

THE INTERNATIONAL JOURNAL OF HUMANITIES & SOCIAL STUDIES

A Comparative and Correlational Study between Defence and Team Athletes: Psychological Health and Piety

Ali Tekin

Associate Professor; School of Physical Education and Sports, Bitlis Eren University, Bitlis, Turkey

Melih Calisir

Expert of Physical Education and Sports, Muğla, Turkey

Gulcan Tekin

Prelector, School of Physical Education and Sports, Bitlis Eren University, Bitlis

Cagatay Dereceli

Assistant Professor, School of Physical Education and Sports, Adnan Menderes University, Aydın, Turkey

Abstract:

Comparison of religious life and psychological health of athletes in different sport branches was aimed in this study. A total of 360 athletes, 116 female and 244 male, who engaged in a sports branch for at least 2 years, participated voluntarily in the study as the sample. The athletes were divided into two groups by the researcher according to their type of sport and as defence athletes (DA $\rightarrow n=219$; %60,8) and team athletes (TA $\rightarrow n=141$; %39,2). Short Symptom Scale by Şahin and Durak (1994), Religious Life Scale by Şahin (1999) were used as data collection tools. Parametric independent t-test and Pearson correlation were used for analysis. The significance level was accepted as $p<0.05$ and the interval confidence as 95%. As the results, level of piety of defence athletes is higher than team athletes; the piety level of female athletes is higher than males. There is not any relation between psychological health and piety

Keywords: sports type, psychological health, religion

1. Introduction

Sports are physical actions that provide their participants with a competitive environment and that can be done for competition, entertainment and exerting power in general individually or collectively, based on certain rules and principles and requiring regular exercise and power (Tekin, 2009). Impact of sports on development of personality may be associated with the sports branch involved. The type of sports branches may have different impacts on psychological and emotional situation of an individual owing to some certain psychological characteristics it contains. For instance, psychological and emotional characteristics of individual doing team sports and those doing individual sports can be different from each other depending on the content of the sports they do (Salar et al. 2012). Considering the psycho-social impacts of sports branches that require individual struggle (defence sports) on their participants, there is confusion about positivity or negativity of such impacts. Nevertheless, there are many researchers suggesting that those who do defence sports display positive psycho-social changes and moral developments. It is already a well-known fact that defence sports focus on this very purpose in essence (Tekin 2008). In team sports where several athletes compete as a team, success or failure belongs to the team as a whole, and responsibilities and compulsion levels of team athletes are therefore lower than those of individual athletes. Success takes knowing the characteristics of team-mates very well, cooperation, solidarity, group dynamics and healthy communication (Salar et al. 2012).

Psychological well-being is defined as non-existence of any psychological disorder and as association with the normal one (in psycho-social terms, being normal is equivalent to being healthy) (Güleç 2009). Psychological wellbeing has always been popular since its emergence as a concept up to date, and has even expanded to be a large field of research. Piety is the degree of acceptance, concentration and occupation of an individual concerning the faith, prayer and symbols of the religion which he or she is a member of (Kurt 2009). Piety is framed by "individuality" in general. In this context, piety can be defined as "the level of penetration of religion into human life" (Tekin 2004). Considering the concepts of psychological well-being and religion together, what most often comes to mind is the impact of religion on psychological wellbeing. There is a presumption in theological debates that religion always protects psychological wellbeing (Apaydın 2010). There are many experimental studies conducted on the relation between piety and psychological wellbeing. Many of these studies have identified a positive relation between piety and psychological and physical wellbeing (Hökelekli et al. 2010).

Literature reviews have revealed many studies conducted with many different sample groups on piety and psychological wellbeing. Nevertheless, the review of Master's theses in the database of the Board of Higher Education gave us the result that this topic is yet to be examined in relation with sports. Lack of any graduate study on this topic turns up the importance of this very study. Moreover, any data that can be obtained about the relationship between psychological wellbeing and piety of athletes doing different sports can serve as a source for further studies and can be used by sports scientists, trainers and sports people as reference information. Given the gap in the field, this study aimed at examining the relation between psychological wellbeing and piety of athletes according to variables of type of sports, gender, age, income level and educational status.

2. Method

All 360 athletes volunteer from Muğla (city-center, Milas) and Balıkesir (city-center) Bitlis (Tatvan), 116 female and 244 male, who engaged in a sports branch for at least 2 years, participated in the sample of the study. The athletes were divided into two groups by the researchers according to the types of sports. There were 219 (60,8%) athletes in defense athletes (DA) group; percentage distribution is wrestling (n=45; %12,5), muaythai, (n=32, %8,9), tae-kwondo (n=31; 8,6%), judo (n=29; 8,1%), kick-box (n=27; 7,5%), boxing (n=4; 6,7%), karate (n=15; (4,2%), and aikido (n=16; 4,4%). Second group includes 141 (%39,2) team athletes (TA). The distribution is volleyball (n=36; 10,0%), football (n=29; 8,1%), basketball (n=25; 6,9%), field hockey (n=23; 6,4%) futsal (n=18; 5,0%), and handball (n=10; %2,8).

Short Symptom Scale (SSS) by Şahin and Durak (1994), Religious Life Scale (RLS) by Şahin (1999) and Personal Information Form developed by the researcher of the study were used as data gathering materials. SSS is a self-report scale with 53 items, intended for determining hostility, somatization, depression, anxiety, and negative self symptoms. Internal consistency reliability coefficient differs between 0.71 and 0.85. Test retest reliability of SSS is between 0.68 ile 0.91. Each item of SSS is scored from 0 to 4. The SSS has 5 subscales such as depression (items 17, 14, 20, 16, 19, 39, 25, 37, 35, 18, 27, 9), anxiety (45, 46, 43, 47, 38, 31, 28, 42, 32, 13, 36, 49, 12), negative self (50, 22, 51, 52, 53, 44, 21, 24, 48, 15, 34, 26), somatization (8, 2, 7, 33, 29, 30, 5, 11, 23), and hostility, (40, 4, 41, 3, 6, 1, 10). RSL consists of 97 items RSL is scored from 0 to 5 and then the scores are counted. The scores range is between 0 and 69.

Descriptive statistics such as mean (X), standard deviation (SD) and frequency (f) were given. Parametric independent t-test for comparison of two different groups and Pearson product-moment correlation coefficient for measuring of the linear correlation between two variables were used. The significance level as $p < 0.05$, the interval confidence as 95% was accepted.

3. Findings

	ST	N	M	Sd	SE	t	p
Depression	DA	219	11,77	8,97	,606	-2,378	,018*
	TA	141	14,11	9,37	,790		
Anxiety	DA	219	11,35	8,99	,608	-,822	,412
	TA	141	12,13	8,56	,721		
Negative Self	DA	219	11,30	8,94	,604	-,524	,600
	TA	141	11,79	8,53	,719		
Somatization	DA	219	6,75	5,57	,377	,030	,976
	TA	141	6,73	5,73	,483		
Hostility	DA	219	8,39	5,81	,393	-1,183	,237
	TA	141	9,11	5,35	,451		
Psychological Health	DA	219	49,56	34,27	2,316	-1,216	,225
	TA	141	54,01	33,42	2,815		

* $p < 0.05$

Table 1: Comparison of SSS's sub-dimensions considering sports type

	Sex	N	M	SD	SE	t	p
Depression	F	116	14,27	9,14	,849	2,266	,024*
	M	244	11,93	9,13	,585		
Anxiety	F	116	12,40	8,97	,833	1,095	,274
	M	244	11,31	8,74	,560		
Negative Self	F	116	11,84	8,98	,834	,513	,608
	M	244	11,33	8,69	,556		
Somatisation	F	116	7,48	5,87	,545	1,727	,085
	M	244	6,39	5,49	,352		
Hostility	F	116	9,14	5,93	,551	1,073	,284
	M	244	8,45	5,50	,352		
Psychological Health	F	116	55,17	34,13	3,169	1,493	,136
	M	244	49,46	33,80	2,164		

* $p < 0.05$

Table 2: Comparison of SSS's sub-dimensions considering sex

	ST	N	X	SS	SE	t	p
Emotion	DA	219	16,78	4,439	,300	-,260	,795
	TA	141	16,90	4,434	,373		
Faith	DA	219	7,93	,364	,025	2,216	,027*
	TA	141	7,77	,976	,082		
Behaviour	DA	219	25,38	4,690	,317	7,327	,000**
	TA	141	21,05	6,505	,548		
Knowledge	DA	219	5,86	1,518	,103	,225	,822
	TA	141	5,82	1,400	,118		
Piety	DA	219	56,00	7,115	,481	4,614	,000**
	TA	141	51,74	10,391	,875		

*p<0.05; ** p<0.001

Table 3: Comparison of RLS's sub-dimensions considering sports type

	Sex	N	X	SS	SE	t	p
Emotion	F	116	18,00	3,707	,344	3,523	,000**
	M	244	16,27	4,641	,297		
Faith	F	116	7,86	,709	,066	-,035	,972
	M	244	7,86	,662	,042		
Behaviour	F	116	23,98	5,450	,506	,668	,505
	M	244	23,54	6,051	,387		
Knowledge	F	116	6,13	1,393	,129	2,552	,011*
	M	244	5,71	1,491	,095		
Piety	F	116	56,03	8,106	,753	2,548	,011*
	M	244	53,52	8,994	,576		

*p<0.05; **p<0.001

Table 4: Comparison of RLS's sub-dimensions considering sex

		Psychological Health	Pearson Correlation
Psychological Health	Pearson Correlation	1	-,030
	P		,576
	N	360	360
Piety	Pearson Correlation	-,030	1
	P	,576	
	N	360	360

Table 5: Psychological Health and Piety Correlation

		Psychological Health	Piety	Sports Type
Psychological Health	Pearson korelasyon	1	-,030	,064
	P		,576	,225
	N	360	360	360
Piety	Pearson korelasyon	-,030	1	-,237**
	P	,576		,000
	N	360	360	360
Sports Type	Pearson korelasyon	,064	-,237**	1
	P	,225	,000	
	N	360	360	360
** p< 0.01				

Table 6: Correlation between Sports Type Psychological Health and Piety

		Psychological Health	Piety	Sex
Psychological Health	Pearson korelasyon	1	-,030	-,079
	P		,576	,136
	N	360	360	360
Piety	Pearson korelasyon	-,030	1	-,133*
	P	,576		,011
	N	360	360	360
Sex	Pearson korelasyon	-,079	-,133*	1
	P	,136	,011	
	N	360	360	360
* p< 0.05				

Table 7: Correlation between Sex Psychological Health and Piety

4. Discussion and Conclusion

According to the comparisons of scale and factor scores based on the type of sports, there is statistically significant difference in the depression factor ($p<0.05$) (Table 1). Depression level of defence athletes is lower than that of team athletes. The analysis conducted according to the gender variable displayed a statistically significant difference in the depression factor ($p<0.05$) (Table 2). Depression score of female athletes is higher than that of male athletes. The comparisons of scale and factor scores based on the type of sports gave us statistically significant difference in factors of faith ($p<0.05$), behaviour ($p<0.001$) and piety ($p<0.001$) (Table 3). It is therefore safe to suggest that the level of faith, behaviour and piety in defence athletes is higher than that in team athletes. Comparison of scale and factor scores based on gender variable exhibited statistically significant difference in factors of emotion ($p<0.001$), knowledge ($p<0.05$) and piety ($p<0.05$) (Table 4). Accordingly, the level of emotion, knowledge and piety in female athletes is higher than that in male athletes.

Analyses have shown no correlation between psychological wellbeing and piety levels of athletes [$r=-,030$; $p>0,05$], Table 5]. Psychological wellbeing and piety are not variables that are interrelated (in positive or negative terms). It is a widely-accepted assumption that there is a positive correlation between psychological health and religion. Gartner et al. (1991) examined about 200 studies and exhibited first the positive correlation between piety and positive function. Furthermore, they found ambiguous results between religion and anxiety, sexual problems, psychosis, prejudice, self-esteem and intelligence. Additionally, they observed in some indicators a correlation between religion and low psychological health. Researchers reviewed 20 studies on the correlation between piety/spirituality and psychological wellbeing between 1998 and 2004 and reported that 90% of these studies found a positive correlation between piety/spirituality and psychological wellbeing. Researchers suggest that this percentage means that impacts of religion on psychological wellbeing have been demonstrated by experimental studies (Wong et al. 2006).

Almeida et al. (2006) analysed 850 studies that examined the correlation between psychological wellbeing and religion in the last two decades, and suggested that religion was utilized as a harbour and fulfilled a more important function more frequently during stressful times in particular (in elderly, disability and severe illnesses) and that religion should be used in clinical treatment and there were strong, significant correlation between religious attitude and positive psychological health. Apaydın (2010) reviewed the literature in this field in the West and expressed that religious faith was accompanied by a higher life satisfaction and having a moral perspective specifically in 79 out of 100 studies on the correlation between piety and life satisfaction. In relevant studies in Turkey, Küçükcan and Köse (2000) identified that people find a safe harbour in religious faith and concepts in order to recover from the sufferings and depression caused by material and spiritual losses they experience. Hayta (2000) found a positive correlation between participation in prayers and psycho-social adaptation in students. Kula (2001) mentioned a positive correlation between piety and having an identity in his study. Gürses (2002) conducted a study on university students and reached some findings suggesting that piety had positive impacts on personality and it might therefore have some positive impacts on psychological wellbeing. Arıcı (2006) found out a positive correlation between the coping factor that has a critical function in protection of psychological health in high school students and the prayer ritual which is a practical manifestation of religion. Yapıcı (2007) found in his study on university students that there was a correlation between psychological wellbeing and piety in fields that can be considered as manifestations of individual ways of piety. In another study conducted in a Turkish sample, Kıracı (2007) found inverse correlations between inner piety and existentialist concern and sense of sinfulness. A positive self value is an important characteristic for psychological well-being. Güler (2007) suggested that there was a positive correlation between the positive image of God and self-esteem.

This study found a negative correlation between the type of sports and piety [$r=-,237$; $p<0,01$, Table 6]. There is a correlation between the type of sports and piety in favour of defence athletes. Piety scores go up in individual defence sports. The interaction between athletes and religion has been an important area of study for sports sociologists who recognize the impact of religion and spirituality on the lives of athletes (Coakley 2003). It was even suggested to integrate "positive psychology", which is a relatively new discipline recognizing spirituality and religion as important dimensions of psychological wellbeing into sports psychology studies (Aspinwall and Staudinger 2003; Seligman and Csikszentmihalyi 2000). A study identified that spirituality level of individual athletes was higher than that of team athletes (Lyons, 2013). Another study reported that commitment of team athletes to religious faith was higher than individual athletes (Elyası et al., 2011). In a comparative study on piety levels and dimensions

of female taekwondo athletes and female swimmers, Bölükbaşı and Kılıçgil (2004) reported that the faith of taekwondo athletes was higher than that of swimmers and they prayed more.

Results of this study suggested a negative correlation between gender and piety [$r=-.133$; $p<0.05$], Table 7]. Piety scores go up in female athletes. The level of emotion, knowledge and piety in female athletes is higher than that in males. Studies examining the correlation between the gender variable and piety can be classified into three groups. Some studies suggest that girls are more pious than males whereas some others suggest just the opposite. There are some other studies suggesting no statistically significant correlation between piety and gender. Researchers in Group 1 are mostly Western in general terms while those in Group 2 have Eastern origins. In the West, a substantial literature has started to be shaped around the correlation between “gender and religion”. Piety analyses conducted based on the gender factor in the West often reported significant differences between male and female piety. These analyses also displayed that females were more pious in qualitative and quantitative terms, prayed and read the Holy Bible more, and even added an emotional dimension to religion (Miller and Hoffman 1995). According to these analyses, females join religious organizations more than males do, have a lower tendency towards atheism and are more faithful to their faith more than males are (Hallahmi and Argyle 1975). There are different results about the correlation between gender and piety in the national literature in Turkey. Köktaş (1993), Karaca (2000), Onay (2004) and Mehmedoğlu (2004) showed that the percentage of faith and prayer practices was higher in males whereas Kimter (2008) suggested that this percentage was higher in females than males. Yapıcı (2012) reviewed, in a meta-analysis research, 78 field studies with a sample of 43,864 subjects in the context of gender-piety differentiation. Except for the dimension of “knowledge”, females exhibit a more pious image in dimensions of “faith”, “prayer”, “emotion” and “impact”. Nevertheless, there is not any significant difference between genders in terms of “overall piety”. Results suggest that females are partly more pious than males in Turkish society. However, it is still yet to be clear whether it is because of gender difference or any other factor. As shown by domestic and international studies, the correlation of the gender variable with piety exhibits a very instable characteristic (Hökelekli et al. 2010).

Despite the fact that there is not any correlation between the type of sports and psychological well-being, comparisons of scales and factor scores conducted based on the type of sports (defence vs. team sports) pointed to some statistically significant difference in the depression factor ($p<0.05$) (Table 1). Vaez Mousavi (2000) and Kajbafnezhad et al. (2011) suggested that team athletes had more advanced psychological skills than individual athletes did while Noorbakhsh (2004), Siadat and Keikha (2013), Tabeian et al. (2013) reported no difference between two group of athletes in terms of mental skills and suggested that sports decreases feelings of anxiety and stress in athletes, irrespective of the type of sports, and increase their self-esteem.

There is not any correlation between gender and psychological wellbeing. Nevertheless, a comparison of scale and factor scores according to gender suggests a statistically significant difference in the depression factor. Female athletes have higher depression scores. The finding that females are more pious but have a worse psychological health status in the gender factor is a result that comes out of the study in general. It seems appropriate to attribute this result to more anxious, concerned, emotional, sensitive and fragile nature of females. It was reported that females experience a higher level of anxiety more frequently (Cauce et al. 2000), and naturally they more often tend to be exposed to depression than males do (Andrade et al. 2001; Peker et al. 2009; Gürsu 2011). It is also the case for athletes. Yang et al (2007) and Hammond et al. (2013) reported that female athletes display depression syndromes significantly more frequently than males do while Hankin et al. (2007) suggested that females exhibited depression syndromes more and this is because females are exposed to more stressors than males are. All these results can be attributed to that females are affected by stressful life events that concern other people and more often resort to the support of their closer environment, emotional sharing and talking about their problems, and are more passive and fatalist (Çınar 2005; Ekşi 2003).

In summary, depression level of defence athletes was lower than that of team athletes while depression score of female athletes was higher than that of male athletes. The level of faith, behaviour and piety of defence athletes was higher in team athletes whereas the level of emotion, knowledge and piety was higher in females. There is not any correlation between psychological wellbeing and piety. Piety scores go up in favour of defence athletes and female athletes. There is not any correlation between type of sports and gender and psychological wellbeing. These results apply only to the sample of this very study and we do therefore need further studies to generalize these findings and to reach more precise judgements.

5. References

1. Andrade, L., Gorenstein, C., Vieira Filho, AH., Tung, T.C., Artes, R. (2001). Psychometric properties of the Portuguese version of the State-Trait Anxiety Inventory applied to college students: factor analysis and relation to the Beck Depression Inventory. *Brazilian Journal of Medical and Biological Research*; 34(3), 367-74.
2. Apaydın, H. (2010). Ruh Sağlığı-Din İlişkisi Araştırmalarına Bir Bakış. *Din Bilimleri Akademik Araştırma Dergisi*, 10(2), 59-77.
3. Arıcı, A. (2006), Ergenlerde Dini Başa Çıkma Yöntemi Olarak Dua , Hayati Hökelekli (Ed.), *Gençlik Din ve Değerler Psikolojisi*, İstanbul: Değerler Eğitimi Merkezi Yayınları, ss.529-557.
4. Aspinwall, L.G., & Staudinger, U.M. (2003). *A psychology of human strengths: Fundamental questions and future directions for a positive psychology*. Washington, DC: American Psychological Association.
5. Bölükbaşı, Z., & Kılıçgil, E. (2004). Taekwondo ve Yüzme Branşlarındaki Bayan Sporcuların Dindarlık Boyutları. *Sporometre Beden Eğitimi ve Spor Bilimleri Dergisi*, 2(2) 61-72.
6. Cauce, A.M., Paradise, M., Ginzler, J.A., Embry, L., Morgan, C.J., Lohr, Y., Theofelis, J. (2000), The characteristics and mental health of homeless adolescents: age and gender differences *Journal of Emotional and Behavioural Disorders*, 8(4), 230-239
7. Coakley, J.J. (2003). *Sport in society* (8th Ed.). Boston: Irwin McGraw-Hill.

8. Çınar, P. (2005). Cinsiyet ve ruhsal hastalıklar. *Türk Psikoloji Bülteni*, 36, 59-64.
9. Davis, B., & Byrd, R.J. (1975). Effects of Judo on the Educable Mentally Retarded. *Journal of Sports Medicine*, 15 (4), 337-341.
10. Ekşi, A. (2003). Gözden geçirme: beş kıtada genç sorunları. *Çocuk ve Gençlik Ruh Sağlığı Dergisi*, 10(2), 78-87.
11. Elyası, G., Sedagati, P., Salehian, M.H. ve Moghaddam, J.B. (2011). The study of religious beliefs among male athletes and non- athletes. *Annals of Biological Research*, 2 (5), 228-231
12. Gartner, J., Larson, D. B., Allen, G. D. (1991). Religious commitment and mental health: A review of the empirical literature. *Journal of Psychology and Theology*, 19(1), 6-25.
13. Güleç, C. (2009). *Pozitif Ruh Sağlığı*, Ankara: Arkadaş Yayınları.
14. Güler, Ö. (2007). Tanrı'ya Yönelik Atıflar, Benlik Algısı ve Günahkârlık Duygusu (Yetişkin Örneklem). Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Yayınlanmamış Yüksek Lisans Tezi, Ankara.
15. Gürses, İ. (2002). Dindarlık İle İlgili Tutumlar ve Otoriteryen Kişilik ilişkisi. *Gençlik, Din ve Değerler Psikolojisi* (içinde), [Ed. Hayati Hökelekli], Ankara Okulu Yayınları, Ankara, s.2.
16. Gürsu, O. (2011). Ergenlik Döneminde Psikolojik Sağlık ve Dindarlık İlişkisi. Yayınlanmamış Doktora Tezi. Selçuk Üniversitesi Sosyal Bilimler Enstitüsü, Konya
17. Hammond, T., Gialloredo, C., Kubas, H., Davis IV, H. H. (2013). The prevalence of failure-based depression among elite athletes. *Clinical Journal of Sport Medicine*, 23(4), 273-277.
18. Hankin, B.L., Mermelstein, R. & Roesch, L. (2007). Sex Differences in Adolescent Depression: Stress Exposure and Reactivity Models. *Child Development*, 78(1), 279-295.
19. Hayta, A. (2000). U. Ü. ilahiyat fakültesi öğrencilerinin ibadet ve ruh sağlığı (psiko-sosyal uyum) ilişkisi üzerine bir inceleme, *Uludağ Üniversitesi İlahiyat Fakültesi Dergisi*, 9(9): 487-505.
20. Hökelekli, H., Peker, H., Karaca, F., Bahadır, A. ve Memedoğlu, A.U. (2010). *Din Psikolojisi*. Anadolu Üniversitesi Web-Ofset Yayınları, No: 2051, 1. Baskı, Eskişehir.
21. Kajbafnezhad, H; Ahadi, H; Heidarie, A.R; Askari, P; Enayati, M. (2011). Difference between team and individual sports with respect to psychological skills, overall emotional intelligence and athletic success motivation in Shiraz city athletes, *Journal of Physical Education & Sport*, 11(3), 249-254.
22. Karaca, F. (2000). *Ölüm Psikolojisi*, İstanbul: Beyan Yayınları.
23. Kımtır, N. (2008). Benlik Saygısı ve Dindarlık İlişkisi, Doktora Tezi, Uludağ Üniversitesi Sosyal Bilimler Enstitüsü, Bursa.
24. Kırac, F. (2007). Dindarlık Eğilimi, Varoluşsal Kaygı ve Psikolojik Sağlık, Yayınlanmamış Yüksek Lisans Tezi, Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
25. Köktaş, M. E. (1993). *Türkiye'de Dinî Hayat*, İstanbul: İşaret Yayınları.
26. Kula, M.N. (2001). *Kimlik ve Din*. Ergenler Üzerine Bir Araştırma, İstanbul: Ayışığı kitapları.
27. Kurt, A. (2009). Dindarlığı Etkileyen Faktörler. *Uludağ Üniversitesi İlahiyat Fakültesi Dergisi*, 18(2), 1-26.
28. Küçükcan, T., and Köse, A. (2000). *Doğal Afetler ve Din*, İstanbul: İsam Yay.
29. Lyons, V. L. (2013). *Moral Reasoning of Collegiate Athletes and Intramural Sport Athletes: An Investigation of the Influence of Religiosity, Gender, and Type of Sport Played* (Doctoral dissertation, The Ohio State University).
30. Mehmedoğlu, A.U. (2004). *Kişilik ve Din*. İstanbul: Değerler Eğitimi Merkezi Yayınları.
31. Miller, A. S. ve Hoffmann, J.P. (1995). Risk and Religion: An Explanation of Gender Differences in Religiosity, *Journal for the Scientific Study of Religion*, 34(1), 63-75.
32. Noorbakhsh, P. (2004). A comparison of basic, psychological- Physical and cognitive skills of top men athletes of individual and team sports of Khuzestan province and the relation of these skills with their performance, *Harkat Journal*, 23(2), 23-32.
33. Onay, A. (2004). Dindarlık, Etkileşim ve Değişim: üniversite öğrencileri örneklemini. İstanbul: Dem Yayınları.
34. Peker, I., Alkurt, M.T., Usta, M.G., ve Turkbay, T. (2009). The evaluation of perceived sources of stress and stress levels among Turkish dental students. *International Dental Journal*, 59 (2), 103-111.
35. Salar, B., Hekim, M., & Tokgöz, M. (2012). 15-18 Yaş Grubu Takım ve Ferdi Spor Yapan Bireylerin Duygusal Durumlarının Karşılaştırılması. *Mehmet Akif Ersoy Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 4(6), 123-135.
36. Seligman, M.E.P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55 (1), 5-14.
37. Siadat, S.A., & Keikha, A. (2013). A comparative study of happiness factors among women athletes of individual and team sports (a case study). *International Journal of Sport Studies*, 3 (1): 86-92.
38. Şahin, A. (1999). İlahiyat Tıp ve Mühendislik Fakültelerinde Okuyan Öğrencilerde Dinî Hayatın Boyutları Üzerine Bir Araştırma. Yayınlanmamış Doktora Tezi, Dokuz Eylül Üniversitesi Sosyal Bilimler Enstitüsü, İzmir.
39. Şahin, N.H., & Durak, A. (1994). Kısa Semptom Envanteri: (Brief Symptom Inventory-BSI) Türk Gençliği İçin Uyarlanması. *Türk Psikoloji Dergisi*, 9 (31), 44-56.
40. Tabeian, H., Zaravar, F., Shokrpour, N. & Baghooli, H. (2013). The Impact of Mental Happiness on the Athletic Success. *British Journal of Arts and Social Sciences*, 15(1), 75-84.
41. Tekin, A. (2008). Dövüş Sanatlarının Psikososyal Faydaları: Mit mi Gerçek mi? Türkiye Kick Boks Federasyonu Spor Bilimleri Dergisi, 1(1), 1-12.
42. Tekin, A. (2009). *Rekreasyon*. Ata Ofset Matbaacılık, Ankara.

43. Tekin, M. (2004). Dindarlık Bağlamında Amel-İ Salih Kavramına Sosyolojik Bir Yaklaşım, Dindarlık Olgusu (Sempozyum Tebliğ ve Müzakereleri) , İstanbul: Kurav Yayınları.
44. Vaez Mousavi, M. (2000). A Comparison of quality of life in individual and team sports athletes. A Research in Sports Sciences, Number 3(4), 12-17.
45. Wong, Y. J., Rew, L., Slaikou, K. D. (2006). A systematic review of recent research on adolescent religiosity/spirituality and mental health. Issues in Mental Health Nursing, 27(2), 161-183.
46. Yang, J., Peek-Asa, C., Corlette, J. D., Cheng, G., Foster, D. T., Albright, J. (2007). Prevalence of and risk factors associated with symptoms of depression in competitive collegiate student athletes. Clinical Journal of Sport Medicine, 17(6), 481-487.
47. Yapıcı, A. (2007), Ruh Sağlığı ve Din Psiko-Sosyal Uyum ve Dindarlık, Adana: Karahan Kitabevi.
48. Yapıcı, A. (2012). Türk Toplumunda Cinsiyete Göre Dindarlık Farklılaşması: Bir Meta-Analiz Denemesi. İlahiyat Fakültesi Dergisi 17(2), 1-34.