ORİJİNAL ARAŞTIRMA ORIGINAL RESEARCH

DOI: 10.5336/sportsci.2020-74853

Self-Handicapping and Self-esteem Levels of Turkish Category I Wrestling Referees

Kategori I Türk Güreş Hakemlerinin Kendini Sabotaj ve Benlik Saygısı Düzeyleri

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ABSTRACT Objective: Self-esteem and self-handicapping were considered as some of the components that affect success. This paper aimed to investigate self-esteem and self-handicapping levels of active Category I (top-level) wrestling referees in Turkey. Material and Methods: A personal information questionnaire, Rosenberg's (1965) self-esteem scale which was adapted into Turkish by Cuhadaroglu (Öner, 2012) and Rhodewalt's (1990) self-handicapping scale which was adapted into Turkish by Akin (2012) were used to collect data. There were 22 Category I wrestling referees in Turkey when the study was conducted and each of them participated voluntarily. Differences between groups were analysed by using Mann-Whitney U and differences among multiple groups were analysed by Kruskal-Wallis H test. The level of agreement between two referee observers' scores was tested by using the intraclass correlation coefficient and Cohen's kappa. Results: It was found that the subjects had a relatively high level of self-esteem (mean=34.27) and a relatively low level of selfhandicapping score (mean=44.50). It was also found that self-esteem and self-handicapping scores of the subjects did not show any statistically significant difference by the level of income or level of education (p>.05). It was found that the level of experience caused self-handicapping scores to decrease as the level of experience increased but the difference was not enough to be statistically significant (p=0.28). Conclusion: It was concluded that Turkish Category I wrestling referees were selected in a proper way so that they have a good level of self esteem (34.27±3.94) and low level of self-handicapping (44.50±10.60).

Keywords: Psychology; performance; self-esteem; self-handicapping

ÖZET Amaç: Benlik saygısı ve kendini sabotaj kavramları, başarıyı etkileyen bileşenlerden bazılarıdır. Bu çalışmanın amacı, Türkiye'de aktif olarak görev yapan Kategori I (en üst düzey) güreş hakemlerinin kendini sabotaj ve benlik saygısı düzeylerinin incelenmesidir. Gereç ve Yöntemler: Verilerin toplanması için; kişisel bilgi formu, Rosenberg (1965) tarafından geliştirilen ve Türkçe'ye uyarlaması Çuhadaroğlu tarafından yapılan benlik saygısı ölçeği (Öner, 2012) ile Rhodewalt (1990) tarafından geliştirilen ve Akın (2012) tarafından Türkçe'ye uyarlanan kendini sabotaj ölceği kullanılmıştır. Çalışmanın yapıldığı esnada Türkiye Güreş Federasyonu bünyesinde görev yapan 22 adet Kategori I hakeminin tamamı gönüllü olarak çalışmaya katılmıştır. Gruplar arasındaki farklılıklar Mann-Whitney U testi ile çoklu gruplar arasındaki farklılıklar ise Kruskal-Wallis H testi ile analiz edilmiştir. Hakem gözlemcilerinin puanları arasındaki uyum, sınıfiçi korelasyon katsayısı ve kappa testi kulllanılarak değerlendirilmiştir. Bulgular: Deneklerin göreceli olarak yüksek benlik saygısı düzeyine (ortalama=34,27) ve göreceli olarak düşük bir kendini sabotaj (ortalama=44,50) düzeyine sahip oldukları bulunmuştur. Ayrıca, benlik saygısı ve kendini sabotaj puanlarının aylık gelir düzeyi ya da eğitim düzeyine göre anlamlı bir farka sahip olmadıkları bulunmuştur (p>0,05). Mesleki tecrübe süresi arttıkça kendini sabotaj puanlarının azaldığı görülmüş ancak bu farkın istatistiksel olarak anlamlı olmaya yetecek düzeyde olmadığı (p=0,28) tespit edilmiştir. Sonuç: Türkiye Güreş Federasyonunda görevli Kategori I hakemlerinin iyi düzeyde benlik saygısı seviyesine (34,27±3,94) sahip oldukları ve kendini sabotaj düzeylerinin (44,50±10,60) düşük düzeyde olduğu sonucuna ulaşılmıştır.

Anahtar Kelimeler: Psikoloji; performans; benlik saygısı; kendini sabotaj

Wrestling is, even if not known as the oldest, one of the ancient forms of sports and it was found that it has a history of at least 150 centuries.¹ The main purpose of an athlete is to win the competition and to achieve this, there should be some standard applications such as rules, equipment restrictions and necessities and so on. For a fair competition, referee is the main component. Because (s)he has the superior power over the competition, (s)he should be competent, careful, fair, objective, and unbiased. As in any



official sports occasions are ruled by judges, umpires, referees and, officials, wrestling is also ruled by referees. In wrestling, the referee is the person who has the responsibility to conduct the bout on the mat according to the current technical regulations and rules.²

Wrestling is a well-known sport all over the world by both the professionals and wrestling spectators. Wrestlers, trainers, spectators, and the other officials expect a referee to be fair, consistent, objective, and reassuring.³

Self-handicapping is a cognitive strategy that people use to create failure reasons intentionally to protect their self-esteem from the harmful results of a potential failure. People tend to create conditions that will lead them to be unsuccessful when they feel a potential failure as a threat for their emotions.^{4,5} To avoid failure, individuals try to protect themselves by retracting themselves from the task engagement or by escaping from the situation either physically or mentally.⁶ Self-handicapping studies are commonly conducted on the academicians and especially on students.⁷⁻¹³

Self-esteem is a subjective evaluation about the feelings of a person towards himself.¹⁴ Self-handicapping is frequently linked to self-esteem but the direction of their relation is not certain. Some studies suggested a positive correlation between self-handicapping and self-esteem but others indicated that people with high self-esteem were prone to use self-handicapping strategies more.^{8,9} There are studies in the literature on the athletes' self-esteem but studies on referees' self-esteem are limited.¹⁵⁻²¹

Wrestling referees rule the game on the mat and they are always under stress because of being judged and/or evaluated by their colleagues, supervisors, spectators, athletes, and coaches. As in the other sports, it is possible that a wrestling referee can make a wrong decision and that may be irreversible and change the fate of the game.²² This kind of situation, if occurs, puts a very big load on the referee's shoulders. To be successful and feel satisfied, the referee may try to stay away from such situations. In such a case, if the referee has an acceptable excuse, (s)he may feel better and put the blame on that excuse. The wrestling referees should be emotionally and psyTurkiye Klinikleri J Sports Sci. 2020;12(3):379-86

chologically strong enough to cope with that stress and control the factors that will negatively influence their performances. Referees are to make decisions frequently during the game and their decisions are important factors in sports.²³ The link between selfesteem and decision-making was shown earlier.²⁴

Being an international level referee is a hard task for the wrestling referees in Turkey. A referee should have at least six years of successful referring career to apply for being an international level referee. This includes at least a year of being a candidate referee. It should be followed by minimum two years of experience as a regional level referee and finally the person should serve at least three years as a national level wrestling referee. Along with these prerequisites, the candidates should have an annual performance score over 8.5, at least Bachelor's degree and minimum acceptable level of proficiency in either English or French.²⁵

Literature search revealed that the number of self-esteem and self-handicapping studies conducted on the wrestling referees was limited and no study was found on the self-handicapping levels of the wrestling referees. This study is designed to assess the self-handicapping levels and self-esteem scores of the United World Wrestling Category I wrestling referees. To our knowledge, this study is the first on the literature to assess the self-handicapping levels of wrestling referees. These points raise the importance of the study.

MATERIAL AND METHODS

PARTICIPANTS

The population of the study was made up of 22 Turkish Category I wrestling referees and all of the subjects in the population were included in the study.²⁶ The subjects were asked to take part in the study during the International Wrestling Referees Education Seminar held in Corum, Turkey, in February 2019.

All referees agreed to participate voluntarily and their written informed consents were obtained prior to the study. Ethics approval was also obtained from the Hitit University Non-interventional Researches Ethics Committee (2019-107). Central Referee Committee of the Turkish Wrestling Federation approved the study. This study was conducted in accordance with the principles set forth in the Helsinki Declaration 2008.

DATA COLLECTION

A questionnaire was used to collect demographic data of the participants. Self-esteem data were collected by using 10-item self-esteem scale by Rosenberg (1965) which was adapted into Turkish by Cuhadaroglu.^{27,28} Internal consistency of the self-esteem scale was found to be high. The positive, negative and total Cronbach alpha values were found to be 0.875, 0.853, and 0.897, respectively. The scores that can be obtained from the self-esteem scale varies between 10 and 40. High self-esteem scale scores indicate higher self-esteem, and low scores indicate lower self-esteem.²⁸

Self-handicapping scores were collected by 25item self-handicapping scale by Rhodewalt (1990) which was adapted into Turkish by Akin (2012).^{29,30} Results of exploratory factor analysis for the self-esteem scale revealed that the 25 items were loaded on one factor. The total variance explained was 32% and factor loadings ranged between .34 to .69. Fit index values of the model were RMSEA=0.037, NFI=0.98, CFI=0.99, IFI=0.99, RFI=0.97, GFI=0.97, AGFI=0.94. The internal consistency reliability coefficient of the scale was found as .90 and the testretest reliability coefficient was found as 0.94. Also, the corrected item-total correlations ranged from 0.30 to 0.63.³⁰

Two top level international referee instructors were asked to classify the Category I wrestling referees' on-mat performances subjectively and the instructors classified them into one of these three categories: Top, mid, and low.

STATISTICAL ANALYSIS

Because the dataset was found not to be normally distributed, nonparametric tests were used to analyse data. SPSS 22.0 statistical package software (SPSS Inc., Chicago IL, USA) was used to conduct statistical analyses. Frequency tables and percentages were used to display the distribution of the demographic variables. Mann-Whitney U test was used to compare two groups and Kruskal-Wallis H test was used to compare multiple group comparisons. Bonferroni correction was applied for multiple group comparisons by dividing the predetermined statistically significance level by the number of the comparisons. Inter-rater reliability analysis was carried out by using intraclass correlation coefficient. Cohen's kappa was also used to test the inter-rater agreement. The level of significance was set at p<.05.

RESuLTS

All of the Category I wrestling referees in Turkey (N=22) participated in the study. The referees were all married but one. The referees' levels of education were Bachelor's degree or over. Only 1 referee was self-employed and the rest were civil servants. The level of income was not so heterogeneous and 18 referees claimed a monthly income between 3500 and 7000 TL. Most of the referees lived in metropoles (N=14) and some (N=8) lived in city centres. No referee lived in rural areas. Only 6 referees had beginner level of English proficiency. All referees had at least 10 years of experience and 12 of them had an experience of 20 years or over.

The subjects' self-esteem and self-handicapping scores were given in Table 1. Self-esteem scores ranged between 26 and 40 and found to have a median of 34.5 (mean 34.27 ± 3.94) while self-handicapping scores had a median of 41.0 (mean 44.50 ± 10.60). Self-handicapping scores of the participants were between 29 and 61.

There were no statistically significant differences on self-esteem (p=0.76) or self-handicapping scores (p=0.66) of the subjects by the level of educa-

| TABLE 1: Descriptive statistics of Rosenberg Self-esteem and Self-handicapping scores. | | | | | | | | |
|--|-------|-------|--|--|--|--|--|--|
| Rosenberg Self-esteem Scale Self-handicapping Scale | | | | | | | | |
| n | 22 | 22 | | | | | | |
| Mean | 34.27 | 44.50 | | | | | | |
| Median | 34.5 | 41.0 | | | | | | |
| Standard Deviation | 3.94 | 10.60 | | | | | | |
| Minimum | 26.0 | 29.0 | | | | | | |
| Maximum | 40.0 | 61.0 | | | | | | |

tion. Mann-Whitney U results revealed that the scores did not differ by the level of education (Table 2). Similarly, as shown in Table 3, Kruskal-Wallis H test results indicated that there were no statistically significant differences on either self-esteem (p=0.83) or self-handicapping (p=0.10) scores by the level of income of the participants.

In Table 4, it was shown that self-esteem scores of the subjects were very close and self-handicapping scores were nearly homogeneous except for the referees with 10-14 years of experience. The referees' self-handicapping (p=0.28) and self-esteem (p=0.89) scores did not differ by the level of experience as shown in Table 5.

| TABLE 2: Testing the differences on scales by level of education (Mann-Whitney u test). | | | | | | | | | |
|---|-------------------------|----|-----------|--------------|------|-----|-----|--|--|
| | Level of education | n | Mean rank | Sum of ranks | U | Z | p* | | |
| Rosenberg self-esteem score | Bachelor's Degree | 14 | 11.18 | 156.5 | 51.5 | 309 | .76 | | |
| | Master's Degree or over | 8 | 12.06 | 96.5 | | | | | |
| Self-handicapping score | Bachelor's Degree | 14 | 11.04 | 154.5 | 49.5 | 440 | .66 | | |
| | Master's Degree or over | 8 | 12.31 | 98.5 | | | | | |

* p refers to the Mann-Whitney u test for comparison of variables between two groups.

| TABLE 3: Testing the differences on scales by level of income (Kruskal-Wallis H test). | | | | | | | | | |
|---|---------------------------|---|-----------|----------------|----|------------|--|--|--|
| | Level of income (monthly) | n | Mean rank | X ² | df | p * | | | |
| Rosenberg self-esteem score | Below 3500 TL | 1 | 12.00 | .89 | 3 | .83 | | | |
| | 3500-5000 TL | 9 | 10.11 | | | | | | |
| | 5000-7500 TL | 9 | 12.94 | | | | | | |
| | Over 7500 TL | 3 | 11.17 | | | | | | |
| Self-handicapping Scale Score | Below 3500 TL | 1 | 1.00 | 6.31 | 3 | .10 | | | |
| | 3500-5000 TL | 9 | 14.06 | | | | | | |
| | 5000-7500 TL | 9 | 8.94 | | | | | | |
| | Over 7500 TL | 3 | 15.00 | | | | | | |

* p refers to the Kruskal-Wallis H test for comparison of variables among groups.df: Degrees of freedom.

| TABLE 4: Self-esteem and Self-handicapping scores of the referees by level of experience. | | | | | | | |
|---|----|-----------------------------|-------|------|------------|-------------|-----------|
| | | Rosenberg Self-esteem Score | | | Self-handi | capping Sca | ale score |
| Level of experience | n | Median | Mean | SD | Median | Mean | SD |
| 10-14 years | 3 | 33 | 34.33 | 3.21 | 56 | 52.67 | 10.41 |
| 15-19 years | 7 | 33 | 33.57 | 4.43 | 41 | 42.29 | 9.32 |
| 20 years or over | 12 | 35.5 | 34.67 | 4.08 | 43.5 | 43.75 | 11.19 |

SD: Standard Deviation.

| TABLE 5: Testing the differences on scales by level of experience (Kruskal-Wallis H test). | | | | | | | | |
|--|---------------------|----|-----------|------|----|------------|--|--|
| | Level of experience | n | Mean rank | X2 | df | p * | | |
| Rosenberg Self-esteem score | 10-14 years | 3 | 11.17 | .23 | 2 | .89 | | |
| | 15-19 years | 7 | 10.64 | | | | | |
| | 20 years and over | 12 | 12.08 | | | | | |
| Self-handicapping Scale score | 10-14 years | 3 | 17.00 | 2.53 | 2 | .28 | | |
| | 15-19 years | 7 | 10.36 | | | | | |
| | 20 years and over | 12 | 10.79 | | | | | |

* p refers to the Kruskal-Wallis H test for comparison of variables among groups. SD: Standard deviation.

Inter-rater reliability analysis was carried out by using intraclass correlation coefficient and found to be high (ICC=0.93, CI=0.83-.97, p=0.002) and there were no statistically significant differences between the raters' classifications (p=0.67) on either self-esteem or self-handicapping scales. The Cohen's kappa statistic revealed that the agreement between the observers were somewhere between moderate and strong (K=0.73, p=0.002). There were no statistically significant differences between the self-esteem and self-handicapping scores of the Category I wrestling referees by the master referees' Evaluation categories according to the Kruskal-Wallis H test results

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(p=0.45).

Although being an international level referee can be described as the summit for a referee, it is not easy to achieve that success, especially in Turkey. The referees have to be active as a national referee before they take an exam to be an international referee, although they meet all the other criteria, they also required to have at least 6 years of experience.²⁵ It implies that the wrestling referees who are willing to be promoted as an international referee shall make less mistakes than their colleagues. That is an advantageous situation for the Turkish international referees. Because they have to comply with the strict rules and have at least 6 years of on-mat experience, they have an advantage over the referees from different countries.³

Level of education, especially lower levels of academic achievement, was known to be predicted by self-handicapping but level of education seemed to have no statistically significant (p>.05) effect on the levels of self-esteem and self-handicapping in Category I wrestlers (Table 2).^{31,32} Because all of the participants had at least bachelor's degree, they had a good level of education. It was previously shown that self-esteem was increased as the level of education increased.¹⁰ People with lower level of education had lower level of self-esteem when compared to their counterparts with higher levels of education.¹¹ Our results were supported by the results of the similar studies in the literature which were mentioned above. The subjects' levels of monthly income had no effect on the scores obtained from the two scales. The reason of that was thought to be the homogeneous income structure of the subjects. There were neither a referee who had a monthly income well above the average nor a referee well below the average. Most of the subjects had an income of 3500 to 7000 TL. Because all of the subjects but one were civil servants, they had a similar level of income (Table 3).

Experience reduces the chance of erroneous decisions and referees' decisions are known to be an important factor in a sporting event.³³ Refereeing in the international events is much more stressful for the referees and they may tend to use self-handicapping strategies to protect their self-esteem if they find themselves in a stressful situation.³⁴ It was previously reported that self-esteem changed by age and even though the certain trajectory is unknown, self-esteem peaked around the age of 50.35 The experience levels of the Turkish Category I wrestling referees are relatively high. More than half of the participants (54.5%) had an experience of at least 20 years and only a small portion of them (13.6%) were experienced 10 to 14 years. The referees' self-esteem scores were very close at each category and self-handicapping scores were found to be almost homogeneous except for 10-to-14-year experienced referees. This group had a higher score of self-handicapping level (52.67 ± 10.41) but it was not statistically significant. These findings prove that the level of experience affected the Turkish Category I wrestling referees' selfhandicapping and self-esteem levels in the positive direction. The most experienced referees had the highest self-esteem scores (34.67 ± 4.08) . Even though the differences between experience categories were found not to be statistically significant, this finding is parallel to the suggested summit age of the self-esteem (Table 4).

The effect of residency on self-esteem was previously shown in the literature by Raposo and Freitas and they found that the residents in the rural areas had lower self-esteem scores than the residents in the urban areas.³⁶ Because all of the subjects lived in urban areas, the effect of residency was not considered as a variable to for the Category I wrestling referees to assess the differences between the self-esteem scores.

It was known that perfectionistic people were less satisfied with their performances and these people felt more stress than those who were regular.^{37,38} Perfectionistic people were prone to fear of failure and because of that; they might show self-handicapping attitudes.³⁹ In this study, the subjects had a relatively low level of self-handicapping scores (44.50 ± 10.60) (Table 1). Although the perfectionistic people seemed to have higher levels of self-handicapping scores, it shall not be concluded that the subjects were not to be perfectionistic. It should be kept in mind that most of the subjects had at least over twenty years of experience and they had many examinations to rise up to the current category. It can be implied that the lower levels of self-handicapping scores of the subjects were because of their levels of experience not because of they were lack of perfectionistic point of view. The association between selfhandicapping and achievement was studied earlier by some researchers but the results were inconsistent. Some previous studies revealed no significant results while some recent researches found moderate to large negative relationship.¹² It can be told that the findings of the current study were in line with the recent researches as the subjects had higher levels of achievement but low levels of self-handicapping.

Self-handicapping was described as a way of preserving self-esteem but behaving in that way would be harmful to the person by encouraging the lack of responsibility and effort. Consequently, such a strategy would be undesirable for success.⁴⁰ The subjects in this study had low levels of self-handicapping but high levels of self-esteem. Because being an international wrestling referee is not an easy task, the referees who want to be promoted as an international referee might have worked hard and tried to their best to be successful. Even though self-handicapping might be used to manipulate the perception of the others, the subjects in the current study did not seem to be in need of using that strategy.¹³

Self-handicapping scale was reported earlier to have a median of 60.²⁹ Not many researches have been found in the literature that were examined the

effects of self-handicapping and/or self-esteem on referees of different sports. In a study conducted by Kamuk, Evli and Tecimer (2018), it was found that national level football referees had a median of 51 and a mean of 52.39 ± 12.61 on self-handicapping scale.²² This level of self-handicapping is below the average (62.5) but still higher than the levels of the Category I wrestling referees (44.50±10.60). It supports that the self-handicapping scores tend to decrease as the level of refereeing experience increases (Table 4).

Self-esteem has always been known as a basic impulse of the human being.⁴¹ Self-esteem has two aspects, sense of personal efficiency and sense of personal worth, and those senses are interrelated.⁴² As it was reported earlier, the people with high level of self-esteem are known to have sense of personal adequacy and sense of having desired achievements in the past.²⁴ Along with this, referees are not promoted to a higher level if found to be incompetent by the referee observers, so a referee might risk his professional career if he makes a mistake, moreover, he may lose his career because of an inexcusable mistake. This may be considered as a job insecurity and referees react to this potential threat according to their self-esteem levels.43 As the Category I wrestling referees are the top referees in their countries, it can be told that they have gone through a tough process and it is natural that they have a sense of personal efficiency and a sense of personal worth. The subjects of the current study were found to have high level of self-esteem that supports that self-esteem was related to personal efficiency and personal worth. As researches suggest, self-handicapping was linked to low levels of self-esteem and it was found that people who use self-handicapping as a means of self-protective strategy had lower self-esteem scores and individuals with low self-esteem were more prone to self-handicapping strategies than the ones with higher self-esteem.^{44,45} These might contribute to explain the results of the current study, the relationship between the lower self-handicapping and high level of self-esteem scores of the Category I wrestling referees.

CONCLUSION

According to the results of the study, self-esteem and self-handicapping levels of Turkish Category I

wrestling referees were found to be at desirable levels. The referees had a high level of self-esteem and a low level of self-handicapping. The referees' scores did not differ either by level of education or by level of income. Level of experience had an effect on selfhandicapping scores in favour of those who were more experienced but the difference was not enough to reach at a statistically significant level. It can be clearly told that Turkish Category I wrestling referees were selected in a proper way and they have a good level of self-esteem and low level of self-handicapping.

Acknowledgements

The author thanks to the President of the Central Referee Committee of the Turkish Wrestling Federation for his support.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

This study is entirely author's own work and no other author contribution.

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