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ORIGINAL RESEARCH

Examination of Psychological Resilience Levels of Basketball and Tennis Players Considering the Gender Variable

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Abstract

In the study pursued in order to determine the psychological resilience levels of individuals who are interested in basketball and tennis sports in university teams and the differences between them considering the gender variable, gender variable levels are given in percentages, and resilience levels have been studied by comparing with their gender with the T-test. Population consists of 50 female and 51 male players and 30 female and 30 male tennis players, in total 161 players. In order to determine to resilience levels of the players, "Psychological resilience scale" developed by Friborg et al. (2005) has been applied. According to the research results, it is concluded that constitutional style, perception of future and social competence psychological resilience sub-dimensions of the tennis players are better than basketball players, family cohesion, social competence and social resources sub-dimensions and total psychological resilience perception of female players are more successful than male players.

Keyword: psychological resilience, gender variable, tennis, basketball.

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INTRODUCTION

In recent years, significant differences have stood out in players' structures in many of the sport fields. Briefly when compared with the former players, psychological structures of today's players are apparently different (Konter, 2003). In current years in which professionality is high, the effects of financial gains and loss on players cause pressure on them substantially. The way of dealing with this kind of pressure is management of players this pressure atmosphere in the best way.

Reaching success in sport is possible with player's using his/her potential at the highest level. First of all, getting ready for result base competition, in other words getting ready with the winning-oriented mentality only can prevent the player from thinking right and revealing his/her abilities. It has been long known that the on-site performances of players are affected by many factors. The most important ones of them can be; situation of the opponent, the importance of the match, supporters' cheers, traumatophobia, live broadcast of the match. Dealing with all of them is that while the psychological preparations of the players are being made, reminding and suggesting that everything is in their own hands, and the control of success and failure is in his/her hands. Since this kind of mentality will improve player's self reliance, the body is expected to react positively as well to perform any activity or technique in the competition (Konter, 2003).

Psychological resilience is described as a personality trait that consists of three dimensions; commitment, control and difficulty. (Crowley et al., 2003). Commitment is individual's being involved in daily events without staying out of events quiescently; control is a tendency to believe and behave in a way that affects and changes them instead of feeling sadness when encounter with difficulties; difficulty is a natural part of variance and daily life, a stimulus for progress rather than a factor threatening security. Consequently, psychological resilience can reduce the negative factors of life which are making stress or can be a shield against them. (Maddi et al., 2006). In recent years, researchers have described many stress reasons that players face with (Mckay et al.; Scanlan et al., 1991). They have shown that psychologycial features help elite players to overcome problems and to transfer them in the path to perfection. (MacNamara et al., 2010a, 2010b).

Although extensive psychological resilience studies have been conducted in many fields, studies generally concentrate on children, adults and adults' childhood period in which they have faced famial problems which effective in their life (Greef & Human, 2004). Despite the fact that there are less study in the world about players psychological resilence, these studies are qualitative studies (Fletcher & Sarkar, 2012; Galli & Vealey, 2008; Sarkar & Fletcher, 2014). As far as we examine, a study comparing the psychology players has not been conducted yet in Turkey. Therefore, this study purposes to determine that what differences between gender variable and psychological resilence of the individuals who are proffessionally interested in basketball and tennis.

METHOD

This chapter includes information about the model of the study, population and sample, data collection method, data collection tool and analysis of data.

The Model of the Study

The study has been carried out by using single survey model as descriptive in order to determine the psychological resilence levels of players.

The Population and Sample

The population of this study is consisted of the tennis and basketball players who played in 2013-2014 season Turkey Intervarsity 1st League. The sample of the study consisted of 50 female and 51 male basketball player and 30 female and 30 male tennis player, in total 161 players who are selected using random sampling methods. Players who could be reached at the time of study, have been evaluated within the scope of the study group of the study.

Data Collection Method

Data necessary for the study has been collected from the players directly involved in study group. In order to determine the psychological resilence levels of the players who are the dependent variable of the study, "Psychological resilience scale" developed by Friborg and et al. (2005) has been used.

Data Collection Tool

Psychological Resilience Scale for Adults: developed by Friborg et al.(2005) and translated into Turkish by Basım and Çetin (2011). The scale including 33items in total, consists of six dimensional structure: structural style, perception of the future, family cohesion, self-perception, social competence and social resources. According to these dimensions, distributions of materials are consisted of as structural style; item 3, 9, 15 and 21 (in total 4 items) , perception of the future; item 2, 8, 14 and 20 (in total 4 items), family cohesion; item 5, 11, 17, 23, 26 and 32 (in total 6 items), self-perception; item 1, 7, 13, 19, 28 and 31 (in total 6 items), social competence; item 4, 10, 16, 22, 25 and 29 (in total 6 items) and social resources; item 6,12, 18, 24, 27, 30 and 33 (in total 7 items). In these items there are gap-filling statements stating provisions such as " In case of an unexpected situation. I can find solutions always / I can not predict what to do often", " I know my future goals. How to achieve them / I am not sure how to do this", " New friendship topic is something which / I can do easily / I have difficulty in". Moreover, there is a marking section with five separate boxes between two appropriate answers for this answers. Participants are asked to what extend they are agree with the statements in items and are asked to check the box which they think close the most appropriate one. In addition to this, with the intention to prevent prejudicial evaluations of the individuals answered the scale, answers which present positive and negative provisions, are placed in different parts of the scale. With regard to calculating released in the original form, it is accepted that high score signs high psychology in this study.

Two different samples have been used for the validity of the scale by Basım and Çetin (2001). This approach which grounds on verification of results from one sample in another sample, has aimed to increase the generalizability of the study by this means. To this end, Basım and Çetin (2011) have used two sample groups consisting of 350 students and 262 transactors in the study.

Basım and Çetin (2011) have analyzed the test-retest reliability and internal consistency for the reliability of the psychological resilience scale for adults. Related to the test-retest reliability, Pearson correlation coefficient of the subscales of the scale adopted 23 days apart

between two sample groups; for the self-perception is 0.72 ($p<0.01$), for perception of the future is 0.75 ($p<0.01$), for structural style is 0.68 ($p<0.01$), for social competence is 0.78 ($p<0.01$), for family cohesion is 0.81 ($p<0.01$) and for social resources is 0.77 ($p<0.01$) (Basım & Çetin, 2011). Regarding the internal consistency of the scale, Cronbach Alpha values of sub dimensions of the both samples have been analyzed; it has been detected that Cronbach Alpha coefficients of sub dimensions varied between 0.66 and 0.81 for the student sample and 0.68 and 0.79 for the employee sample (Basım & Çetin, 2011). In addition, the total Cronbach Alpha values of the scale have been calculated as 0.86 for the both sample groups (Basım & Çetin, 2011).

Analysis of Data

Arithmetic mean, standard deviation, percentage and frequency values of all data have been calculated for descriptive statistics. Student-t test has been used for the difference between the two groups in testing the differences between genders. In the event of difference, Benferroni post-hoc test has been used in order to find out the reason of differences. SPSS 20 package program has been used in all the statistical analysis and significance has been tested at the level of 0.05.

FINDINGS

In this section psychological resilience levels based on the gender variable are presented in tabular for the objective of the study.

Table 1. Sex Distribution Ratio

Sex	Number	%
Female	76	47.2
Male	85	52.8
Total	161	100

When Table I is analyzed, it is seen that 47.2% of the participants are female and 52.8% are male. Levels of participation are almost close to each other.

Table 2. Psychological Factor Score Distributions of the Players

Psychological Resilience Sub-Dimensions	N	A.M	S.D	At Least	At Most
Structural Style	161	14.16	3.65	4	20
Perception of the Future		15.34	3.74	8	20
Family Cohesion		21.55	4.86	10	30
Self Perception		23.00	5.26	6	30
Social Competence		22.37	5.27	10	30
Social Resources		25.88	6.04	11	35

In Table II, arithmetic mean and standard deviation values of the scores received by the players from psychological sub-dimensions are presented. According to this, social resources are high in the sub-dimension (A.M 25.88 SD 6.04).

In Table III, arithmetic mean and standard deviation values of the scores received by the players from psychological sub-dimensions are presented in terms of gender variable. According to this, social resources are high in the sub-dimension in female and male (A.M F 27.01 M 24.86 SD F 6.17 M 5.77).

Table 3. Psychological Factor Score Distributions of the Players According to Gender Variable (F: female, M: male)

Psychological Fac./ Gender	N		A.M		SD		At Least		At Most	
	F	M	F	M	F	M	F	M	F	M
Structural Style	76	85	14.20	14.12	3.76	3.57	4	4	20	20
Perception of the Future			15.89	14.85	3.91	3.54	8	8	20	20
Family Cohesion			22.38	20.81	5.14	4.49	10	10	30	30
Self Perception			23.41	22.64	5.51	5.04	10	6	30	30
Social Competence			23.37	21.48	5.31	5.11	10	10	30	30
Social Resources			27.01	24.86	6.17	5.77	11	11	35	35

Table 4. Student-t Test Table Demonstrating Difference between Psychological Resilience Sub-dimensions Considering Gender Variable

Psychological Resilience Sub-dimesions and Total Score	Gender	N	A.M	S.D	t	p
Structural Style	Female	76	14.20	3.76	.138	.890
	Male	85	14.12	3.57		
Perception of the Future	Female	76	15.89	3.91	1.786	.076
	Male	85	14.85	3.54		
Family Cohesion	Female	76	22.38	5.14	2.068	.040*
	Male	85	20.81	4.49		
Self Perception	Female	76	23.41	5.51	.929	.354
	Male	85	22.64	5.04		
Social Competence	Female	76	23.37	5.31	2.295	.023*
	Male	85	21.48	5.11		
Social Resources	Female	76	27.01	6.17	2.288	.023*
	Male	85	24.86	5.77		
Total Score	Female	76	126.26	23.10	2.170	.031*
	Male	85	118.75	20.81		

When Table IV is analyzed, as a result of Student-t test, there is a significant difference between family cohesion, social competence and social resources psychological sub-dimensions and total scores in terms of genders ($p<0.05$). In all these sub-dimensions and and total scores, psychological resilience scores of females are higher. And this means that psychological resilience of female players is better than the psychological resilience of male players.

Table 5. Student-t Test Table Demonstrating Difference between Psychological Resilience Sub-dimensions in terms of Sport Branches of the Players Considering Gender Variable

Psychological Factor	Branch	N	A.M	S.D	t	p
Constructural Style	Basketball	101	13.70	3.49	2.061	.041*
	Tennis	60	14.92	3.81		
Perception of the future	Basketball	101	14.53	3.66	-.687	.000*
	Tennis	60	16.70	3.51		
Family Cohesion	Basketball	101	21.63	4.73	-.273	.785
	Tennis	60	21.42	5.10		
Self Perception	Basketball	101	22.72	4.91	-.866	.388
	Tennis	60	23.47	5.83		
Social Competence	Basketball	101	21.73	5.33	-.017	.045*
	Tennis	60	23.45	5.03		
Social Resources	Basketball	101	25.52	5.82	-.956	.341
	Tennis	60	26.47	6.40		
Total Score	Basketball	101	119.85	22.51	-1.830	.069
	Tennis	60	126.42	21.14		

When Table V is analyzed, as a result of Student-t test, there is a significant difference (p>0.05) between tennis players and basketball players in structural style, perception of the future and social competence psychological sub-dimensions and total scores in terms of genders. In all these sub-dimensions, arithmetic mean scores of tennis players are higher than the basketball players. And this means that psychological resilience scores in sub-dimensions of tennis players are higher than basketball players.

ARGUMENT

The objective of this study is to analyze the psychological resilience level of tennis and basketball players who played in university teams in terms of gender variation and to compare with each other.

Despite the fact that there is not a significant difference (p>0.05) between psychological resilience total scores of tennis and basketball players according to study results, structural style, it is observed that perception of the future and social competence sub-psychological sub-dimensions tennis players are better than the basketball players. Besides, it is observed that, there is a significant difference (p<0.05), when compared with psychological resilience sub-dimensions gender variable of the players.

Despite the fact that psychological resilience has been evaluated in many occupational gropus and community in our country earlier, similar studies have not been exercised in players and sport organisations and community. In this study, psychological resilience scores of the basketball players has determined as 119.85±22.51 and, psychological resilience scores of the tennis players as 126.42±21.14 and statistically there is not a significant difference between them. Sezgin (2009), in the study including 347 elementary school teachers, has reported that psychological resilience avarage point is 28.71 and in branch teachers it is 28.01. The researcher has reported that psychological resilience levels don't change according to branch. These results are parallel with our study results reporting psychological resilience does not change in sports branches. Tümlü and Recepoğlu (2013) have reported that psychological resilience levels of academic staff do not differ significantly in terms of the title variable in studies carried out on 94 instructors. Besides, researchers have reported that although there is not a significant difference statistically, psychological resilience level of the proffesors is the highest (x=56.30), psychological resilience level of the associate professors is the lowest (x=37.92). They also reported that the low level of psychological resilience of associate professors has been evaluated as an unexpected result.

In this study, although it has been found out that structural style, perception of the future and social competence psychological sub-dimensions of the tennis players are significantly (p<0.05) better than the basketball players, there is not a significant difference between two groups in terms of total scores. Tennis players are significantly (p<0.05) better than the basketball players in terms of structural style, perception of the future and social competence psychological sub-dimensions. Although the reason of this cannot be known exactly, it may be baceause of the fact that tennis players are exposed to less race and organisation stress and/or their personal stress level is lower than the basketball players (Sarkar & Fletcher, 2014). The other reasons may be the possibility of features that can increase the perception of psychological resilience such as being positive, motivation, reliance, focus and social support (Sarkar & Fletcher, 2014).

When psychological resilience levels of the players in terms of gender have been analyzed, it has been found that there is a significant difference (p<0.05) among female and

male players between family cohesion, social competence and social reources pyschological sub-dimensions and total scores. When the avarage points have been examined, it can be seen that female players have significantly ($p<0.05$) better psychological resilience levels than the male players in all the sub-dimensions and total scores. Results of the study on the effect of gender on psychological resilience are contradictory in the related field literature. While some of them are supporting our study result, some of them are reporting contrary results. Hannah and Morrisey (1986) have found out that psychological resilience level of females are higher than male players in the study in which they have come to conclusion that psychological resilience level of young is related with gender. Tümlü and Recepoğlu (2013) have reported that psychological resilience level of the university academic staff has not affected from gender variable significantly in their study on 94 instructors. Similarly Harrison et al., (2002) have reported that gender is not effective on psychological resilience.

High level of psychological resilience of female players compared to male players, because of the differences in traditional female and male roles, it is expected that there can be differences in the way the two genders approach to the events. Males react logically to the events in the environment and tend to avoid emotional behaviours and help. (Hortaçsu, 2003). Consequently, to overcome some problems especially at work, because of characteristics attributed to them by Turkish society, their tend to avoid from help for their problems can cause to decrease of their psychological resilience with increasing responsibilities over time. Hence, having social support as a protector item of psychological resilience, can be explained as high level of psychological resilience of female compared to male as social supports are more common among female.

CONCLUSION and RECOMMENDATIONS

Gender is seen relative with psychological resilience as a genetic personal factor and in children at risk, psychological resilience of the girls is higher (Kumpfer, 1999). On the other hand, boys are indicated to be more vulnarable against a range of risk factors like psychopathology of the parents and poverty (Luthar, 1999). Besides, males react more negative to family breakups and social impacts when compared to females in behavioral meaning, they have higher risk on external behavioral problems (Bolger et al., 1995) and low academic achievement (Ripple & Luthar, 2000). In addition to this, effect of the gender can vary depending on the age of individual. For example, while primary school age boys have been more affected by economic difficulties compared to girls (Bolger et al., 1995) girls can be affected more by this situation compared to boys in their youth period (Juarez et al., 1997; as cited in Luther, 1999). Moreover, it has been emphasized that children, regardless of gender, are more vulnarable and can easily be injured in many respects to all risk factors than the adolescent and young (Luthar, 1999).

Research Results

1. The structural style, perception of the future and social competence psychological sub-dimensions of tennis players have been found to be better than basketball players.

2. Female players have been found to be more succesful than male players in their family cohesion, social competence and social resources sub-dimensions total psychological resilience perception.

SUGGESTIONS

1. Various support programs can be recommended to increase the psychological resilience of male players. Programs can be recommended to increase the psychological resilience of female players to higher level.

2. Studies to increase psychological resilience in team sports such as basketball can be suggested.

3. By virtue of tennis being an individual sport, these features are more likely to be better than basketball players. Much more comprehensive studies are needed in this field in order to reveal exactly where the difference between these two sports branches comes from.

4. In this study, social support has not been considered. This is the important limitedness of the study. The reason of difference between genders could be explained better if social support was considered. Consideration of psychological resilience of players and social support relation in later studies can give important knowledge about this subject. Revealing the possible relationship between psychological resilience and social support, which are expressed as stress resistance resources in players, can be important especially in terms of hindering decrease of performance.

5. Supporting of this kind of studies with qualitative studies can enable psychological resilience of players to be understood better.

6. Considering that the structure of the sport is different, instead of scales for normal individuals, pyschological resilience studies determined by severally scales to be prepared for players and perhaps to be developed for team and individual sports can attribute more to the field.

7. In various sport branches, the scope of study can be extended with a wider sample group by doing researches which analyzing the satisfaction with life and psychological resilience of the players.

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