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Examining the Relationship between Referee Self-efficacy and General Self-efficacy Levels of Basketball Referees in Terms of Certain Variables

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Abstract

The aim of this study is to examine the relationship between referee self-efficacy and general self-efficacy levels of basketball referees in terms of gender, education, age and refereeing experience. The study group was created within a convenience sampling method. 192 referees, 10% (n=19) female, and 90% (n=173) male, who performed active refereeing within Turkish Basketball Federation during 2016-2017 basketball season participated in the study. The personal information form, Referee Self-Efficacy Scale (REFS) and the General Self-Efficacy Scale (GSE) were used as data collection tools. The analysis of the data was conducted using SPSS 21 and AMOS programs. Pearson Product Moment Correlation Coefficient, t-test and one-way variance analysis (ANOVA) were used in determining the relationships between variables, binary and multiple comparisons, respectively. Total scores of referees in REFS and scores obtained from sub-dimensions of physical fitness and decision making show a significant difference according to gender. There is a positive and significant relationship between referees' physical fitness, game knowledge, decision making, pressure, communication, total scores in GES and REFS, and their age and refereeing experience. There is a positive and significant relationship between referees' physical fitness, game knowledge, decision making, pressure, communication, total scores in GES and REFS, and all other variables. There is no significant difference between REFS total score, physical fitness, game knowledge, decision making, pressure and communication of referees, and education.

Keywords: basketball referee, self-efficacy, referee self-efficacy

1. Introduction

Referee self-efficacy was conceptualized within self-efficacy theory of Bandura (Bandura, 1997), and specifically self-efficacy in sports (Feltz, Short, & Sullivan, 2008). When certain situational demands are considered, self-efficacy can be defined as one's belief to accomplish behaviors resulting in desired consequences in a certain condition and ability to perform various levels of a task successfully (Bandura, 1977, 1986). A strong self-efficacy provides achievement and well-being and varying in personal development and capabilities. The one who has a strong self-efficacy is able to focus on achievement by recovering himself and changing his strategy without attributing the failure to totally himself (Bandura, 1977, 1986; Yıldırım & İlhan, 2010).

Referees should perform and accomplish more than one task during a competition under pressure in order not to make a mistake in their decisions. For example, under adverse conditions and pressure, referees should analyze and judge the events during the match, make quick decisions, referee the match, consider more than one dimension of the match, maintain the order and settle the disagreements (Tuero, Tabernero, Marquez, & Guillen, 2002); Karaçam & Pulur, 2016). Inefficacy, carelessness, wrong decisions, delayed responses in these tasks may result in an ultimate stress and burnout (Guillén & Feltz, 2011; Ekmekçi, 2008).

In the sport psychology field, many studies indicate that self-efficacy belief is important for athletes (Jackson, Beauchamp, & Knapp, 2007; Moritz, Feltz, Fahrbach, & Mack, 2000; Martin & Gill, 1991; Cengiz, 2012), teams (Feltz & Lirgg, 1998; Spink, 1990a; Öcal & Aydın, 2009) and coaches (Feltz, Chase, Moritz, & Sullivan, 1999; Gençer, Kiremitçi, & Boyacıoglu, 2009). Improvements in related studies of each of these certain groups resulted in significant conceptual developments (Feltz, 1982; Feltz et al., 1999; Lent & Lopez, 2002; Spink, 1990b) and certain measurement models (Feltz et al. 1999; Short, Sullivan, & Feltz, 2005). However, Guillén and Feltz (2011) indicated that referees can be considered as an important group of people who are mostly ignored in terms of their self-efficacy beliefs towards refereeing performance. For this reason, it was stated that conceptual and measurement models are needed to guide the studies in this field.

A pre-conceptual model of the referee self-efficacy was suggested by Guillén and Feltz (2011). Referee self-efficacy

was defined as the extent of a belief that referees have an adequate capacity to accomplish their tasks successfully. Guillén and Feltz (2011), Myers, Feltz, Guillén, & Dithurbide, (2012) and Karaçam & Pulur (2017) stated that referee self-efficacy is composed of game knowledge and strategic skills, decision-making skills, psychological skills, in-game interaction – supervision and physical fitness factors. Based on the self-sufficiency theory and studies of self-efficacy in sport, Guillén & Feltz (2011) stated that referees with higher self-efficacy make better decisions, show more effective performance and show more commitment to their jobs; they are shown respect more than coaches, managers, and other officials; and they experience less stress than the ones who have lower self-efficacy. Besides, Guillén & Feltz (2011) and Farshad et. al., (2013) stated that the referees having higher self-efficacy are more committed to their job and this affects their performance positively. In a study conducted by Hepler & Feltz (2012), self-efficacy level has an important impact on decision making. Karaçam & Pulur (2017) concluded that referees' physical fitness, game knowledge, decision making, pressure, communication, referee self-efficacy and general self-efficacy affect each other positively. Moreover, Myers et. al. (2012) and Karaçam & Pulur (2017) found a positive correlation between self-efficacy levels of referees and their ages and refereeing experience and stated that self-efficacy levels of referees increase as their age and refereeing experience increase.

Although studies on referee self-efficacy and general self-efficacy levels are scarce, the development of referee self-efficacy and general self-efficacy perceptions of basketball referees is crucial in the successful refereeing the competitions. Furthermore, it is very important to know the variables affecting the referee self-efficacy and general self-efficacy perceptions of the basketball referees and the relationship between these variables in planning the referee's training process and raising the referee's performance. In this context, the following questions will be answered in the research.

1. Do referee self-efficacy and general self-efficacy perceptions of basketball referees show a significant difference based on gender and education variables?
2. Is there a significant relationship between referee self-efficacy and general self-efficacy perceptions of basketball referees and age-experience variables?
3. Is there a significant relationship between referee self-efficacy and general self-efficacy levels of basketball referees?

1.1 Self-efficacy

The concept of self-efficacy was proposed by Bandura (1977). According to Bandura (1977), self-efficacy is the belief that a person can successfully perform his or her behavior to get the desired results. In other words, self-efficacy is the belief about himself/herself as to how successful an individual can be to overcome difficult situations in the future. Self-efficacy is the one's self-judgment on his/her ability to cope with different situations, achieve a certain activity, and his/her capacity (Senemoğlu, 2000). The social cognitive theory implies that self-efficacy belief plays a strong role in human behavior. Self-efficacy belief does not depend on one's abilities, but one can believe that they can accomplish a job by believing their abilities. These beliefs influence action plans of the individual (Zeldin, Britner, & Pajares, 2008). Self-sufficiency is considered to be a variable that directly affects the behavior of individuals (Bandura, 2012).

2. Method

In this section, details are given related to characteristics of the study group, data collection tools, and data analysis.

2.1 Research Model

The aim of this study is to examine the relationship between referee self-efficacy and general self-efficacy levels of basketball referees in terms of gender, education, age and refereeing experience. The study is a descriptive study with relational survey model. Although relational research does not prove the existence of causality in a real sense, it is possible to make inferences about the cause-effect relationship with relational investigations by using some advanced statistical techniques (Fraenkel & Wallen, 2009).

2.2 Study Group

The study group was formed by convenience sampling method in this research. An appropriate sampling method based on accessibility and availability principles is the most preferred method in some research subjects to gather information quickly (Büyüköztürk, 2010). Of these referees, 14.6% (n = 28) were province, 10.9% (n = 21) were A, 23.4% (n = 45) were B and 51% (n = 98) were C classification referees. The average age of the referees participating in the research is 28, and the average of refereeing experience is 8 years. In this study, the application of the data collection tool was implemented one day when the referees did not have a competition, considering the voluntariness principle.

2.3 Data Collection Tools

Referee Self-Efficacy Scale (REFS) and General Self-Efficacy Scale (GSE) were utilized to determine referee self-efficacy and general self-efficacy levels of basketball referees.

2.3.1 Referee Self-efficacy Scale (REFS)

Referee Self-Efficacy Scale (REFS) was firstly developed by Myers et. al. in 2012. Turkish adaptation of the scale was conducted by Karaçam and Pulur (2017). The scale has 18 items which were created in five-point Likert grading format. In the scale, there are 5 sub-dimensions as physical fitness which is composed of 5 items (sample item: Have enough condition to referee a match), game knowledge which is composed of 3 items (sample item: I am able to understand the basic strategy of the branch in which I referee), decision making which is composed of 3 items (sample item: I am able to make decisions in critical situations), pressure which is composed of 3 items (sample item: I am not influenced by pressure from players) and communication which is composed of 4 items (example item: I am able to communicate effectively with coaches). Grading options of the scale items are indicated as "Strongly disagree=1" and "Strongly agree=5". There is not any item that is reversely scored. High scores that are obtained from each factor of the scale indicate that self-efficacy is high in that factor. In the analyses conducted by Karaçam and Pulur (2017), the variance explained for the whole scale was found to be 72.27%. A five-component structure with an eigenvalue greater than 1 has emerged. For the scale components, alpha internal consistency coefficients were found to be .88 in physical fitness factor, .71 in game knowledge factor, .85 in decision factor, .86 in pressure factor, .81 in communication factor and .90 in total communication scale. The KMO value was found to be .87. As a result of DFA analysis applied to the scale, it was seen that χ^2/sd = 1.842 RMSEA = .06, CFI = .94, GFI = .88, RMR = .01.

In the conducted for this study, the variance explained for the whole scale was found to be 72.09%. A five-component structure with an eigenvalue greater than 1 emerged. For the scale components, alpha internal consistency coefficients were found to be .86 in physical fitness factor, .70 in game knowledge factor, .85 in decision making factor, .86 in pressure factor, .82 in communication factor and .90 in total scale. The KMO value was found to be .87. The DFA analysis of the scale showed that χ^2/sd = 1.929 RMSEA = .06, CFI = .94, GFI = .90, and RMR = .01.

2.3.2 General Self-efficacy Scale (GSE)

The General Self-Efficacy Scale was originally developed in Germany in 1979 by Jerusalem and Schwarzer and adapted to Turkish by Aypay (2010). The scale consists of 10 items of four similar Likert types (sample item: knowing what to do when I encounter a new situation). Scholz and Schwarzer (2002) found that, with a few exceptions, all items were between .30 and .77, and alpha internal consistency coefficients were between .75 and .91 in item-total correlations calculated based on the data obtained using the 25 -fold version of the general self-efficacy scale. Confirmatory factor analysis results showed that the scale was a scale with single factor (Scholz and Schwarzer, 2002). A study by Aypay (2010) revealed a two-component structure with an eigenvalue greater than 1 emerged. Alpha internal consistency coefficients for scale components are .79 and .63. The calculated Alpha coefficient is .83.

In the conducted for this study, it was found that the scale was a scale with single factor and 48.88% of the variance explained while KMO value was found to be .88 and Cronbach's Alpha was .88 in the reliability study of the scale. The DFA results for validating the single-factor structure of GEFS showed that the goodness of fit index of the model was acceptable (χ^2 / sd = 3.12, RMSEA = .09, CFI = .90, GFI = .90, RMR = .01).

2.4 Data Analysis

In this research, firstly, information was given about the purpose of working on all participants of the implementation. The analysis of the data was conducted using SPSS 21 and AMOS programs. In the analysis of the data, the data set was examined in terms of the error value, outliers, normality and multiple correlations. It was observed that there is no incorrectly entered data in this process. The relationship between variables was investigated by Pearson Product Moment Correlation Coefficient. A t-test was used to analyze the difference of basketball referees according to gender variable and multiple variance analysis (ANOVA) was used in the analysis of difference according to the educational level variable.

3. Findings

Comparison of Sub-dimensions of REFS, Total Scores of REFS and GSE according to demographic variables is given in Table 1.

Table 1. T-test Results of Sub-dimensions of REFS, Total Scores of REFS and GSE According to Gender

Variables	Female (n = 19)		Male (n = 173)		*t*	*sd*	*p*
	$\bar{X}$	*S*	$\bar{X}$	*S*			
Physical fitness	22.42	2.36	23.39	2.29	1.74	190	.08
Game knowledge	13.63	1.38	14.26	1.06	2.36	190	**.01***
Decision making	12.57	1.64	14.00	1.40	4.11	190	**.00***
Pressure	13.73	1.48	14.00	1.28	.83	190	.40
Communication	18.68	1.66	18.28	1.89	.87	190	.38
REFS total	81.05	5.81	83.94	6.04	1.98	190	**.04***
GSE total	34.10	3.36	35.27	3.90	1.25	190	.21

* $p < .05$

When Table 1 is examined, it can be seen that the levels of scores obtained by basketball referees from the whole scale, and sub-dimensions of physical fitness and decision making show a significant difference according to gender. According to this, self-efficacy, physical fitness and decision-making levels of male referees are higher than of female referees. However, there is no significant difference in basketball referees' physical fitness, pressure, communication and general self-efficacy levels compared to their genders.

According to the variable of education, ANOVA results of REFS Sub-dimensions, total scores of REFS and GSE are given in Table 2.

When Table 2 is examined, it can be said that it was found that basketball referees' REFS total score, physical fitness, game knowledge, decision making, pressure, communication and GSE total scores did not show any significant difference compared to education variable ($p > .05$).

Table 2. ANOVA Results of REFS Sub-dimensions, Total Scores of REFS and GSE According to Education

Variables	Group	*n*	$\overline{X}$	*S*	Source of Variance	KT	*sd*	KO	*F*	*p*
Physical fitness	Associate degree	23	22.65	3.08	Between groups	17.93	2	8.96	1.68	.18
	Bachelor degree	133	23.27	2.24	Within groups	1008.14	189	5.33		
	Master's Degree	26	23.77	1.94						
	Total	192	23.29	2.31	Total	1026.07	191			
Game knowledge	Associate degree	23	14.13	1.28	Between groups	.84	2	.42	.34	.71
	Bachelor degree	133	14.17	1.11	Within groups	235.63	189	1.24		
	Master's Degree	26	14.33	.98						
	Total	192	14.19	1.11	Total	236.47	191			
Decision making	Associate degree	23	13.82	1.89	Between groups	.56	2	.28	.12	.88
	Bachelor degree	133	13.83	1.44	Within groups	422.63	189	2.23		
	Master's Degree	26	13.97	1.40						
	Total	192	13.85	1.48	Total	423.20	191			
Pressure	Associate degree	23	14.17	1.15	Between groups	2.81	2	1.40	.83	.43
	Bachelor degree	133	14.00	1.27	Within groups	320.05	189	1.69		
	Master's Degree	26	13.75	1.48						
	Total	192	13.97	1.30	Total	322.87	191			
Communication	Associate degree	23	18.34	2.05	Between groups	2.43	2	1.21	.34	.71
	Bachelor degree	133	18.26	1.88	Within groups	669.89	189	3.54		
	Master's Degree	26	18.55	1.76						
	Total	192	18.32	1.87	Total	672.32	191			
REFS total	Associate degree	23	83.13	6.60	Between groups	27.21	2	13.60	.36	.69
	Bachelor degree	133	83.54	5.98	Within groups	7000.09	189	37.03		
	Master's Degree	26	84.38	6.13						
	Total	192	83.65	6.06	Total	7027.31	191			
GSE total	Associate degree	23	35.56	3.77	Between groups	23.20	2	11.60	.77	.46
	Bachelor degree	133	34.93	3.94	Within groups	2832.79	189	14.98		
	Master's Degree	26	35.75	3.63						
	Total	192	35.16	3.86	Total	2855.99	191			

$p < .05$

The correlation between Sub-dimensions of REFS, REFS and GSE total scores and age-refereeing experience is given in Table 3.

Table 3. The Correlation between Sub-dimensions of REFS, Total Scores of REFS and GSE, and Age-Refereeing Experience

	n	Age	Refereeing experience
Physical fitness	192	.20**	.23**
Game knowledge	192	.25**	.29**
Decision making	192	.36**	.33**
Pressure	192	.27**	.24**
Communication	192	.23**	.16*
REFS total	192	.35**	.33**
GSE total	192	.24**	.16*

** $p < .01$, * $p < .05$

When Table 3 is examined, it is seen that there is a significant and positive relationship between basketball referees' physical fitness, game information, decision making, pressure, communication, total REFS and total GSE scores and age in all variables. It was found the highest relationship is between decision making and age ($r = .36$, $p < .01$), and the lowest one is between physical fitness and age ($r = .36$, $p < .01$). When the obtained data are examined, it is seen that referees' physical fitness, game knowledge, decision making, pressure, communication, total REFS and GSE scores increase as the age increase. It was found that basketball referees have a positive and significant correlation between referees' physical fitness, game knowledge, decision making, pressure, communication, total scores of REFS and GSE and referee years. The highest correlation was found between decision making and REFS total scores ($r = .33$, $p < .01$) and refereeing experience, and the lowest correlation was between communication and GSE total scores ($r = .16$, $p < .05$) and refereeing experience. When the obtained data are examined, it is seen that referees' physical fitness, game knowledge, decision making, pressure, communication, total scores of REFS and GSE increase as the year of refereeing increase.

Results of correlation between Sub-dimensions of REFS and total scores of REFS and GSE are given in Table 4.

Table 4. Correlation between Sub-dimensions of REFS and Total Scores of REFS and GSE

Variables	1	2	3	4	5	6	7
1. Physical Fitness	1.00	.49**	.48**	.33**	.28**	.75**	.48**
2. Game Knowledge		1.00	.54**	.36**	.37**	.70**	.50**
3. Decision Making			1.00	.55**	.54**	.82**	.67**
4. Pressure				1.00	.48**	.70**	.61**
5. Communication					1.00	.72**	.58**
6. REFS Total						1.00	.75**
7. GSE Total							1.00

** $p < .01$

When table 5, which shows the relationship between the basketball referees' physical fitness, game knowledge, decision making, pressure, communication, REFS total and GSE scores is examined, it is seen that all the variables are positively and significantly correlated with each other. In the relationship between referee self-efficacy sub-dimensions, while the highest correlation was between REFS total score and decision making ($r = .82$, $p < .01$), the lowest correlation was between communication and physical fitness ($r = .28$, $p < .01$). When the relationship between the total scores of REFS and GSE and REFS' sub-dimensions is examined, it was found that the highest correlation between was total scores of REFS and GSE ($r = .75$, $p < .01$) and the lowest correlation was between GSE total score and physical competency ($r = .48$, $p < .01$).

4. Discussion

Findings of the study showed that basketball referees' score levels in REFS total score, physical fitness, and decision making sub-factors show a significant difference according to gender. According to this, self-efficacy, physical fitness and decision-making levels of male referees are higher than of female ones. However, there is no significant difference in basketball referees' physical fitness, pressure, and communication levels according to their gender. In the detailed literature review, there is no study examining the relationship between basketball referees' self-efficacy and their gender. The research is thought to contribute to the field in this direction.

No significant relationship is found between REFS scores of the basketball referees and their gender. In the detailed literature review, it is seen that there is no study examining the relationship between their general self-efficacy of basketball referees and their gender. While studies on different occupational groups lead Uysal (2013) to similar results, Rimm and Jerusalem (1999) Scholz et al. (2002) Schwarzer and Born, (1997) Schwarzer and Scholz (2000), Aypay (2010) and Yazıcı (2015) found that self-efficacy level of males differ significantly from of females. This is thought to be due to the cultural structure of the study groups or the differences in the measurement.

Research findings showed that basketball referees do not show any significant difference in REFS total score, sub-factors of referees' physical fitness, game knowledge, decision making, pressure, communication and GSE total scores compared to educational variables. This can be interpreted as the fact that the level of education is not an effective variable on the referee self-efficacy and general self-efficacy of basketball referees. In the detailed literature survey, it is seen that there is no study examining the relationship between the referees' self-efficacy and their education levels. The research is thought to contribute to the field in this direction.

No significant relationship is found between REFS scores of the basketball referees and their education level. In the detailed literature review, it is seen that there is no study examining the relationship between the general self-efficacy of basketball referees and their education levels. Yazıcı (2015) and Pekmezci (2010) have reached similar results in studies conducted on different occupational groups. In this respect, the results of the research are consistent with the results of

previous studies in the related field.

Research findings showed that there is a significant and positive relationship between referees' physical fitness, game knowledge, decision making, pressure, communication, the total scores of REFS and GSE and age in all variables. It was found that the highest relationship is between age and decision making while the lowest one is between age and physical fitness. Myers et al., (2012) and Karaçam & Pulur (2017) found a positive and significant relationship between total score of REFS, all sub-dimensions of the scale and age in their previous studies, similar to the study. Aypay (2010) and Karaçam & Pulur (2017) found a positive and significant relationship between the total scores of REFS and age. In this respect, the results of the research are consistent with the results of previous studies in the related field. These results can be interpreted as the increase of the age of basketball referees causes referees' physical fitness, game knowledge, decision making, pressure, communication, total scores of REFS and GSE.

Research findings showed that there is a positive and significant relationship between referees' physical fitness, game knowledge, decision making, pressure, communication, total scores of REFS and GSE and refereeing years in all variables. It was found that the highest relationship is between the year of refereeing and decision making and total scores of REFS while the lowest relationship is found between communication and total scores of GSE. Myers et al. (2012) and Karaçam & Pulur (2017) found a positive and significant relationship between total score of REFS, all sub-dimensions of the scale and refereeing years, similar to the study. Guillén and Feltz (2011) noted that the refereeing experience of the referees influences the referees' self-efficacy. As consistent with this study, Karaçam & Pulur (2017) found a positive and significant relationship between the total score of GSE and the year of refereeing. In this respect, the results of the research are consistent with the results of previous studies in the related field. These results can be interpreted as the refereeing years of basketball referees increase, referees' physical fitness, game knowledge, decision making, pressure, communication, total scores of REFS and GSE.

When the relationship between the physical fitness, game knowledge, decision making, pressure, communication of referees, total scores of REFS and GSE is examined, it can be seen that all the variables are positively and significantly related to each other. In this relationship, it was found that the highest relationship is between total score of REFS and decision making while the lowest one is between physical fitness and communication. When the relationship between the total scores of GSE and of REFS and sub-dimensions of REFS is examined, the highest relationship is between the total scores of REFS and GSE while the lowest score is between total score of GSE and physical competency. Myers et al. (2012) and Karaçam & Pulur (2017) studied the relationship between basketball referees' physical fitness, game knowledge, decision making, pressure, communication and total score of REFS and found that all variables were positively and significantly related to each other. Similar to the study conducted by Karaçam & Pulur (2017), they found a positive and significant relationship between total score of GSE and total scores and sub-dimensions of REFS. In this respect, the results of the research are consistent with the results of previous studies in the related field. These results can be interpreted as basketball referees' physical fitness, game knowledge, decision making, pressure, communication, total scores of REFS and GSE positively influence each other.

As a result of the research, it was seen that the basketball referees' gender is a significant variable in terms of the levels of scores obtained from the total score of REFS and sub-dimensions of physical fitness and decision making. The age and referee experience of basketball referees are found to be effective on the referee self-efficacy and general self-efficacy positively. Basketball referees' physical fitness, gaming knowledge, decision making, pressure, communication, total scores of REFS and GSE are found to affect each other positively.

5. Suggestions

- In this study, the relationship between referee self-efficacy and general self-efficacy of basketball referees was discussed. Examination of the different variables that are expected to influence referee self-efficacy of basketball referees will contribute to the field.
- When the training processes of the basketball referees are planned, the work for the improvement of referee self-efficacy and the general self-efficacy of referees may contribute to the performance of them.
- In this study, the referee self-efficacy and general self-efficacy of basketball referees were handled at the cognitive level. Studies to be made may contribute to the field.
- This work is limited to basketball referees. Implementation of studying to include different referee groups may contribute to the field.

References

Aypay, A. (2010). Adaptation Study of General Self-Efficacy Scale to Turkish. *İnönü University Journal of Faculty of Education*, *11*(2).

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84* (2), 191-215. https://doi.org/10.1037/0033-295X.84.2.191

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory.* Englewood Cliffs, NJ: Prentice-Hall.

Bandura, A. (1997). *Self-efficacy: The exercise of control.* New York: Freeman.

Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited. *Journal of Management*, *38*(1), 9-44. https://doi.org/10.1177/0149206311410606

Büyüköztürk, Ş. (2010*). Scientific research methods* (5th edition). Ankara: Pegem Academy.

Cengiz, R. (2012). The Relationship Between Self-Efficacy Levels and Leadership Qualities That Taekwondo Athlete Perceive. *e-Journal of New World Sciences Academy*, *7*(4), 2B0089.

Ekmekçi, R. (2008). Determining the source and coping style of stress among basketball referees and developing preventative administrative practices (Unpublished doctoral dissertation). Abant İzzet Baysal University, Bolu.

Ekmekçi, R. (2016). *Psychological preparation in refereeing*. Ankara: Detay Publication.

Farshad, T., Esmaeili, M. R., & Bavandpour, R. (2013). The effect of self-efficacy on job satisfaction of sport referees. *European Journal of Experimental Biology*, *3*(2), 219-225.

Feltz, D. L. (1982). A path analysis of the causal elements in Bandura's theory of self-efficacy and an anxiety-based model of avoidance behavior. *Journal of Personality and Social Psychology, 42,* 764–781. https://doi.org/10.1037/0022-3514.42.4.764

Feltz, D. L., & Lirgg, C. D. (1998). Perceived team and player efficacy in hockey. *The Journal of Applied Psychology, 83,* 557–564. https://doi.org/10.1037/0021-9010.83.4.557

Feltz, D. L., Chase, M. A., Moritz, S. E., & Sullivan, P. J. (1999). A conceptual model of coaching efficacy: Preliminary investigation and instrument development. *Journal of Educational Psychology, 91,* 765–776. https://doi.org/10.1037/0022-0663.91.4.765

Feltz, D. L., Short, S. E., & Sullivan, P. J. (2008). *Self-efficacy in sport*. Champaign, IL: Human Kinetics.

Fraenkel, J. R., & Wallen, N. E. (2009). How to design and evaluate research in education (7th ed.). New York: McGraw-Hill.

Gençer, R. T., Kiremitçi, O., & Boyacıoglu, H. (2009). Psychometric properties of coaching efficacy scale: A study on Turkish coaches. *Sport Sciences*, *4*(2), 143-153.

Guillén, F., & Feltz, D. L. (2011). A conceptual model of referee efficacy. *Frontiers in psychology*, *2*, 25. https://doi.org/10.3389/fpsyg.2011.00025

Hepler, T. J., & Feltz, D. L. (2012). Take the first heuristic, self-efficacy, and decision-making in sport. *Journal of Experimental Psychology: Applied*, *18*(2), 154. https://doi.org/10.1037/a0027807

Jackson, B., Beauchamp, M. R., & Knapp, P. (2007). Relational efficacy beliefs in athlete dyads: An investigation using actor-partner interdependence models. *Journal of Sport & Exercise Psychology, 29,* 170–189. https://doi.org/10.1123/jsep.29.2.170

Karaçam, A., & Pulur, A. (2016). Identification the Relation between Active Basketball Classification Referees' Empathetic Tendencies and Their Problem Solving Abilities. *Universal Journal of Educational Research, 4*, 1912-1917. https://doi.org/10.13189/ujer.2016.040822

Karaçam, A., & Pulur, A. (2017). Adaptation study of referee self-efficacy scale (REFS) to Turkish. *Journal of Physical Education and Sports Sciences*, *11*(1).

Lent, R. W., & Lopez, F. G. (2002). Cognitive ties that bind: A tripartite view of efficacy beliefs in growth-promoting relationships. *Journal of Social and Clinical Psychology, 21,* 256–286. https://doi.org/10.1521/jscp.21.3.256.22535

Martin, J. J., & Gill, D. L. (1991). The relationships among competitive orientation, sport-confidence, self-efficacy, anxiety, and performance. *Journal of Sport and Exercise Psychology*, *13*(2), 149-159. https://doi.org/10.1123/jsep.13.2.149

Moritz, S. E., Feltz, D. L., Fahrbach, K. R., & Mack, D. E. (2000). The relation of self-efficacy measures to sport performance: a meta-analytic review. *Research Quarterly for Exercise and Sport, 71,* 280–294. PubMed. https://doi.org/10.1080/02701367.2000.10608908

Myers, N. D., Feltz, D. L., Guillén, F., & Dithurbide, L. (2012). Development of, and initial validity evidence for, the Referee Self-Efficacy Scale: A multistudy report. *Journal of sport and Exercise Psychology, 34*(6), 737-765. https://doi.org/10.1123/jsep.34.6.737

Öcal, H., & Aydin, O. (2009). The relationships of collective efficacy beliefs, self-efficacy beliefs and group cohesiveness with success evaluations and expectancies in sports teams. *Journal of Faculty of Letters/Edebiyat Fakultesi Dergisi, 26*(2).

Pekmezci, G. U. (2010) *The Relationships between Organizational Commitment of Nurses and Their Self-Efficacy Perceptions* (Unpublished master's thesis). İstanbul University, İstanbul.

Rimm, H., & Jerusalem, M. (1999). Adaptation and validation of an estonian version of the general self-efficacy scale (ESES). *Anxiety, Stress, and Coping (Anxiety Stress Coping), 12*(3), 329-345. https://doi.org/10.1080/10615809908250481

Scholz, U., & Schwarzer, R. (2005). The general self-efficacy scale: Multicultural validation studies. *The Journal of Psychology, 139* (5), 439-457. https://doi.org/10.3200/JRLP.139.5.439-457

Scholz, U., Gutierrez-Dona, B., Sud, S., & Schwarzer, R. (2002). Is general self-efficacy a universal construct? *European Journal of Psychological Assessment, 18*(3), 242-251. https://doi.org/10.1027//1015-5759.18.3.242

Schwarzer, R., & Born, A. (1997). Optimistic self-beliefs: Assessment of general perceived self-efficacy in thirteen cultures. *World Psychology, 3,* 177-190.

Schwarzer, R., & Scholz, U. (2000, August). *Cross-cultural assessment of coping resources: The general perceived self-efficacy scale.* Paper presented at the First Asian Congress of Health Psychology: Health Psychology and Culture, Tokyo, Japan. [Online] Retrieved on 12-February-2007 at URL: http://web.fuberlin.de/gesund/publicat/world_data.htm

Senemoğlu, N. (2000). *Development, learning and instruction.* Ankara: Gazi.

Short, S. E., Sullivan, P. S., & Feltz, D. L. (2005). Development and preliminary validation of the collective efficacy questionnaire for sports. *Measurement in Physical Education and Exercise Science, 9,* 181–202. https://doi.org/10.1207/s15327841mpee0903_3

Spink, K. S. (1990a). *Group cohesion and collective efficacy of volleyball teams. Journal of Sport & Exercise Psychology, 12,* 301–311. https://doi.org/10.1123/jsep.12.3.301

Spink, K.S. (1990b). Collective efficacy in the sport setting. *International Journal of Sport Psychology, 21,* 380–395.

Tuero, C., Tabernero, B., Marquez, S., & Guillen, F. (2002). Analysis of the factors affecting the practice of refereeing. *SCAPE, 1*(1), 7–16.

Uysal, İ. (2013). General self-efficacy beliefs of academicians: A case of AİBU Faculty of education. *Trakya University Journal of Education, 3*(2).

Yazıcı, S. G. (2015). *Examining of General Self-Efficacy and Self—Esteem of Married and Single Adults.* (Unpublished master's thesis). İstanbul Trade University, İstanbul.

Yıldırım, F., & İlhan, İ. Ö. (2010). Reliability and validity study of Turkish version of general self-efficacy. *Turkish Journal of Psychiatry, 21* (4), 301-308.

Zeldin, A. L., Britner, S. L., & Pajares, F. (2008). A comparative study of the self-efficacy beliefs of successful men and women in mathematics, science, and technology careers. *Journal of Research in Science Teaching, 45*(9), 1036-1058. https://doi.org/10.1002/tea.20195