($p<0.05$).

From among the 2046 games investigated in this study, the most frequently played 10 openings were as follows respectively: Sicilian defence (n=476; 23,3%), Queen's Gambit (n=326; 1,9%), Ruy Lopez/Spanish Game (n=252; 12,3%), Queen's Indian Defence (n=124; 10,1%), French Defence (n=114; 5,6%), English Opening (n=108; 5,3%), Nimzo Indian (n=82; 4%), Petrof's Defence (n=74; 3,6%), King's Indian (n=72; 3,5%), and Caro-Kann (n=52; 2,9%). But, the least frequently played openings were Versov Opening, Budepest Gambit, Colle System, Hungarian defence, Larsen Opening, and Blumenfeld Gambit (n=1) respectively.

Examining the openings played in only 50 games or over, it was found that the best three openings of the relative whites were Car-Kann (39,3%), Queen's Gambit (34,6%) and King's Indian (33,3%) respectively, and the best three openings of the blacks were French Defence (33,3%), Grunfeld Defence (31%), and Ruy Lopez/Spanish Game (29,6%) respectively, and the most frequent three openings that resulted in a draw were Petrof's Defence (60,8%), Queen's Indian Defence (54%), and Ruy Lopez/Spanish Games (51,2%) respectively.

5. CONCLUSION (SONUÇ)

In conclusion, It can be claimed that Top 100 players play Sicilian Defence, Queen's Gambit and Ruy Lopez/Spanish Game most frequently; of the kinds of openings, they prefer Semi-Open Games most; the winning, defeating, and drawing percentages change depending on the increasing age and the kinds of openings played; and the best opening is Caro-Kann for Whites, French Defence for Blacks, and Petrof's Defence for a draw respectively.

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