



**EXAMINING OF THE LEVELS OF ATHLETES
SELF-SUFFICIENCY THAT INTEREST IN BRANCHES OF
BARBELL, WRESTLING AND BOXING**

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Abstract:

This study is done in order to examine the relation among the levels of athlete's self-sufficiency that interest in the barbell, wrestling and boxing which are individual sports. The study consists of 135 athletes who are 126 men, 9 women and also are selected randomly from the branches of barbell, wrestling and boxing in Ankara. A scale form is used as data collection tool in study. The scale forms consist of 2 different parts. In first part, there are some questions about personal characteristics. In second part, there are some questions about the level of self-sufficiency. The findings obtained are collected with the scale of self-sufficiency. The reliability and validity of scale forms are calculated as 0.716 Cronbach alpha value. According to these criteria, the scale is reliable. The data are evaluated in detail by analyzing in SPSS 20.0 programme. In analysis, the analysis of correlation, t test of independent sample, one-way analysis of variance and Tukey test are used. There are no meaningful differences in terms of the levels of women and men participants' self-sufficiency in research findings. Also, the level of self-sufficiency doesn't differ according to the age and branch of sport. Given the influence of general self-sufficiency on the attitudes and performance of sportsmen, it is extremely important to know and develop methods for increasing general self-efficacy levels. Athletes' self-efficacy beliefs are an important element in increasing motivation for level of spore participation and success. As people's perception of general self-efficacy increases, so does the interest in the places.

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1. Introduction

Sports activities are the regular activities that are carried out with the aim of ensuring the development of individuals' bodies, soul and ideas, strengthening their national emotions and preparing them for daily living conditions. Amusement, exercise, development of skills, demonstration of success, health, socialization and both mental and spiritual satisfaction are the reasons for both men and females' actively participating in these activities. Another reason for athletes' being successful is faith of competence. Multiple psychological factors and faith of general self-efficacy may be effective in athletes' being in or outside of the sports. Sportive success is in an interaction with mental performance, physical performance, and psychological performance. Especially when the athletes are thought to be in psychological struggle during the match, they have to be in a position to know and apply the prerequisites for successful leaving (Karademir & Çoban, 2011). Performance is crucial for athletes. Psychological performance's being at top-level as well as physical performance brings the real success.

The self-efficacy beliefs which is defined as a belief of capacity to make a certain job is an important factor for athletes (Bandura, 1994). It can be argued that using discipline and new methods among athletes with high or low self-sufficiency strongly influences sportive success (Cengiz, vd. 2012). Self-efficacy is an important issue that determines how someone will think, feel, and act. Low self-efficacy leads to feelings of depression and desperation. Such people also have low self-confidence. The level of self-efficacy may prevent or increase motivation. People with high self-efficacy may choose harder and more risky tasks. Their targets are high and they work hard to reach their targets (Schwarzer & Fuchs, 1995). However; self-efficacy are not the same with unrealistic feelings and dreams. On the contrary, it depends on experience, it does not cause taking unrealistic risk and it guides agile behavior by person's developing himself. It enables person to see his talents more clearly.

High self-efficacy belief leads to high desire, low self-efficacy belief leads to low success desire; on the other hand, it is observed that the desire for high success leads to high self-efficacy belief, while the desire for low success leads to low self-efficacy belief (Chase, 1998). In this research done on the light of this information, it is aimed to examine the self-efficacy perceptions of the athletes dealing with weightlifting, wrestling and boxing.

2. Method

2.1 Population and Sample

Screening model has been used in the research. It is aimed to determine the self-efficacy differentiation situations of wrestling and boxing athletes in the frame of this model. Purposive sampling method has been used in the research (Büyüköztürk, 2014, Yıldırım & Şimşek, 2014). The study consists of a total of 135 athletes, 126 men and 9 women, who are licensed to practice in the individual branch (weightlifting, wrestling and boxing) in Ankara province. The athletes have voluntarily participated in the work.

2.2 Data Collection Tool

Scale form has been used as data collection inventory in the research. The scale form consists 2 parts. In the first part, questions about personal characteristics (age, gender, education level, branch and sports age) are included. In the second part, questions about the self-sufficiency level are included. The obtained data were obtained with the Self-Efficacy-Sufficiency Scale developed by Sherer et al. in 1982 and adapted into Turkish by Gözüm and Aksayan in 1999 (Gözüm & Aksayan 1999).

2.3 Self-Efficacy-Sufficiency Scale

Self-Efficacy-Sufficiency Scale was developed by Sherer et al. in 1982 and adapted into Turkish by Gözüm and Aksayan in 1999. The reliability and validity of the Turkish version of the scale has been found to be Cronbach's alpha internal consistency coefficient of .81 and test-retest reliability of .92 for the same sample (Gözüm & Aksayan, 1999). Self-efficacy-sufficiency scale (SESC) is a 5-point Likert type self-assessment scale. In 23-article, the participants are asked to mark 1- "never describes me", 2-"describes me little", 3 "neutral", 4-"describes me well", 5-"describes me very well" for each article. The score given for each item is taken as basis. However, 2,4,5,6,7,10,11,12,14,16,17,18,20,22. The articles are in the opposite direction. Thus, at least 23, 115 points can be taken from the scale. The high score on the scale indicates that the SES perception of the individual is at a good level. The scale has four sub-factors. These are: 1. Starting behavior contains articles number: 2,11,12,14,17,18,20,22. 2. Continuing the behavior contains articles number: 4,5,6,7,10,16,19. 3. Completion of behavior contains articles number: 3,8,9,15,23. 4. The struggle against obstacles contains articles number: 1,13,21.

2.4 Statistical Techniques Used in the Research

The gathered data has been analyzed in the SPSS 20.0 packaged software program. Within the analysis; correlation analysis for explaining the correlation among variables, independent sample t-test for pairwise comparisons, one-way variance analysis for multiple groups' comparisons, and Tukey test have been used in determining the group originating the difference.

2.5 Research Hypotheses

H₁: Self-efficacy levels show a significant difference according to gender.

H₂: Self-efficacy levels show a significant difference according to age.

H₃: Self-efficacy levels show a significant difference according to level of education.

H₄: Self-efficacy levels show a significant difference according to branch.

H₅: Self-efficacy levels show a significant difference according to sports age.

2.6 Reliability Analysis on Self-Efficacy Scale

The scale used in the research has four sub-factors. These are starting the behavior, continuing the behavior, completion of the behavior, and struggling against obstacles. As a result of the reliability analysis on the general of the scale and subscales, coefficients have been found as 0,218 for behavior start dimension, 0,577 for behavior continuity dimension, 0,485 for behavior completion dimension and 0,416 for struggling against obstacles dimension.

Since the alpha coefficients of the subscales were low, the subscale scores in the study were excluded from the analysis. The analysis has been performed with scale grand total scores.

The articles which may have an adverse effect on the collectability of the scale and which reduce the alpha value were excluded and the analysis has been continued with article number 2,4,5,6,7,10,11,12,14,16,17,20. The Cronbach alpha value for the scale has been calculated as 0,716. According to this criterion, the scale is reliable.

3. Findings

Table 1: Range of Athletes According to Age Variable

| Age | f | % | Mean | SD. |
|------|----|------|-------|------|
| <=15 | 52 | 38,5 | 15,81 | 1,46 |
| >15 | 83 | 61,5 | | |

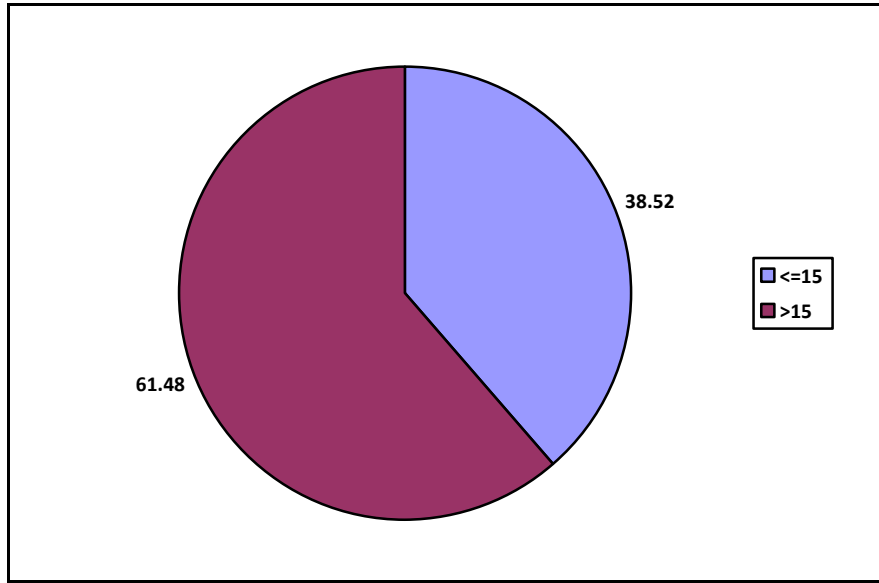


Figure 1: Range of Athletes According to Age Variable

38.5% of the participants are 15 years or less, and 61.5% are over the age of 15 years.

Table 2: Range of Athletes According to Gender Variable

| Gender | f | % |
|--------|-----|------|
| Male | 126 | 93,3 |
| Female | 9 | 6,7 |

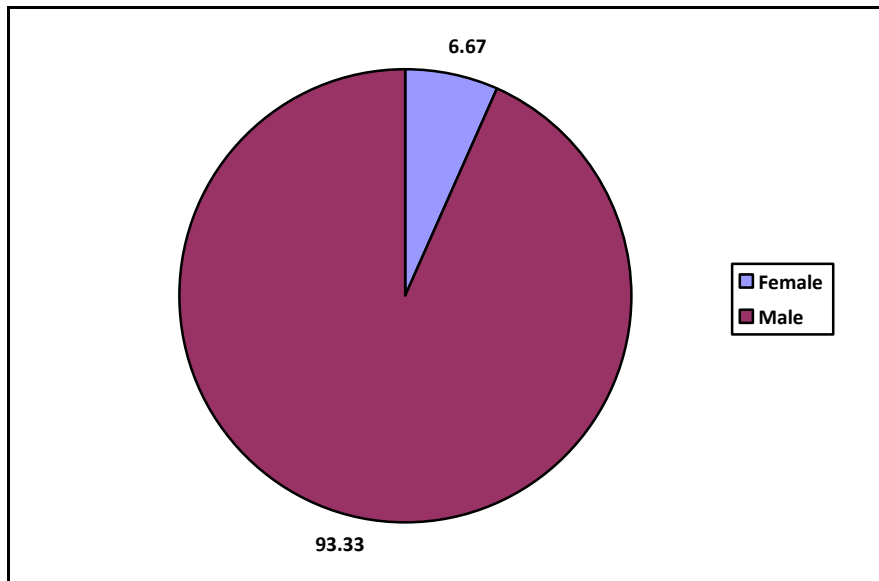


Figure 2: Range of Athletes According to Gender Variable

%93,3 of the participants are male, and %6,7 of them are female.

Table 3: Range of Athletes According to Level of Education Variable

| Level of Education | f | % |
|---------------------|-----|------|
| Primary Education | 33 | 24,4 |
| Secondary Education | 102 | 75,6 |

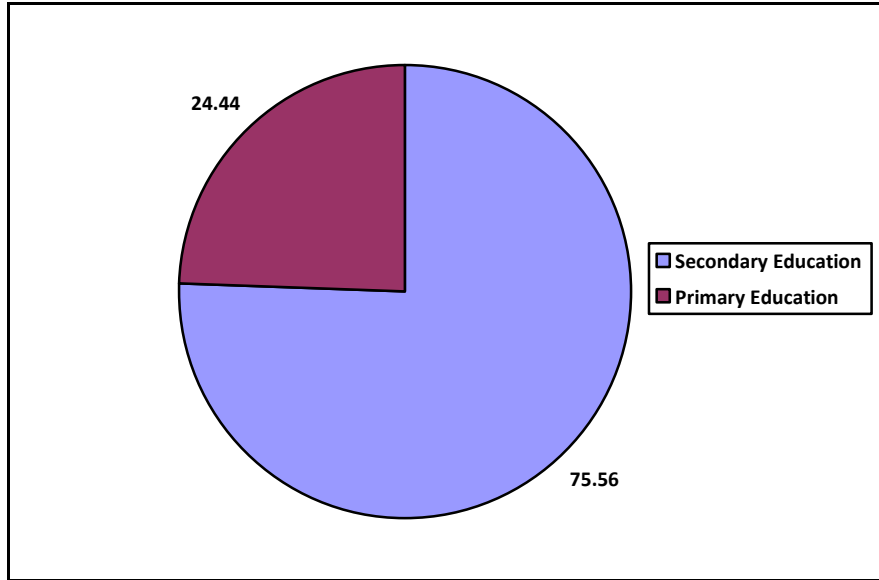


Figure 3: Range of Athletes According to Level of Education Variable

24.4% of the participants have primary education, and 75.6% have secondary education.

Table 4: Range of Athletes According to Branch of Sports Variable

| Branch | f | % |
|---------------|----|-------|
| Box | 45 | 33,33 |
| Wrestling | 45 | 33,33 |
| Weightlifting | 45 | 33,33 |

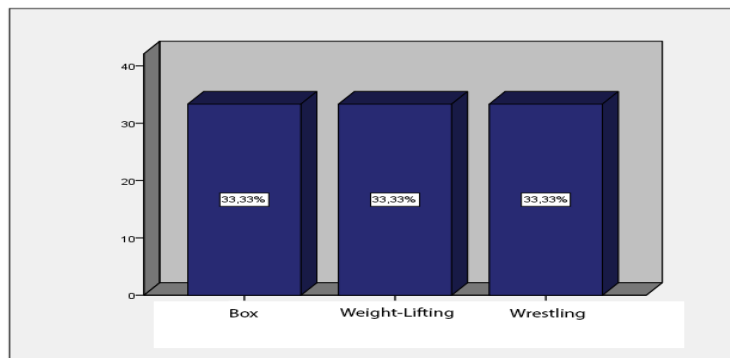


Figure 4: Range of Athletes According to Branch of Sports Variable

33.33% of participants are in boxing, 33.33% are in wrestling and 33.33% are in weightlifting branches.

Table 5: Range of Athletes According to Sports Age Variable

| Sports Age | f | % | Mean | S.D. |
|------------|-----|------|------|------|
| <=5 | 112 | 83,0 | 3,40 | 1,82 |
| >5 | 23 | 17,0 | | |

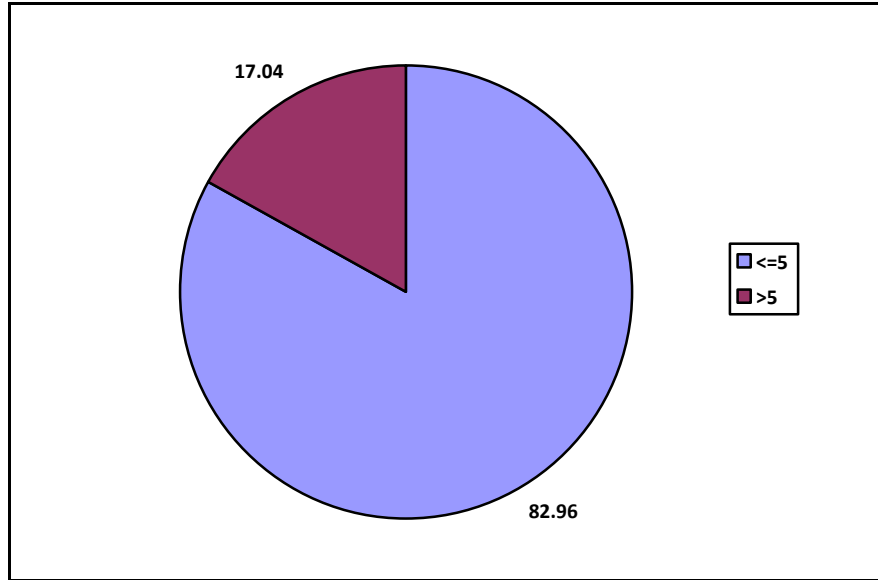


Figure 5: Range of Athletes According to Sports Age Variable

83% of the participants have been doing sports for 5 years or less, and 17% for more than 5 years.

Table 6: Descripted Statistics on the Scale

| | Min. | Max. | Mean | S.D. |
|--|--------------|--------------|--------------|-------------|
| I have a problem like not being able to get down a job I need to do | 1,00 | 5,00 | 3,96 | 1,21 |
| When I set important goals for myself, I rarely succeed. | 1,00 | 5,00 | 3,35 | 1,45 |
| I give up doing my work without completing it. | 1,00 | 5,00 | 4,26 | 1,11 |
| I avoid getting into difficulties. | 1,00 | 5,00 | 4,22 | 1,12 |
| I do not go into trouble to do if some things seem too complicated. | 1,00 | 5,00 | 3,33 | 1,4 |
| When I try to learn something new, if I do not succeed at first, I give up immediately. | 1,00 | 5,00 | 4,31 | 1,11 |
| I do not dwell on unexpected problems too much. | 1,00 | 5,00 | 3,59 | 1,38 |
| When new things look very hard for me, I avoid trying to learn. | 1,00 | 5,00 | 4,0 | 1,33 |
| I do not trust myself enough to do something. | 1,00 | 5,00 | 4,29 | ,98 |
| I give up easily. | 1,00 | 5,00 | 4,16 | 1,36 |
| I cannot find myself capable of coming up with the problems that come up in life. | 1,00 | 5,00 | 4,19 | 1,07 |
| If I meet someone interesting who is difficult to make a friendship with, I will immediately give up being friends with that person. | 1,00 | 5,00 | 3,50 | 1,30 |
| Scale Total | 12,00 | 46,00 | 24,81 | 7,38 |

The participant has given points between 12 and 46 to the self-efficacy scale. Mean of total scale score has been found as 24,81±7,38.

While the most negative statement indicating is “I do not go into trouble to do if some things seem too complicated.” with answer mean of 3,33; the most positive statement has been found “When I try to learn something new, if I do not succeed at first, I give up immediately.” as 4,31.

H₁ Hypothesis Test: Self-Efficacy Levels Differ According to Gender

| | | N | Mean | SD | t | p |
|---------------------------|--------|-----|-------|------|-------|------|
| Self-efficacy Total Score | Male | 126 | 25,02 | 7,37 | 1,231 | ,220 |
| | Female | 9 | 21,89 | 7,22 | | |

In the result of independent sample t-test, it has been determined there is no significant difference between male and female participants in terms of self-efficacy level ($p > 0,05$). The obtained results support H₁ hypothesis.

H₂ Hypothesis Test: Self-Efficacy Levels Differ According to Age

| | | N | Mean | SD | t | p |
|---------------------------|------|----|-------|------|------|------|
| Self-efficacy Total Score | <=15 | 52 | 24,90 | 8,72 | ,120 | ,905 |
| | >15 | 83 | 24,75 | 6,45 | | |

As seen in the table, the self-efficacy level does not differ according to age variable ($p > 0,05$). The obtained results do not support H₂ hypothesis.

Table 7: Correlation Test on Ungrouped Age Data

| | | Age | Self-Efficacy |
|---------------------------|---|------|---------------|
| Age | r | 1 | ,012 |
| | p | | ,892 |
| | N | 135 | 135 |
| Self-efficacy Total Score | r | ,012 | 1 |
| | p | ,892 | |
| | N | 135 | 135 |

According to the Correlation Test results there is no significant correlation between age and self-efficacy scores ($p > 0,05$).

H₃ Hypothesis Test: Self-Efficacy Levels Differ According to Level of Education.

| | | N | Mean | SD | t | p |
|---------------------------|-----------|-----|-------|------|------|------|
| Self-efficacy Total Score | Primary | 33 | 25,72 | 8,95 | ,823 | ,412 |
| | Secondary | 102 | 24,50 | 6,81 | | |

Self-efficacy level does not differ according to level of education ($p > 0,05$). The obtained results do not support H₃ hypothesis.

H₄ Hypothesis Test: Self-Efficacy Levels Differ According to Branch of Sports.

| | | N | Mean | SD | F | p |
|---------------------------|---------------|-----|-------|------|-------|------|
| Self-efficacy Total Score | Box | 45 | 23,04 | 7,17 | 2,052 | ,133 |
| | Wrestling | 45 | 25,36 | 7,74 | | |
| | Weightlifting | 45 | 26,26 | 7,02 | | |
| | Total | 135 | 24,81 | 7,38 | | |

In the result of one-way variance analysis, it has been determined that self-efficacy level does not differ according to branch of sports ($p > 0,05$). The obtained results do not support H₄ hypothesis.

H₅ Hypothesis Test: Self-Efficacy Levels Differ According to Sports Age.

| | | N | Mean | SD | t | p |
|---------------------------|----|-----|-------|------|------|------|
| Self-efficacy Total Score | ≤5 | 112 | 24,89 | 7,39 | ,296 | ,768 |
| | >5 | 23 | 24,39 | 7,44 | | |

Self-efficacy level does not differ according to sports age ($p > 0,05$). The obtained results does not support H₅ hypothesis.

Table 8: Correlation Test on Ungrouped Data

| | | Sports Age | Self-Efficacy |
|---------------|---|------------|---------------|
| Sports Age | r | 1 | -,026 |
| | p | | ,768 |
| | N | 135 | 135 |
| Self-Efficacy | r | -,026 | 1 |
| | p | ,768 | |
| | N | 135 | 135 |

According to Correlation Test results, no significant correlation between sports age and self-efficacy scores has been found ($p > 0,05$).

4. Discussion and Results

38.5% of participants are in the age range of 15 and under, 61.5% are in the age range of 15 years, 93.3% are male, 6.7% are females. 24.4% of the participants have primary education, and 75.6% have secondary education. 33.33% of participants are in boxing, 33.33% are in wrestling and 33.33% are in weightlifting branches. 83% of the participants have been doing sports for 5 years or less, and 17% for more than 5 years.

As seen the findings of the research, self-efficacy levels of athletes of individual sports of weightlifting, wrestling, and box do not show a significant difference. In a study conducted by Patial (2014), it was found that bruiseurs have higher self-efficacy level than weight-lifters. In addition, it is seen that bruiseurs and wrestlers have more or less the same self-efficacy level, and weight-lifters have lower self-efficacy levels than bruiseurs. Patial (2014) achieved results that do not overlap with our findings in our research.

No significant difference has been found when it is analyzed in terms of gender variable. The gathered findings overlap with McKenzie (1999) findings. 10910 students participated in a study conducted by Özsüer et al. (2011) in order to evaluate the level of university students' academic self-efficacy belief levels. As a result of the study, it was found that students' academic self-efficacy belief levels do not significantly differ according to gender. The findings of our research overlap with Çubukçu & Girmen (2007), Başaran (2010), Oğuz & Topkaya (2008)'s findings of their studies. When obtained findings are analyzed, it is seen that gender does not have an effect on self-efficacy. When Hutzler et al. (2005)'s findings are analyzed, it is emphasized that self-efficacy is related to a person's emotional status's being positive or negative. Being either male or female does not have a great effect in terms of self-efficacy perceptions of their branches of sports.

Some of the conducted studies' findings contradict with our findings. Otacıoğlu (2008) analyzed the self-efficacy levels of pre-service music teachers participating in School Experience I. In the result of the study, significant difference between students' self-efficacy levels in terms of gender variable was found and it was stated that female students' self-efficacy levels were higher than male students'.

According to the test results which are conducted to determine whether self-efficacy show significant difference according to age, branch of sports, and sports age; no significant difference has been found. The obtained data overlap with some of the previous researches. When it is analyzed in terms of Hutzler et al. (2005)'s findings from their research, it was emphasized that self-efficacy is related to a person's emotional

status's being positive or negative. In other words, it is considered that individual's branch of sports, and age has a great importance in terms of self-efficacy perceptions.

When general self-efficacy's effect on athletes' attitudes and performances are taken into account, methods for being known and developed of self-efficacy levels is crucial. Athletes' self-efficacy belief is an important factor in increasing the motivation for success and participation rate of sports. As individual's the cognizance of general self-efficacy increase, their goals increase and the effort for achieving these goals increase.

The coaches can help the athlete's progress their self-efficacy levels using situations such as appreciating the positive aspects of the athlete, or simply following a way from simple to complex. They can improve the athlete's' overall self-efficacy levels by teaching new training techniques that will lead to success and creating active learning environments.

References

1. Bandura, A. (1994). Self-efficacy in V. S. Ramachaudran (Ed.). Encyclopedia of Human Behavior (Vol. 4. pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.]. Encyclopedia of mental health. San Diego: Academic Press. 1998). <http://www.uky.edu/~eushe2/Pajares/self-efficacy.html> adresinden 14 Nisan 2016 tarihinde edinilmiştir.
2. Başaran, S. S. (2010). Müzik Öğretmeni Adaylarının Sürekli Kaygı Düzeyleri, Müzik Öğretmenliği Mesleğine Yönelik Tutumları Ve Öz-Yeterlik Algılarının Çeşitli Değişkenler açısından İncelenmesi. Yayınlanmamış Yüksek Lisans Tezi, Zonguldak Karaelmas Üniversitesi, Sosyal Bilimler Enstitüsü, Zonguldak.
3. Büyüköztürk, Ş. (2014). Sosyal Bilimler İçin Veri Analizi El Kitabı: İstatistik, araştırma deseni SPSS uygulamaları ve yorum. 20. Baskı. Ankara: Pegem Akademi.
4. Cengiz, R., Korucu Aytan, G. ve Abakay, U. (2012). Taekwondo Sporcularının Algıladığı Liderlik Özellikleri İle Öz-Yeterlik Düzeyleri Arasındaki İlişki. *E-Journal of New World Sciences Academy*, 7(4), 69-78. http://www.newwsa.com/download/gecici_makale_dosyaları/NWSA-6770-3005-8.pdf
5. Chase, M. A. (1998). Sources of Self-Efficacy İn Physical Education and Sport. *Journal of Teaching in Physical Education*, 18, 76- 89.

6. Çubukçu, Z. ve Girmen, P. (2007). Öğretmen Adaylarının Sosyal Öz-Yeterlik Algılarının Belirlenmesi. Eskişehir Osman Gazi Üniversitesi, Sosyal Bilimler Dergisi, 8(1).
7. Gözüm S, Aksayan S. (1999). Öz-Etkililik-Yeterlik Ölçeğinin Türkçe Formunun Güvenirlilik Ve Geçerliliği. Atatürk Üniversitesi Hemşirelik Yüksekokulu Dergisi, 2(1):21-34.
8. Hutzler, Y., Zach, S. & Gafni, O. (2005). Physical Education Students Attitudes And Selfefficacy Towards The Participation Of Children With Special Needs İn Regular Classes. European Journal of Special Needs Education, 20(3), 309– 327.
9. Karademir, T. ve Çoban, B. (2011). Spor Alanında Örgütsel Adalet Ve Duygusal Zeka. *Elektronik Sosyal Bilimler Dergisi*, 10(36), 25-41. <http://dergipark.ulakbim.gov.tr/esosder/article/view/5000068393/5000063455>
10. McKenzie, J. K. (1999). Correlation between Self-Efficacy and Self-Esteem İn Students. A research paper, Madison: University of Wisconsin.
11. Oğuz, A. ve Topkaya, N. (2008). *Ortaöğretim Alan Öğretmenliği Öğrencilerinin Öğretmen Öz-Yeterlik İnançları İle Öğretmenliğe İlişkin Tutumları*. Akademik Bakış.
12. Otacioğlu, S.G. (2008). *Müzik Öğretmenliği Okul Deneyimi I Uygulamalarına Katılan Öğretmen Adaylarının Öz Etkililik-Yeterlilik Düzeylerinin İncelenmesi*. Cumhuriyet Üniversitesi Sosyal Bilimler Dergisi. 31.1. 163-170.
13. Özsüer, S. İnal, G. Uyanık, Ö. ve Ergün, M. (2011). Afyon Kocatepe Üniversitesinde Öğrenim Gören Öğrencilerin Akademik Öz-Yeterlik İnanç Düzeylerinin İncelenmesi. Sosyal Bilimler Dergisi.
14. Patial, P.K. (2014). A Study on Self-Efficacy of Boxers, Weightlifters and Wrestlers. International Journal of Physical Education, Fitness and Sports, 3(3), 54- 57.
15. Schwarzer R, Fuchs R(1995) Self-Efficacy And Health Behaviors. To Appear İn: Conner M, Norman P. Predicting Health Behavior: Research and Practice with Social Cognition Models. Buckingham: Open University Press. trochim.human.cornell.edu/gallery/walkley/selfeff.htm - 20k.
16. Yıldırım, A. ve Şimşek, H. (2014). Sosyal Bilimlerde Nitel Araştırma Yöntemleri. (9. Baskı), Ankara: Seçkin Yayınları.

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